

Course Descriptions

EXPLANATION OF COURSE NUMBERS, TRANSFER IDENTIFICATION AND COMMON COURSE NUMBERING SYSTEM

Trinity Valley Community College participates in the Texas Common Course Numbering System which is designed to assist students who are transferring between institutions within the system. Each course is assigned an alphabetic prefix which specifies the department offering the course as well as a four-digit number. The first of four digits identifies the academic level of the course. Freshman or first year courses are designated by a "1," whereas, sophomore or second year courses are designated by a "2." The second digit specifies the number of semester credit hours awarded for completion of the course. The third and fourth digits establish course sequence within a program area. Some former TVCC course numbers appear parenthetically after the new course numbers. For example, GOVT 2301 (PS 2311) is a three semester credit hour government course normally taken during the sophomore year. The course was formerly Political Science 2311.

Each TVCC course also has three numbers in parentheses following the course title. The first number indicates the number of credit hours for the course, the second number indicates the number of lecture hours which the course meets each week, and the third number indicates the number of lab hours which the course meets each week. For example, (3-3-2) indicates a three semester credit hour course which meets for three lecture hours and two laboratory hours each week. Developmental Studies courses are an exception to this designation. They carry no semester hour credit and cannot be used for graduation purposes.

For more information about the Texas Common Course Numbering System or for a listing of participating institutions, contact the Office of Instruction or the Guidance and Counseling Center.

Courses taught by Internet or television have an additional \$20.00 fee per course.

Accounting

ACNT 1191, 1291, 1391. Current Accounting Applications

1191 (1-1-0)

1291 (2-2-0)

1391 (3-3-0)

Selected instruction related to the modern needs of business, industry, government and other institutions. The course is designed to allow flexibility in accounting course content needed to meet the particular instructional needs of the student.

ACCT 2401. Financial Accounting. (4-3-3)

Prerequisite: High School Bookkeeping or ACNT 1303.

A study of the basic fundamentals of accounting emphasizing the structure, relationships, concepts and principles, systems and controls, the accounting cycle for service and merchandising type enterprises, including special journals and ledgers, notes and interests, deferrals and accruals, receiving and merchandise inventory, depreciation applied to plant assets, payroll and sales taxes. Lab Fee: \$20.00.

ACCT 2402. Managerial Accounting. (4-3-3)

Prerequisite: Accounting 2401.

This is a study of principles as applied to partnerships and corporations; control accounting applied to departments and branches, manufacturing process and job order costs, budgetary control and standard costs; income taxes, cost relationships, special analysis and reports, statement types and analysis used in decision-making. Systems information and procedures used in management planning and control are also covered. Lab Fee: \$20.00.

ACNT 1303. Introduction to Accounting. (3-3-0)

An introduction to bookkeeping and accounting in which the principles of double entry bookkeeping will be studied. Emphasis is placed on journalizing, posting to ledger accounts, trial balances, financial statements, adjusting and closing entries. Business forms, vouchers, interest and discounts are also studied. This course is designed for terminal students and for students who have not had high school bookkeeping. This course is not designed as a transfer course.

ACNT 1311. Introduction to Computerized Accounting Systems. (3-3-0)

Prerequisite: ACCT 1303 or ACCT 2401 or Instructor Approval.

A study of the fundamental principles of accounting using the microcomputer to solve accounting problems. Emphasis is on the closing entries to the ledger, post-closing trial balance, depreciation, accounts receivable, accounts payable, payroll and financial statement analysis. A comprehensive accounting problem or a comprehensive practice set will conclude this course.

ACNT 1313. Computerized Accounting Applications. (3-3-0)

Prerequisite: ACNT 1311 and ACCT 2401 or instructor approval.

A study of accounting utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a commercial accounting package. Some spreadsheet and word processing application will be utilized.

ACNT 1329. Payroll & Business Tax Accounting. (3-3-0)

A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Develop personnel and payroll records that provide the information required under current laws and process payroll data and tax data and prepare reports.

ACNT 1331. Federal Income Tax. (3-3-0)

Prerequisite: Approval of Division Chairperson and Instructor.

This course primarily focuses on federal income taxation for individuals. Emphasis is placed on the preparation of Form 1040, along with various supporting schedules. Also covered are the areas of partnership taxation, corporate taxation and tax administration. Attention is also placed on the use of data processing equipment in the preparation of the various tax forms and schedules.

ACNT 2332. Accounting Information Systems. (3-3-0)

Prerequisites: ACNT 1311 and ACCT 2401 or approval of instructor.

A study of the role of accounting information systems and related subsystems, including data collection, retrieval, manipulation, filtering and sorting of data. Identify the nature and purposes of an accounting information system; identify concepts and terms that provide the foundation of accounting information systems.

ACNT 2382. Cooperative Education-Accounting Technician. (3-1-20)

Prerequisite: Sophomore Standing or Approval of Division Chairperson.

A comprehensive treatment of career related activities encountered in the student's area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Internship is open only to students enrolled in the Associate in Applied Science Degree program. Lab Fee: \$20.00.

Agriculture

AGRI 1131. The Agricultural Industry. (1-1-0)

This course provides an overview of world agriculture, nature of the industry and resource conservation, and the American agricultural system which is dependent on coordination of the production agriculture, processing, distribution, marketing, delivery systems and their sub-systems. Employment forecasts and basic information will be provided to assist the student in selecting a field of study.

AGRI 1325. Marketing of Agricultural Products. (3-3-0)

An introductory course covering operations in movement of agricultural commodities from producer to consumer, including essential marketing functions of buying, selling, transporting, storing, financing, standardization, pricing, and risk bearing. A study of institutions, market analysis, price analysis, and futures markets is included.

AGRI 1329. Principles of Food Science. (3-3-0)

Food science and technology in relation to world and domestic food supply and demand. Fundamentals of food classification, modern processing, and quality control.

AGRI 1407. Crop Science. (4-3-3)

Scientific approach to agronomic crops; their importance, value, use characteristics, classification, distribution, climatic and soil requirements, production, storage, improvement and seed technology. Lab Fee: \$20.00

AGRI 1413. Entomology. (4-3-3)

Principal insects and pests of crops and livestock, including life history, methods of attack, damage, and control are studied. Integrated pest management and biological controls are stressed. Collections and mounting of insects are required. Lab Fee: \$20.00

AGRI 1415. General Horticulture. (4-3-3)

A survey of the general field of horticulture. Growth, fruiting habits, and propagation practices are stressed. Study of principles of plant propagation, including vegetables, ornamentals, pecans, and fruits. Methods of starting plants by the use of seeds, cuttings, layers, buds, grafts, and bulbs are used. Hydroponic growing techniques and indoor plant growth are also covered. Lab Fee: \$20.00

AGRI 1419. Animal Science. (4-3-3)

Basic course of study of the various types, breeds, market classes and grades of livestock. Factors influencing efficiency in feeding, marketing, breeding, care and management are considered. Lab Fee: \$20.00

AGRI 2321. Live Animal Evaluation. (3-3-3)

Basic principles and concepts in selection and evaluation of beef cattle, sheep, swine, and horses. The ability to present concise and accurate oral and written reasons for selection, grading, and ranking is stressed. Lab Fee: \$20.00

AGRI 2330. Wildlife Management. (3-3-3)

This course emphasizes the needs of wildlife and how the habitat may be manipulated to improve existing conditions. Particular emphasis is placed on the management practices that are applicable to East Texas. Lab Fee: \$20.00

AGRI 2317. Agricultural Economics. (3-3-0)

The field of agricultural economics and its relationship to other sciences. The characteristics of our economic system and basic economic concept. Survey of the farm and ranch and institutional aspects of agricultural finance, governmental policies and programs related to agriculture.

AGRI 2301. Agricultural Power Units. (3-3-3)

This course emphasizes the fundamentals of internal combustion engines: gasoline, diesel, and liquified petroleum. Maintenance and adjustments of the electrical ignition, fuel lubricating, and cooling systems of agricultural power machinery. Lab Fee: \$20.00

AGRI 2303. Agricultural Construction. (3-3-3)

Selection, use, and maintenance of hand and power tools; arc, mig, and oxy-acetylene welding; and construction materials and principles. Lab Fee: \$20.00

Arts

ARTS 1301. (ART 1311) Art Appreciation. (3-3-0)

Analysis of art elements and principles as applied to various forms of visual expression; study of historical examples of architecture, painting, sculpture, and minor arts directed toward an intelligent appreciation of masterpieces.

ARTS 1303. (ART 2313) Art History I. (3-3-0)

A survey of painting, sculpture, architecture and the minor arts from pre-historical times to the 14th century. Research problems and extensive viewing of slides provide additional enrichment.

ARTS 1304. (ART 2317) Art History II. (3-3-0)

A continuation of ARTS 1303 covering various forms of art from the 14th to the 20th century.

ARTS 1311. (ART 1315) Design. (3-3-3)

Emphasis upon two-dimensional design; includes the fundamentals of line, color, form, texture, shape, space, and arrangement. Lab Fee: \$20.00

ARTS 1313. (ART 1312) Basic Art Foundations and Projects. (3-3-3)

This course is an introduction to the creative media with emphasis on art projects appropriate to the elementary curriculum. Enhancing artistic awareness and sensitivity through the creative and imaginative use of art materials and tools is the focus of the course. Students will also be exposed to art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. Lab Fee: \$20.00

ARTS 1316. (ART 1313) Drawing I. (3-3-3)

A beginning course investigating a variety of media, techniques, and subjects including still life, landscape, and architectural subjects, and exploring perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end itself. The course is designed for art majors as well as for the student who wishes to increase his powers of observation and drawing skills for personal enjoyment. Lab Fee: \$20.00

ARTS 1317. (ART 1314) Drawing II. (3-3-3)

Prerequisite: ARTS 1316 or approval of instructor.

Expansion of Drawing I stressing the expressive and conceptual aspects of drawing including the human figure within a spatial environment. Attention will be given to the study of anatomy as it relates to artistic expression. Lab Fee: \$20.00

ARTS 2316. (ART 2311) Painting I. (3-3-3)

Prerequisite: ARTS 1316 and 1311, or approval of instructor.

Exploring the potentials of painting media with emphasis on color and composition. Expression is unrestricted as well as subject matter. Course is designed for art major as well as for the student who wishes to learn or improve painting techniques. Lab Fee: \$20.00

ARTS 2317. (ART 2312) Painting II. (3-3-3)

Prerequisite: ARTS 2316 or approval of instructor.

Continuation of Painting I with emphasis on individual expression in the interpretation of still life, landscaping and figure subjects. Lab Fee: \$20.00

ARTS 2326. (ART 2314) Sculpture I. (3-3-3)

A studio course in ceramic sculpture techniques including clay types and usage, and exploring natural finishes of the clay. Relief sculpture and fundamentals of forming the human head will be introduced. Stacking and firing procedures will be taught. Lab Fee: \$20.00

ARTS 2327. (ART 2315) Sculpture II. (3-3-3)

Advanced study of ceramic sculpture techniques with emphasis on individual projects and styles. Finishes and color application will be explored in greater depth. Lab Fee: \$20.00

ARTS 2343. (ART 2316) Problems in Contemporary Art. (3-3-0)

Prerequisite: Consent of the instructor.

ARTS 2343 is an individual studies course which may be repeated with varying topics. Topics may be academic or may involve studio work. Ordinarily only students with training in art will be allowed to enroll as considerable independent work is required.

ARTS 2346. (ART 1316) Ceramics I. (3-3-3)

An introduction to ceramic process, including basic materials and techniques. Hand-building is emphasized with an introduction to the use of the potter's wheel. Glazing and other surface treatments and stacking and firing of the kiln will be taught. This course is individualized to suit the special needs of various students, both art majors and hobbyists. Lab Fee: \$20.00

ARTS 2347. (ART 1317) Ceramics II. (3-3-3)

A continuation of Ceramics I, Ceramics II covers special problems in forming methods in greater depth. Individual student projects and styles will be encouraged and emphasized. An individualized course for the art major or hobbyist. Lab Fee: \$20.00

ARTS 2356. (ART 1318) Photography I. (3-3-3)

Instruction and practice in photography. Content of the course includes a study of cameras, optics, photographic materials, and techniques. Elements of good pictures and applied darkroom procedures are included. May be taken as Communications 1318. Lab Fee: \$20.00

ARTS 2357. (ART 1319) Photography II. (3-3-3)

Continuation of Photography I, Communications 1318. Emphasis on perfection of skills learned in Photography I. In addition, students are given training and assignments in action photography, special lighting photography, time-exposure photography, copy work, sepia toning, picture story photography, portraiture, scenic and still-life photography, closeup photography and special effects photography. May be taken as Communications 1319. Lab Fee: \$20.00

Automotive Technology

AUMT 1405. Introduction to Automotive Technology. (4-4-6)

Fundamentals of engine inspection, removal, and installation procedures. Utilizing appropriate safety procedures, the student will perform mechanical engine tests to determine extent of repair or repairs and demonstrate proficiency in engine removal and installation techniques. Lab Fee: \$20.00

AUMT 1410. Automotive Brake Systems (AUTO 2673). (4-4-6)

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. Lab Fee: \$20.00

AUMT 1416. Suspension and Steering (AUTO 2673). (4-4-6)

Theory and operation of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. Lab Fee: \$20.00

AUMT 1419. Automotive Engine Repair (AUTO 2671). (4-4-6)

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. Lab Fee: \$20.00

AUMT 1445. Heating and Air Conditioning. (4-4-6)

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. Lab Fee: \$20.00

AUMT 2413. Manual Drive Train and Axles (AUTO 2672). (4-4-6)

A study of automotive clutches, clutch operation devices, standard transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. Lab Fee: \$20.00

AUMT 2417. Engine Performance Analysis I (AUTO 2674). (4-4-6)

Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. Lab Fee: \$20.00

AUMT 2425. Automatic Transmission and Transaxle (AUTO 2672). (4-4-6)

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. Lab Fee: \$20.00

AUMT 2434. Engine Performance Analysis II (AUTO 2674). (4-4-6)

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. Lab Fee: \$20.00

Biology

BIOL 1322 Nutrition and Diet Therapy. (3-3-0)

Cross-listing as HECO 1322.

A study of the fundamental principles of human nutrition applied to health of the individual, family and community. Topics covered in the course include the chemical, physical, and sensory properties of food. Nutritional quality, food use, and diet applications are also stressed. Designed for majors in Nursing and Elementary Education. (formerly Home Economics 1311).

Students may register for either BIOL 1322 or HECO 1322 but may receive credit for only one of the two courses.

BIOL 1406. General Biology I. (4-3-3)

Prerequisite: None.

A study of the fundamental principles of living organisms, their chemical and physical nature, genetics, function, organization, classification, and ecology with emphasis on viruses, bacteria, algae, fungi, lower plants, and higher plants. The scientific method is included. Lab Fee: \$20.00

BIOL 1407. General Biology II. (4-3-3)

Prerequisite: None.

A study of the fundamental principles of living organisms, their classification, adaptation, reproduction, ecology, and behavior with emphasis on unicellular organisms, invertebrates, and vertebrate animals. Lab Fee: \$20.00

BIOL 2389. Biology Academic Cooperative. (3-1-6)

Prerequisite: At least one semester of a college biology course and instructor approval.

An instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems. Lab Fee: \$20.00.

BIOL 2401. (BIOL 2411) Human Anatomy and Physiology. (4-3-3)

Prerequisite: Passing the reading section of TASP, Quick-TASP, or an approved alternative test is required to enroll in BIOL 2401.

This course briefly reviews fundamental concepts of biochemistry, cells, and tissues before focusing on the structures and functions of the integumentary, skeletal, muscular, nervous, and endocrine systems. Prior coursework in biology is strongly recommended. Lab Fee: \$20.00

BIOL 2402. (BIOL 2412) Human Anatomy and Physiology. (4-3-3)

Prerequisite: BIOL 2401. Passing the reading section of TASP, Quick-TASP, or an approved alternative test is required to enroll in BIOL 2402.

This course is designed to be a continuation of Biology 2401. Systems to be covered include the cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive. Basic concepts of fluid and electrolyte balance and metabolism are developed. Lab Fee: \$20.00

BIOL 2421. (BIOL 2420) (BIO 2413) Microbiology. (4-3-3)

Prerequisite: 4 credit hours of biology.

A survey of microbiological methods and tools and microorganisms and their morphology, physiology, genetics and classification with emphasis on biological principles and relationships to man with emphasis on medical significance. Microscopic and cultural methods are utilized in laboratory work. Lab Fee: \$20.00

Business and Office Administration

BMGT 1325. (BUSI 2374) Office Management. (3-3-0)

A study of the problems of office management and the duties of the office manager. It also includes the study of the function of the AOM, leadership styles, the problem solving process, managing human resources, training and promotion, office salary administration, labor-management relations and managing administrative services.

BUSG 1191, 1291, 1391. Current Business Applications.

1191 (1-1-0)

1291 (2-2-0)

1391 (3-3-0)

Selected instruction related to the specific modern needs of business, industry, government, and other institutions. This course is designed to allow the flexibility in course content needed to meet the particular instructional needs of a student.

BUSG 1366, 2366. (OFAD 2371, 2372) Business and Office Practicum I and II. (3-1-20)

Prerequisite: Sophomore classification and consent of the instructor.

Under the supervision of the college and the employer, the student combines classroom learning with on-the-job experience in the field of business and office management occupations. Internship is open only to students enrolled in the Associate in Applied Science Degree programs. Lab Fee: \$20.00

BUSG 1301. Business Principles. (3-3-0)

This course is designed to survey the entire field of business, build a business vocabulary, broaden the student's perspective of the business field, aid the student in selecting a field of specialization, and provide a background for further study.

BUSI 1307. Personal and Family Finance. (3-3-0)

A study of the financial problems which people encounter in their personal and family accounts. Includes topics on: goal setting, financial planning, resume writing, record keeping, financial statements, budgets, insurance, taxes, borrowing, housing, investments, retirement, and estate transfer.

BUSI 2301. Business Law. (3-3-0)

This course deals with the origins of American Law, contracts, personal property, bailments, negotiable instruments, insurance, partnership, corporation and real property.

ITSW 2431. Advanced Word Processing. (4-3-3)

Prerequisite: POFI 2401.

A continuation course designed to provide experience producing complex documents using advanced word processing functions. Students will continue to develop accuracy, formatting, and document production skills. Emphasis is placed on learning and applying word publishing and macro functions while applying proofreading and editing skills. Lab Fee: \$20.00

POFT 1127. Introduction to Keyboarding. (1-0-2)

This course serves as an introduction to the microcomputer keyboard and is designed to provide the opportunity to develop microcomputer keyboarding basic skills in a minimum amount of time for those entering a variety of fields such as word/data processing, accounting, and other areas where alpha, numeric, and/or symbol keyboarding is utilized. Lab Fee: \$20.00

POFT 1301. Business English. (3-3-0)

Introduction to a practical approach of basic language usage skills with emphasis on fundamentals of writing and editing for business. Apply the basic rules of grammar, spelling, capitalization, number usage, and punctuation; utilize terminology applicable to technical and business writing; develop proofreading and editing skills; and write effective sentences for business applications.

POFT 1321. Business Math. (3-3-0)

This course is designed to provide a review of basic mathematic skills and to provide a mathematic background for accounting. The course includes instruction on fractions, decimals, percentages, simple and compound interest, retail problems, payrolls, loans, taxes, insurance, and depreciation.

POFT 1409. Administrative Office Procedures I. (4-3-3)

Prerequisite: Completion of POFT 1429.

A course designed to assist, inform, and train students for careers in today's offices. The course is also useful to people returning to work after a period of time or to those who have made a career change. The course integrates office, language, human relations, filing, and decision-making skills required of administrative assistants. Emphasis is placed on preparing students for the realistic problems and situations encountered in modern offices. The use of the computer is combined throughout the course. Lab Fee: \$20.00

POFT 1429. Basic Keyboarding. (4-3-3)

A beginning course designed to introduce students to keyboarding and basic formatting techniques. Emphasis is on mastery of the keyboard, developing basic keyboarding skills, improving language arts skills, developing basic composition skills, and formatting basic computer compatible documents including personal letters, block style letters, memos, envelopes, tables, reports, outlines, and centered material. Keyboarding skills as desired by growing numbers of employers daily due to the widespread use of computer technology in all fields. Lab Fee: \$20.00

POFT 2312. Business Correspondence and Communication. (3-3-0)

This course is intended to develop skills in all phases of business communication including writing, listening, speaking, reading, and interpreting nonverbal cues. Primary emphasis is placed on developing sound skills for writing letters, memos, reports, and correct telephone procedures and techniques. Awareness of electronic advances in information processing and management and their impact on communication is also included.

POFT 2321. Machine Transcription. (3-3-3)

Prerequisite: POFI 2401 or POFT 1429.

This course provides skill development in mailable business and specialized document production, proofreading, and formatting using computers and transcription equipment. Lab Fee: \$20.00

POFI 2401. Word Processing I. (4-3-3)

Prerequisite: Keyboarding skill of 40 gross words per minute or division chairperson approval.

This is an introductory course designed to present concepts of information/word processing as well as the opportunity to perform basic word processing functions, develop formatting skills, and apply communication skills using word processing application software. Lab Fee: \$20.00

POFT 2401. Intermediate Keyboarding. (4-3-3)

Prerequisite: Keyboarding POFT 1429 or equivalent skills and knowledge of word software.

This course provides a review and builds on keyboarding competencies developed. Emphasis is placed on increasing speed, improving accuracy, developing formatting skills, applying communication skills, and learning document production skills. Lab Fee: \$20.00

POFI 2431. Desktop Publishing for the Office. (4-3-3)

Prerequisite: ITSW 2431.

Concepts and practical applications of word publishing are presented. The course provides training in document production using desktop publishing. Page layouts, merging of graphics and text, and utilization of different font styles are emphasized. Lab Fee: \$20.00

Chemistry

CHEM 1405. (CHE 1411) Introductory Chemistry I. (4-3-3)

A study of the fundamentals of elementary inorganic and organic chemistry. A study is made of a select group of elements and compounds and the chemical laws and principles that govern elementary chemistry. A correlation between Chemistry and other related sciences is made with emphasis placed upon the scientific method of problem solving. This course is designed for a wide variety of students including those whose major is in professional nursing and professional agriculture. Lab Fee: \$20.00

CHEM 1408. (CHE 1412) Introductory Chemistry II. (4-3-3)

Prerequisite: CHEM 1405 or high school chemistry.

A continuation of CHEM 1405 with emphasis upon the following topics: properties of water, nature of solutions, colloids, neutralization, industrial chemical processes, electrical chemistry, nonmetals, hydrocarbons and related hydrocarbons. Lab Fee: \$20.00

CHEM 1411. (CHE 1413) General Chemistry I. (4-3-3)

A course in general chemistry for students whose major is chemistry, biology, geology, pre-medical, pre-dental, pre-vet, and engineering. It consists of a study of the gross physical properties of matter, atomic structure, molecular structure, nomenclature, periodic table, bonding, reactions, and gas laws. Lab Fee: \$20.00

CHEM 1412. (CHE 1414) General Chemistry II. (4-3-3)

Prerequisite: CHEM 1411.

A continuation of Chemistry 1413 with topics covering energy associated with chemical change, solutions, equilibrium, electrochemistry, introduction to organic chemistry and nuclear chemistry. Lab Fee: \$20.00

CHEM 2423. (CHE 2411) Organic Chemistry I. (4-3-3)

Prerequisite: CHEM 1407 or 1412.

A basic introductory course in Organic Chemistry for science, pre-med, and related fields of study. The molecular orbital theory and stereochemistry are used in the understanding of the structures and reactions of Aliphatic and Aromatic Compounds. Mechanisms of reactions are considered in terms of the free radical, the carbonium ion, and the carbanion. Lab Fee: \$20.00

CHEM 2425. (CHE 2412) Organic Chemistry II. (4-3-3)

Prerequisite: CHEM 2423.

A continuation of CHEM 2423, more complex Aliphatic and Aromatic Compounds are studied with emphasis on the mechanisms of reactions. The chemistry of carbohydrates and amino acids are introduced in the latter part of the course. Lab Fee: \$20.00

Communications

COMM 1129, 1130, 2129, 2130. (JOU 1111, 1112, 2111, 2112) Journalism Workshop. (1-0-5)

A supervised laboratory for specific work assignments on the staff of the college publication. Lab Fee: \$20.00

COMM 1131, 1132, 2131, 2132. (JOU 1113, 1114, 2113, 2114) Photography Workshop. (1-0-5)

A supervised laboratory for specific work assignments for all students of photography. Lab Fee: \$20.00

COMM 1316. (JOU 2313) Photojournalism. (3-3-3)

Prerequisite: COMM 1318, and 1319, or consent of instructor.

A course in the taking, developing, and printing of photographs, with emphasis on news content. Photography for newspaper, magazine or yearbook publications; use of electronic flash; production techniques; and laboratory work on photographic layouts. Enrollees have the option of working on the college newspaper staff. Lab Fee: \$20.00

COMM 1318. (JOU 1313) Photography I. (3-3-3)

Instruction and practice in photography. Content of the course includes a study of cameras, optics, photographic materials, and techniques. Elements of good pictures and applied darkroom procedures are included. May be taken as ARTS 2356. Lab Fee: \$20.00

COMM 1319. (JOU 1314) Photography II. (3-3-3)

Continuation of Photography I. Emphasis on perfection of skills learned in Photography I. In addition, students are given training and assignments in action photography, special lighting photography, time-exposure photography, copy work, sepia toning, picture story photography, portraiture, scenic and still-life photography, close-up photography and special effects photography. May be taken as ARTS 2357. Lab Fee: \$20.00

COMM 1335. (JOU 2314) Introduction to Commercial Radio. (3-3-0)

A general survey of the principles involved in radio broadcasting, including a study of station and network organization and control. Activities in commercial writing, broadcast formatting, music and news programming, marketing, administration, and engineering are included.

COMM 1336. Television Production I. (3-2-4)

An introduction to the basic principles, procedures and techniques of television production. The emphasis of this course will be the pre-production, production and post-production process of single camera video production. Topics include field camera operation, field audio, directing, and editing. Students will complete individual and group projects. Lab Fee: \$20.00

COMM 1337. Television Production II. (3-2-4)

Prerequisite: COMM 1336.

A continuation of COMM 1336 with an emphasis on multi-camera production techniques. Course topics include operation of cameras and editing equipment, staging, studio lighting, directing, on-camera announcing and interviewing. The student may serve as crew and/or talent on various productions or projects. Lab Fee: \$20.00

COMM 2303. (JOU 2316) Audio/Radio Production. (3-3-0)

This course includes concepts and techniques of sound production, including the coordinating and directing processes. "Hands on" experience with equipment, sound sources and direction of talent is emphasized.

COMM 2309. (JOU 2311) News Editing & Copy Reading I. (3-3-3)

Prerequisite: COMM 2315 or consent of instructor.

A comprehensive study of copy editing for errors of fact and interpretation of English and newspaper style; headline writing; proof reading and page make-up are stressed, in addition to advanced reporting. The basics of desktop publishing are introduced. Enrollees are on college newspaper staff. Lab Fee: \$20.00

COMM 2310. (JOU 2312) News Editing & Copy Reading II. (3-3-3)

Prerequisite: COMM 2309 or consent of instructor.

Continuation of News Editing & Copy Reading I, with emphasis on perfection of skills. Enrollees are on college newspaper staff. Lab Fee: \$20.00

COMM 2311. (JOU 1311) News Gathering & Reporting I. (3-3-3)

Theory and practice of news gathering and writing with emphasis on effective writing. Assignments cover general news, interviews, speeches, meetings, and other fields of activity. The basics of desktop publishing are introduced. Supervised work as a member of the TVCC News-Journal staff is included. Lab Fee: \$20.00

COMM 2315. (JOU 1312) News Gathering & Reporting II. (3-3-3)

Prerequisite: COMM 2311 or consent of instructor.

Interpretive news presentation; development of in-depth reporting; continuation of COMM 2311. Also an introduction to and understanding and evaluation of mass communications. Introduction to newspaper make-up, headline writing, advertising principles, feature writing and editorial writing are included. Lab Fee: \$20.00

COMM 2327. (JOU 2315) Principles of Advertising. (3-3-0)

Fundamentals of advertising, including advertising appeals, print copy writing, and design, sales, and selection of media will be covered. Typography as it relates to advertising is stressed. The course acquaints students with the role of advertising in the American economy and society.

COMM 2331. (JOU 1315) Radio/Television Announcing. (3-3-0)

This course explores the principles of announcing including study of voice, diction, pronunciation, and delivery. Also included is the study of phonetics. Experience in various types of announcing is provided.

COMM 2324. (JOU 2411) Practicum in Electronic Media. (3-3-3)

Lecture and laboratory instruction focusing on various electronic media formats with emphasis on broadcasting. Lab Fee: \$20.00

Computer Science

ITSC 1191, 1291, 1391, 1491. Special Topics in Computer and Information Sciences.

1191 (1-1-0)

1291 (2-2-0)

1391 (3-2-4)

1491 (4-3-3)

The courses are designed to identify and provide knowledge and skills in the latest technological developments in computer software and programming applications. Special emphasis is placed on meeting the needs of business, industry, government, and other institutions.

COSC 1301. Microcomputer Applications. (3-2-4)

This course is an introduction to the selection, use, and potential value of the microcomputer in the home, classroom, and business environment. Emphasis is placed on gaining practical experience with the use of several popular, commercially available software systems. The topical coverage includes the rudiments of information systems, operation of the IBM compatible microcomputer, Microsoft disk-operating system, word processing, electronic spreadsheets, and database management systems. Lab Fee: \$20.00

BCIS 1305. Business Computer Applications. (3-2-4)

This course covers computer terminology, hardware, software, operating system, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word-processing, electronic spreadsheets, a database management system, presentation software, and business-orientation utilization of the internet. Lab Fee: \$20.00

ITSC 1301. Introduction to Computer Science. (3-2-4)

An introduction to Electronic Computer Systems and their use in business. The course covers the history and development of computers, concepts and terminology, and career opportunities in computer related fields. This course includes a series of lab projects using IBM compatible computers. Lab Fee: \$20.00

COSC 1336. Programming Fundamentals I. (3-2-4)

Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. This course assumes computer literacy. Lab Fee: \$20.00

COSC 1337. Programming Fundamentals II. (3-2-4)

Prerequisite: COSC 1336 Programming Fundamentals I.

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering. Lab Fee: \$20.00

COSC 2320. C++ Programming. (3-2-4)

Prerequisite: Programming Fundamentals I or approval of instructor.

An advanced course in C programming using the object-oriented approach to programming through the use of C++ programming language. Includes the emphasis of code reusability through the use of library functions for I/O, flow control and string manipulation. Topics include encapsulation, inheritance and polymorphism. Lab Fee: \$20.00

ITSE 2317. JAVA Programming. (3-2-4)

Prerequisite: Programming Fundamentals I or approval of instructor.

Introduction to object-oriented programming using JAVA. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. Lab Fee: \$20.00

BCIS 1332. COBOL Programming. (3-2-4)

Prerequisite: Programming Fundamentals I or approval of instructor.

This course is an introduction to structured design and programming, using the COBOL language. The powerful file handling and report editing capabilities of COBOL are illustrated through typical business applications. Lab Fee: \$20.00

ITSW 1311. AS-400 Operating System and Operations. (3-2-4)

Prerequisite: either COSC 1301, BCIS 1305 or ITSC 1301 or approval of instructor.

A study of computer hardware and their operational relationships. The course will emphasize operation of the IBM system 36 or IBM AS/400. Lab Fee: \$20.00

ITSC 1301. Introduction to Computers. (3-3-0)

Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Identify the components of a computer system; demonstrate basic understanding of commonly used applications; explain the impact of computers on society; explore computer careers; identify fundamental programming structures; and demonstrate proficiency in basic operating system functions.

ITSC 1305. Introduction to PC Operating Systems. (3-2-4)

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. Install, configure, and maintain the operating system, perform basic file management operations; organize and allocate primary and secondary storage; access and control peripheral devices; and demonstrate the use of utilities. Lab Fee: \$20.00

ITMC 1341. Windows 2000 Professional and Server. (3-2-4)

Prerequisite: ITCC 1302 LAN Design and Protocols – Cisco 1 or approval of instructor.

Provides students with the knowledge and skills necessary to install and configure Microsoft Windows 2000 Professional on stand-alone computers and on client computers that are part of a workgroup or domain. Provides the skills and knowledge necessary to install and configure Windows 2000 Server software to create file, print, and application servers. The student will connect Windows 2000 clients to networks and the Internet; create and manage user accounts; manage access to resources by using groups; manage data by using the Windows NT File System (NTFS); provide network access to file resources; and configure and manage disks. Lab Fee: \$20.00

ITSC 1317. PC Operating Systems – DOS. (3-2-4)

Prerequisite: COSC 1301 or BCIS 1305 or approval of instructor.

This course is an introduction to the DOS Operating Systems. Topics include installation and configuration, file management, memory, and storage management, peripheral device control, and use of utilities. Lab Fee: \$20.00

ITSW 1307. Introduction to Database Management. (3-2-4)

Prerequisite: ITSC 1301 or approval of instructor.

Introduces database theory and practical application. Includes techniques for planning, defining, and designing a database and procedures pertaining to queries, reports, control, and security of the database. Hands on experience will be provided using appropriate application software. Lab Fee: \$20.00

ITSW 1304. Electronic Spreadsheets. (3-2-4)

Prerequisite: ITSC 1301 or COSC 1301 or BCIS 1305 or approval of instructor.

Understanding and using the basic and advanced concepts of electronic spreadsheets for business applications. Includes the designing of templates, formatting the worksheet, headings, formula building, financial sheets, "what if" forecasting, graphics, printing, and disk operations. Lab Fee: \$20.00

ITSW 1310. Multi-Media. (3-2-4)

Prerequisite: Either COSC 1301, BCIS 1305 or ITSC 1301 or approval of instructor.

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Includes presentation media terminology and concepts; creation of presentations using text, visual and/or sound elements; use of effective compositions and style; preparation of presentations for distribution on computers or other media; and modify sequence and slide master. Lab Fee: \$20.00

BCIS 2390. Systems Analysis and Design. (3-2-4)

Prerequisite: Either COSC 1301, BCIS 1305 or ITSC 1301 or approval of instructor.

This course focuses on the analysis of existing business systems and designing computerized business systems. The flow of data within and through the system is emphasized. The student will complete case studies of selected business problems. Lab Fee: \$20.00

ITSC 1325. PC Maintenance and Repair. (3-2-4)

A study of current personal computer hardware including personal computer assembly, upgrading and repair, setup and configuration, and troubleshooting. Lab Fee: \$20.00

ITSC 1313. Web Page Development I. (3-2-4)

Prerequisite: COSC 1301 or approval of instructor.

Instruction in the use of the Internet. Internet services, and the fundamentals of HTML, web page design and web site development. Lab Fee: \$20.00

ITSE 2413. Web Page Development II. (4-2-4)

Prerequisite: ITSC 1313 or approval of instructor.

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies, and authoring tools. Lab Fee: \$20.00

IMED 2309. Internet Commerce. (3-2-4)

Prerequisite: ITSC 1301, ITSC 1313 or approval of instructor.

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. Lab Fee: \$20.00

ITSE 1381. Cooperative Ed/Practicum - Computer Programming. (3-1-20)

Career related activities in the student's area of specialization are offered through a cooperative agreement between the college, the employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Lab Fee: \$20.00

ITNW 1381. Cooperative Ed/Practicum - Data Processing Technology/Technician. (3-1-20)

Career related activities in the student's area of specialization are offered through a cooperative agreement between the college, the employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Lab Fee: \$20.00

ITNW 1325. Fundamentals of Networking Technologies. (3-3-3)

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Identify and use network transmission media; explain the OSI model; recognize the primary network topologies/protocols, identify their characteristics, and determine which would be most appropriate for a proposed network; identify the functions of a network operating system and distinguish between centralized, client/server, and peer-to-peer systems; and distinguish between Local Area Networks (LANs) and Wide Area Networks (WANs) and identify the components used to expand a LAN into a WAN. Lab Fee: \$20.00

ITNW 1380. Cooperative Ed/Practicum - Business Systems Networking. (3-1-20)

Career related activities in the student's area of specialization are offered through a cooperative agreement between the college, the employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Lab Fee: \$20.00

Cosmetology

CSME 1205. Fundamentals of Cosmetology. (4-2-8)

A course in the basic fundamentals of cosmetology. Topics include service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, combout, and salon management. The students will identify fundamental concepts related to skills required by the Texas Cosmetology Commission; implement fundamental skills required by the Texas Cosmetology Commission; and demonstrate professional communication skills. (0-499 clock hours) Lab Fee: \$20.00

CSME 1410. Introduction to Haircutting & Related Theory. (4-2-8)

Introduction to the theory and practice of hair cutting. Topics include terminology, implements, section haircutting and finishing techniques. The student will exhibit basic work place competencies related to haircutting and finishing techniques; identify terminology related to haircutting and finishing techniques; and demonstrate use of implements and various sectioning, haircutting and finishing. (0-499 clock hours) Lab Fee: \$20.00

CSME 1443. Manicuring & Related Theory. (4-2-8)

Presentation of the theory and practice of nail technology. Topics include terminology, application, and workplace competencies related to nail technology. The student will identify terminology related to nail technology; demonstrate the proper application of nail technology; and exhibit workplace competencies in nail technology. (0-499 clock hours) Lab Fee: \$20.00

CSME 1447. Principles of Skin Care/Facials and Related Theory. (4-2-8)

In-depth coverage of the theory and practice of skin care, facials and cosmetics. The student will identify the terminology related to the skin, products, and treatments; demonstrate the proper application related to skin care and cosmetics; and exhibit workplace competencies in skin care and cosmetics. (500-999 clock hours) Lab Fee: \$20.00

CSME 1451. Artistry of Hair, Theory and Practice. (4-2-8)

Instruction in the artistry of hair design. Topics include theory, techniques, and application of hair design. The student will identify the terminology related to hair structure, growth, and distribution; exhibit workplace competencies related to the artistry of hair, and demonstrate the proper application of hair design. (0-499 clock hours) Lab Fee: \$20.00

CSME 1453. Chemical Reformation and Related Theory. (4-2-8)

Presentation of the theory and practice of chemical reformation. Topics include terminology, application, and workplace competencies related to chemical reformation. The student will identify terminology related to chemical reformation; demonstrate the proper application of chemical reformation; and exhibit workplace competencies related to chemical reformation. (500-999 clock hours) Lab Fee: \$20.00

CSME 2237. Advanced Cosmetology Techniques. (2-1-7)

Mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies. The student will develop and create a variety of hair designs; perform professional cosmetology services; and demonstrate cosmetology workplace competencies. (1000-1500 clock hours) Lab Fee: \$20.00

CSME 2242. Salon Development. (2-4-1)

Exploration of salon development. Topics include professional ethics and goals, salon operation, and record keeping. The student will create a salon portfolio; demonstrate an understanding of salon operations; and demonstrate organizational skills related to salon management. (500-999 clock hours) Lab Fee: \$20.00

CSME 2401. The Principles of Hair Coloring and Related Theory. (4-2-8)

Presentation of the theory and practice of hair color and chemistry. Topics include terminology, application, and workplace competencies related to hair color and chemistry. The student will identify terminology related to hair color and chemistry; demonstrate the proper application of hair color; and exhibit workplace competencies related to hair color. (500-999 clock hours) Lab Fee: \$20.00

CSME 2410. Intermediate Haircutting and Related Theory. (4-2-8)

Advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razor, and/or clippers. The student will exhibit work place competencies related to advanced haircutting and finishing techniques; identify terminology related to haircutting and finishing techniques; demonstrate use of implements and various sectioning, haircutting and finishing techniques. (1000-1500 clock hours) Lab Fee: \$20.00

CSME 2439. Advanced Hair Design. (4-2-8)

Advanced concepts in the theory and practice of hair design. The student will identify terminology related to hair; demonstrate the proper techniques related to hair design; and exhibit workplace competencies in hair design. (1000-1500 clock hours) Lab Fee: \$20.00

CSME 2441. Preparation for Texas Cosmetology Commission Examination. (4-2-8)

Preparation for the Texas Cosmetology Commission Examination. The student will exhibit the skills required to the completion of the Texas Cosmetology practical exam; and complete the theory curriculum for the Texas Cosmetology Commission theory examination. (1000-1500 clock hours) Lab Fee: \$20.00

Cosmetology–Manicure

CSME 1430. Orientation to Nail Technology. (4-2-8)

An overview of the fundamental skills and knowledge necessary for the field of nail technology. Exhibit comprehension of professional ethics; demonstrate sanitation and sterilization; and reiterate the rules and regulations of the institution, department, and state. Lab Fee: \$20.00

CSME 1431. Principles of Nail Technology I. (4-2-8)

A course in the principles of nail technology. Topics include anatomy, physiology, theory, and related skills of nail technology. Identify the basic anatomy of the hands, arms, and feet; explain the basic physiology of the hands, arms, and feet; and demonstrate the related skills of manicuring and pedicuring. Lab Fee: \$20.00

CSME 1441. Principles of Nail Technology II. (4-2-8)

Advanced concepts and principles of nail technology. Topics include advanced instruction in anatomy, physiology, theory, and related skills of nail technology. Lab Fee: \$20.00

CSME 1443. Manicuring and Related Theory. (4-2-8)

Presentation of the theory and practice of nail technology. Topics include terminology, application, and workplace competencies related to nail technology. Identify terminology related to nail technology; demonstrate the proper application of nail technology; and exhibit workplace competencies in nail technology. Lab Fee: \$20.00

Cosmetology Student Instructor

CSME 1434. Cosmetology Instructor I. (4-2-8)

The fundamentals of instruction of cosmetology students. The student will develop an understanding of classroom/clinic management; design teaching methodologies; and design and implement lesson plans. Lab Fee: \$20.00

CSME 1435. Orientation to the Instruction of Cosmetology. (4-2-8)

An overview of the skills and knowledge necessary for the instruction of cosmetology students. The student will develop an understanding of the rules and regulations of the school, department, and state, demonstrate an understanding of teaching methodologies; and exhibit an understanding of lesson plan development. Lab Fee: \$20.00

CSME 2414. Cosmetology Instructor II. (4-2-8)

A continuation of the fundamentals of instruction of cosmetology students. The student will demonstrate proper classroom/clinic management; and implement teaching methodologies and lesson plans. Lab Fee: \$20.00

CSME 2415. Cosmetology Instructor III. (4-2-8)

Presentation of assignments and evaluation techniques for a cosmetology program. The student will develop an understanding of the proper assessment and evaluation techniques in a cosmetology program; and design evaluation tools for a cosmetology program. Lab Fee: \$20.00

CSME 2444. Cosmetology Instructor IV. (4-2-8)

Advanced concepts of instruction in a cosmetology program. Topics include demonstration and implementation of advanced evaluation and assessment techniques. The student will demonstrate proper assessment and evaluation techniques in a cosmetology program; and implement evaluation tools in a cosmetology program. Lab Fee: \$20.00

CSME 2445. Instructional Theory and Clinic Operation. (4-2-8)

An overview of the objectives required by the Texas Cosmetology Commission Instructor Examination. The student will exhibit the skills required for the completion of the Texas Cosmetology Commission curriculum; demonstrate the management of a lab/clinic in a cosmetology program; and exhibit classroom management skills. Lab Fee: \$20.00

Criminal Justice

CJCR 1304. (CRIJ 1321) Probation and Parole. (3-3-0)

Evolution of criminal corrections; avenues into which the corrections field branches; various types and methods of correction; law and custom pertaining to probation, recidivist, mentally ill, parole, pardon and other forms of clemency, the loss and restoration of rights, and punishment and treatment.

CJCR 1307. Correctional Systems and Practices. (3-0-0)

Corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues. The student will identify the organization and role of corrections; distinguish operations and procedure within correctional programs; and appraise rehabilitation, alternatives to institutionalization, and future issues.

CJCR 1400. Basic Jail Course (4-5-0)

Provides instruction in human relations, observation, evaluation of prisoners, booking procedures, classification, mug shots, fingerprinting, strip searches, meals, medical services, visitation, inmates rights and privileges, detention areas, key, knife and tool control, disturbances, riots, fire procedures, and release procedures. Taught in accordance with the current TCLEOSE instructor guides provided by the Commission for course #1005. The student will comply with licensure requirements of the state of Texas; demonstrate skills in the care, custody, and control of jail inmates; and demonstrate an understanding of legal issues, gender and cultural diversity, and stress management techniques in a local correctional environment.

CJCR 2325. Legal Aspects of Corrections. (3-3-0)

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.

CJLE 1333. (CRIJ 1322) Traffic Law. (3-3-0)

State law pertaining to vehicular traffic; history of traffic law; factors which affect officer-violator relations during contact; procedures which will maximize the personal safety of the officer during a traffic stop; accident investigation procedures; and a concentrated study of the Uniform Act (VCS 6701d).

CJLE 1394. Special Topics in Law Enforcement. (3-3-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

CJSA 1325. Criminology. (3-3-0)

This course examines the cases, treatment and prevention of crime and delinquency. Students will analyze the various aspects of deviant behavior, criminological and methodological, relative to the social sciences.

CJSA 1347. (CRIJ 1318) Patrol Administration. (3-3-0)

Line activities of law enforcement agencies with emphasis on the patrol function and prevention of crime; includes traffic, investigation, juvenile, vice, and other specialized operational units.

CJSA 1348. (CRIJ 2374) Ethics in Criminal Justice. (3-3-0)

The study of basic moral and ethical issues in policing, the course, sentencing, and corrections. An examination of the ethical issues involved in criminal justice research.

CJSA 1392. Special Topics in Criminal Justice. (3-3-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation relevant to the professional development of the student.

CJSA 2382, 2383. (CRIJ 2375, 2376) Coop/Seminar. (3-1-20)

Prerequisite: Consent of Instructor; Concurrent enrollment in Criminal Justice Course.

This course will give the students an opportunity to gain technical knowledge through on-the-job training. The job will serve as laboratory work for the student. The seminar will give the students an opportunity to discuss and seek answers to problems they have encountered on the job. Lab Fee: \$20.00.

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

History and philosophy of criminal justice and ethical consideration; crime defined; its nature and impact; overview of criminal justice system; law enforcement; court system; prosecution and defense; trial process; corrections.

CRIJ 1306. The Courts and Criminal Procedure. (3-3-0)

The judiciary in the criminal justice system; structure of American court system; prosecution; right to counsel; pre-trial release; grand juries; adjudication process; types and rules of evidence; sentencing.

CRIJ 1307. Crime in America. (3-3-0)

American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime.

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

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.

CRIJ 1313. Juvenile Justice System. (3-3-0)

A study of the Juvenile Justice process to include specialized juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

CRIJ 2301. (CRIJ 2372) Community Resources in Corrections. (3-3-0)

Modern trends in corrections, such as the community-based programs in work-release, half-way houses, contact program planning, as well as the therapeutic community and treatment team concept in institutions are described and evaluated.

CRIJ 2313. (CRIJ 1371) Correctional Systems and Practices. (3-3-0)

An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions. History, philosophy, methods and techniques.

CRIJ 2314. Criminal Investigation. (3-3-0)

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. (3-3-0)

Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; police liability.

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

The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; current and future issues.

Dance

DANC 1112, 1113, 2112, 2113. (DAN 1111, 1112, 2111, 2112) Dance. (1-0-3)

Participation and instruction in folk, modern, social, tap, and other activities (co-educational). Lab Fee: \$20.00

DANC 1147, 1148, 2147, 2148. Jazz Dance. (1-0-3)

Participation and instruction in jazz dance. Lab fee: \$20.00

Developmental Studies

Developmental Studies courses carry no semester hour credit and therefore cannot be used for graduation purposes.

DEVL 0100. Developmental Writing Laboratory I. (1-0-2)

Laboratory course designed to improve fundamental writing skills. Required of all student enrolled in D.S. 0300. Lab Fee: \$20.00

DEVL 0101. Developmental Mathematics Laboratory I. (1-0-2)

Laboratory course designed for students needing a review of fundamental operations in mathematics. Required of students enrolled in D.S. 0304. Lab Fee: \$20.00

DEVL 0102. Developmental Reading Laboratory I. (1-0-2)

Laboratory course designed to improve reading skills. Required of all students enrolled in D.S. 0306. Lab Fee: \$20.00

DEVL 0106. Developmental Writing II Laboratory. (1-0-2)

A laboratory course required of students enrolled in DEVL 0301. Lab Fee: \$20.00

DEVL 0107. Developmental Math II Laboratory. (1-0-2)

A laboratory course required of students enrolled in DEVL 0309. Lab Fee: \$20.00

DEVL 0108. Developmental Reading II Laboratory. (1-0-2)

A laboratory course required of students enrolled in DEVL 0307. Lab Fee: \$20.00

DEVL 0300. Developmental Writing I. (3-3-0)

This course is designed to improve fundamental writing skills. Students will examine basic sentence structure; write, contract, and expand sentences; compose paragraphs to accomplish various purposes; and apply the conventions of standard written English to all discourse.

DEVL 0301. Developmental Writing II. (3-3-0)

This course begins with a study of the paragraph. Students examine the problems of audience, purpose, organization, expansion, style, and grammar as they relate to effective communication. Then they study the structure and purposes of the essay. Practice in writing paragraphs and essays at this level should prepare the students for successful completion of future writing assignments.

DEVL 0304. Developmental Mathematics I. (3-3-0)

Designed for students needing a review of fundamental operations in arithmetic. Provides indepth work with whole numbers, fractions, decimals, percentages, geometric formulas, and some work with tables and charts.

DEVL 0305. Personal Development. (3-3-0)

A course employing the basic principles of Psychology designed to help the student identify strengths and career interests, and to develop those interpersonal skills necessary for functioning in the student's chosen field or vocation. Care is taken to identify and build upon the student's strengths, especially as these are related to diverse cultural and/or native language capabilities, that may help assure success in the student's chosen field or vocation.

DEVL 0306. Developmental Reading I. (3-3-0)

Prerequisite: None (placement below eighth reading level).

This lecture course emphasizes reading skills and concepts which will be practiced in the reading lab. It concentrates on vocabulary, comprehension, and reading rate.

DEVL 0307. Developmental Reading II. (3-3-0)

Prerequisite: D.S. 0306 or placement at reading levels eight through ten.

This lecture course emphasizes higher level comprehension skills, including inference and analytical reading skills; listening and study skills; and secondary vocabulary. Application of these skills to course work is a major part of class work.

DEVL 0308. Developmental Speech. (3-3-0)

A course in oral communication designed to introduce the student to the principles and basic skills of effective oral communication. The course emphasizes the development and improvement of skills in interpersonal and small group communication, and a variety of structures and techniques for oral presentation are presented throughout the course.

DEVL 0309. Developmental Mathematics II. (3-3-0)

This course is a continuation of Developmental Mathematics I. The main topics covered are taken from Elementary Algebra and may include integer arithmetic, solving linear equations and problems, operations with polynomials, factoring polynomials, and graphs of linear equations.

DEVL 0310. Intermediate Algebra. (3-3-0)

This course is a continuation of Developmental Mathematics II. The main topics covered are factoring, rational algebraic expressions, exponents and radicals, graphs, quadratic equations and systems of equations.

Drafting and Design Technology

ARTC 1413. (DRFT 2478) Digital Publishing I. (4-3-3)

An introduction to the fundamentals of using the computer as a primary production tool. Topics include an overview of industry standard software for page layout and design, drawing and image manipulation, and various methods of reproduction for print and electronic delivery. Lab Fee: \$20.00

ARTC 1453. (DRFT 2471) Computer Illustration. (4-3-3)

This course is designed as an introduction to Computer-Aided-Drafting for non-drafting and engineering majors. Basic concepts of drawing and shading with color will be covered. This course is excellent for computer science, art, and journalism majors. Lab Fee: \$20.00

DFTG 1402. (ARTC 1441) Introduction to Technical Animation and Rendering. (4-3-3)

This course introduces the basic terminology and concepts associated with the development of computer modules used in technical computer animation. Topics include basic animation, principles, model creation, light sources, camera positioning, rendering as well as importing and modification of external files, course projects reflect current practices in the architectural, engineering, or construction disciplines. Lab Fee: \$20.00

DFTG 1309. Basic Computer-Aided Drafting. (3-2-4)

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. The student will comprehend the use of CAD hardware and software to create, display, and plot working drawings. The student will demonstrate the proper use of equipment; operate and adjust input and output devices; start and exit a software program; demonstrate file management techniques; perform drawing setup, construct geometric figures and text, utilize editing commands; control coordinates and scales, use layering techniques and use associate dimensioning, plotting, and printing. Lab Fee: \$20.00

DFTG 1317. Architectural Drafting-Residential. (3-2-4)

Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. The student will demonstrate a general understanding of architectural terms, symbols, use of residential construction materials and processes, and knowledge of reference materials. The student will demonstrate the ability to produce a set of residential construction drawings to include: site plan, elevations, wall sections, schedules, details and foundation plan. Lab Fee: \$20.00

DFTG 1458. Electronic Drafting. (4-3-3)

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. Lab Fee: \$20.00

DFTG 1491. Special Topics in Drafting. (4-3-3)

Prerequisite: DFTG 1409 or approval of Instructor.

Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology of occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends. Lab Fee: \$20.00

DFTG 2306. Machine Design. (3-3-3)

Prerequisite: DFTG 2344.

Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components. Identify the steps used in the design process, terminology, mechanical processes, and produce needed drawings of solutions. Lab Fee: \$20.00

DFTG 2344. Strength in Materials. (3-3-0)

The study of internal effects of forces acting upon elastic bodies and the resulting changes in form and dimensions, including units of stress, shear, bending moments, and simple beam design. The student will specify loading and the effect of forces on structures. The student will prepare moment and shear diagrams and recognize compression and tensile forces within structural elements.

DFTG 2380. (DRFT 2374) Coop/Seminar (3-1-20)

Prerequisite: Approval of Instructor.

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the College, employer, and student. Under 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. Lab Fee: \$20.00

DFTG 2402. Machine Drafting. (4-3-3)

Prerequisite: DFTG 1405 and DFTG 1409.

Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. The students will interpret terms used in tolerancing; determine dimensions of two mating parts, draw spur and bevel gears; and draw set of detail and assembly drawings. The student will define terms used in tolerancing; determine interference and clearances; specify types of thread forms; interpret thread notes; draw spur, bevel, cam profile; and draw a set of detail and assembly drawings. Lab Fee: \$20.00

DFTG 2410. Structural Drafting. (4-3-3)

Prerequisite: DFTG 1405 and DFTG 1409.

Discussion of detail drawings of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to meet the standards of American Institute of Steel Construction, including unit on concrete detailing conforming to American Concrete Institute standards. The student will demonstrate intermediate math skills and exhibit knowledge of steel and concrete systems; use reference books; recognize basic types of connections used for structural drawings; produce structural steel drawings to include framing plans and connection details; and produce structural concrete drawings to include plan views and connection details. Lab Fee: \$20.00

DFTG 2421. Topographical Drafting. (4-3-3)

A course in map drafting. Emphasis is given to plotting of surveyors of field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. The student will demonstrate an understanding of the transit, level, level rod, tape and associated surveying equipment and be able to identify and use topographical symbols. The student will demonstrate the proper use of math skills including trigonometry functions, and exhibit the ability to produce topographical drawings. Lab Fee: \$20.00

DFTG 2423. Pipe Drafting. (4-3-3)

A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrating through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. The student will demonstrate a knowledge of intermediate math skills; foundations, structural steel supports, and process equipment; Instrument Society of America (I.S.A.) symbology; and researching specifications. The student will complete a bill of material list and use charts and standards; visualize views in three-dimension; solve intermediate math problems; draw manually or by computer, follow specifications; and calculate measurements for screwed, socketweld, and butt-weld piping using trigonometric applications. Lab Fee: \$20.00

DFTG 2428. Architectural Drafting – Commercial (4-3-3)

Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. The students will exhibit a general understanding of architectural terms, symbols, use of commercial construction materials and processes, and a general knowledge of drawing production processes. The student will demonstrate the ability to produce a set of commercial construction drawings to include a site plan, floor plans, reflected ceiling plan, sections, elevations, schedules, and details. Lab Fee: \$20.00

DFTG 2432. (DRFT 2477) Advanced Computer Aided Drafting. (4-3-3)

Prerequisite: DFTG 1405 and DFTG 1409 or approval of Instructor.

Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external non-graphic data. Lab Fee: \$20.00

DFTG 2437. (ARTC 1445) Advanced Technical Animation and Rendering. (4-3-3)

This course covers the implementation and orchestration of advanced technical three dimensional animation techniques such as hierarchical linking, forward and inverse Kinematics, character development, and particle dynamics. Course projects reflect current practices in the architectural, engineering, or construction disciplines. Lab Fee: \$20.00

DFTG 2340. Solid Modeling/Design. (3-2-4)

Prerequisite: DFTG 1405, DFTG 1409 or approval of Instructor.

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. The student will apply the concepts necessary to create the three-dimensional solid model objects; create isometric, oblique, and perspective drawings; and draw manually or by computer. Lab Fee: \$20.00

ENGR 1304. Engineering Graphics I. (3-2-4)

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. The student will demonstrate an understanding of geometric construction, various view selections, and principles of working drawings. The student will demonstrate competency in drafting principles in plane geometry, technical sketching, orthographic projection theory and practice, auxiliary views and competency in sectioning, dimensioning, and tolerancing. Lab Fee: \$20.00

ENGR 1305. Engineering Graphics II. (3-2-4)

Examination of the graphical solution to problems involving points, lines, and planes in space. The student will demonstrate the ability to visualize spatial relationships; exhibit good engineering form by being neat in work and accurate in solutions; develop sequential thinking; set patterns of analysis; and spatial visualization through problem-solving. The student will analyze and graphically solve problems which may be difficult to solve mathematically. Lab Fee: \$20.00

INMT 1449. Manufacturing Process. (4-3-3)

Prerequisite: DFTG 1409, DFTG 1405 or approval of Instructor.

This course consists of the study of "How Things Are Made." The basic methods used in manufacturing, such as casting, forging, molding, and extruding, and methods of metal cutting, joining, and finishing various types of metals. Lab Fee: \$20.00

Drama

DRAM 1120, 1121, 2120, 2121. (THE 1111, 1112, 2111, 2112) Theatre Practicum. (1-0-6)

A course in theatre with emphasis on performance techniques in musical and repertory theatre. Practical performance and technical theatre experience are provided. This course may be repeated for a maximum of 4 hours credit. Lab Fee: \$20.00

DRAM 1161. Musical Theatre Workshop. (1-0-4)

This course introduces the student to the various aspects of producing a musical. Topics to be covered include audition and casting, rehearsal techniques, and scheduling, public relations, staging, and musical performance. The student will be required to participate in some aspect of a musical production. Lab Fee: \$20.00

DRAM 1310. (THE 1311) Theatre Appreciation. (3-3-0)

The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians.

DRAM 1330. (THE 2311) Stagecraft I. (3-3-3)

The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. Lab Fee: \$20.00

DRAM 1332. Stage Movement. (3-3-0)

This course is designed to prepare the actor for stage movement with vocal coaching. Students will adapt body movements and physicality to specific periods in theatrical history as well as work with stage combat weaponry.

DRAM 1341. (THE 2312) Make-up for the Stage. (3-3-3)

The craft of make-up is explored. Both theory and practice are included. Lab Fee: \$20.00

DRAM 1342. History of Costume. (3-3-3)

This course surveys fashion and costuming while detailing the periods to shows across the theatrical spectrum. Students will recognize major developments and changes in period costuming while designing for each period. The costuming lab will involve students in the construction and maintenance of costumes and accessories. Lab Fee: \$20.00

DRAM 1351. (THE 1312) Acting I. (3-3-3)

The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. Lab Fee: \$20.00

DRAM 1352. (THE 1313) Acting II. (3-3-3)

This course is a continuation of Acting I. Emphasis is on characterization and ensemble acting. Lab Fee: \$20.00

DRAM 2351. Acting III. (3-3-3)

This course is a continuation of Acting II. Structured in a workshop format, the intent will be to focus on the principles, procedures, and practices of stage direction. Since acting and directing are inextricably related disciplines, students will serve as both the actors and the directors in the direction and production of ten-minute plays and the one-act play. Lab Fee: \$20.00

DRAM 2352. Acting IV. (3-3-3)

This course is a continuation of Acting III. This course is structured in a workshop format and students will contract semester grades with the instructor. The emphasis will be on play direction and/or play writing. Lab Fee: \$20.00

DRAMA 2331. Stagecraft II. (3-3-3)

Prerequisite: Stagecraft I or consent of instructor.

This course is a continuation of Stagecraft I with emphasis on theatrical lighting and sound. Lab Fee: \$20.00

DRAM 2336. (THE 1314) Theatre Speech (3-3-0)

This course includes a study of the physiology and mechanics of effective voice production. Practice is provided in breath control, articulation, enunciation, pronunciation, and phonetics. (Students may register for either SPCH 1342 or DRAM 2336 but may receive credit for only one of the two.)

DRAM 2361. (THE 2313) History of Theatre I. (3-3-0)

Theatre is surveyed from its beginning through the 16th century. The theatre is studied in each period as part of the total culture of the period.

DRAM 2362. (THE 2314) History of Theatre II. (3-3-0)

Theatre is surveyed from the 17th century through the 20th century. The theatre is studied in each period as part of the total culture of the period.

DRAM 2366. Development of the Motion Picture I. (3-3-3)

An analysis of the motion picture as an art form with special interest in landmark films, directors, actors and actresses. Selected emphasis will be given to the historical growth and sociological effects of film on society. The lab part of the course will primarily be devoted to viewing selected films. Lab Fee: \$20.00

Early Childhood Development

CDEC 1292. Special Topics in Child Growth, Care and Development. (2-2-0)

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.

TECA 1303. The Family and the Community. (3-3-3)

A study of the relationship between the child, the family, the community, lifestyles, child abuse, and current issues. Lab Fee: \$20.00

CDEC 2307. Math and Science for Childhood Education. (3-3-0)

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

CDEC 1358. Creative Arts for Early Childhood. (3-3-0)

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 2368 and 2369. (CHID 2271 & 2272) Practicum–Child Growth and Development (3-1-20) (Field Experience Lab)

Practical general training and experiences in the workplace. The College with the employer develops and documents an individualized plan for the student. The plan related the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Lab Fee: \$20.00

CDEC 1393. Special Topics in Family Living and Parenthood. (3-3-0)

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 1394. Special Topics in Child Development and Guidance. (3-3-0)

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 1396. Special Topics in Child Care Service Manager. (3-3-0)

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.

TECA 1311. (CDEC 1411) Educating Young Children. (3-3-3)

An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. Lab Fee: \$20.00

CDEC 1413. (CHID 1474) Curriculum Resources. (4-3-3)

Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children. Lab Fee: \$20.00

TECA 1318. (CDEC 1418) Wellness of the Young Child. (3-3-3)

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. Lab Fee: \$20.00

CDEC 1419. (CHID 2471) Child Guidance. (4-3-3)

An exploration of common behavior problems of young children in child care settings. Emphasis on positive guidance techniques for effective behavior management. Practical application through direct participation in child care setting. Lab Fee: \$20.00

TECA 1354. (CDEC 1454) Child Growth and Development. (3-3-3)

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. Lab Fee: \$20.00

CDEC 1456. (CHID 1473) Emergent Literacy. (4-3-3)

An exploration of principles, methods, and materials for teaching young children language and literacy through a play based, integrated curriculum. Methods for screening for speech and language problems. Lab Fee: \$20.00

CDEC 1459. Children with Special Needs. (4-3-3)

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. Lab Fee: \$20.00

CDEC 2315. Diverse Cultural/Multilingual Education. (3-3-3)

An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children. Explore different models of multicultural/multilingual education; explore personal and institutional bias, and evaluate and plan bias-free environments and activities. Lab Fee: \$20.00

CDEC 2326. (CHID 1472) Administration of Programs for Children I. (3-3-0)

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. (CHID 2371) Administration of Programs for Children II. (3-3-0)

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 1421. The Infant and Toddler. (4-3-3)

A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality care giving routines, appropriate environments, materials and activities, and teaching/guidance techniques. Lab Fee: \$20.00

CDEC 2441. The School Age Child. (4-3-3)

A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, and teaching/guidance techniques. Lab Fee: \$20.00

Economics

ECON 2301. Principles of Macroeconomics. (3-3-0)

This course will include a study of economic problems such as inflation, unemployment, and economic stabilization by monetary and fiscal policy. Macroeconomic concepts of total spending, total output and income, money and banking, and the Keynesian and monetary approaches to national income analysis are discussed.

ECON 2302. Principles of Microeconomics. (3-3-0)

This course will include the basic economic concepts of how individuals, businesses, and societies choose through the social, political and market processes. Microeconomic concepts and principles of demand, supply, the price mechanism, and profits are presented. A study of how the market process works in the real world, as well as current economic problems of pollution, population, poverty, urbanization, and a challenge to capitalism, are discussed.

Education

EDUC 1300. Learning Framework. (3-3-0)

A study of the (1) research and theory in the psychology of learning, cognition, and motivation, (2) factors that impact learning, and (3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Students may register for either EDUC 1300 or PSYC 1300 but may receive credit for only one of the two.)

EDUC 1301. Introduction to the Teaching Profession. (3-3-1)

An enriched, integrated pre-service course and content experience that: (1) provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields; (2) provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations; (3) provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. The course includes a 16 contact hour lab component which must be in P-12 schools.

EDUC 1325. Principles and Practices of Multicultural Education. (3-3-0)

An examination of cultural diversity found in society and reflected in the classroom. Topics include the study of major cultures and their influence in lifestyle, behavior, learning, intercultural communication and teaching, as well as psychosocial stressors encountered by diverse cultural groups.

EDUC 2301. Introduction to Special Populations. (3-3-1)

Prerequisite: EDUC 1301.

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and includes a 16 contact hour lab component which must be with special populations in P-12 schools.

Emergency Medical Technology

EMSP 1501. Emergency Medical Technology – Basic. (5-4-4-0)

Prerequisite: Must be at least 18 years of age and have a high school diploma or GED within one year of course completion date. Students will not be eligible to be certified by TDSHS until they reach 18 years of age and have a high school diploma or GED.

Co-requisite: EMSP 1160

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. Lab Fee: \$20.00

EMSP 1160. EMT Basic Clinical. (1-0-0-3)

Prerequisite: Must be at least 18 years of age and have a high school diploma or GED within one year of course completion date. Students will not be eligible to be certified by TDSHS until they reach 18 years of age and have a high school diploma or GED.

Co-requisite: EMSP 1501

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Upon successful completion of EMST 1501 and 1160 and Texas Department of State Health Services (TDSHS) requirements, the student will be eligible to take the Basic Emergency Medical Technician certification examination. Lab Fee: \$76.00 (Liability insurance required.) Lab fee includes liability insurance premium, drug screening, and criminal background check. Fee is subject to change if insurance premium or other charges change.

EMSP 1438. Introduction to Advanced Practice. (4-2-4-0)

Prerequisite: EMSP 1501 & 1160 with a grade of "C" or better and current certification or pending certification as an EMT-Basic by TDSHS; or current certification by TDSHS as EMT-Basic and successful completion of advanced placement requirements.

Co-requisite: EMSP 1356 & 1261

An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. Lab Fee: \$20.00

EMSP 1356. Patient Assessment & Airway Management. (3-2-2-0)

Prerequisite: EMSP 1501 & 1160 with a grade of “C” or better and current certification or pending certification as an EMT – Basic by TDSHS; or current certification by TDSHS as EMT – Basic and successful completion of advanced placement requirements.

Co-requisite: EMSP 1438 & 1261

A detailed study of the knowledge and skills required to perform patient assessment and airway management. Lab Fee: \$20.00

EMSP 1261. Paramedic Clinical I. (2-0-0-6)

Prerequisite: EMSP 1501 & 1160 with a grade of “C” or better and current certification or pending certification as an EMT – Basic by TDSHS; or current certification by TDSHS as EMT – Basic and successful completion of advanced placement requirements.

Co-requisite: EMSP 1438 & 1356

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Lab Fee: \$33.00 (Liability insurance required.) Lab fee includes liability insurance premium. Fee is subject to change if insurance premium changes.

EMSP 1145. Basic Trauma Life Support. (1-0-2-0)

Prerequisite: EMSP 1355, 2434 & 2262 with a grade of “C” or better. Co-requisite: EMSP 2135, 2243 & 2463

Intense skill development in emergency field management, systematic rapid assessment, resuscitation, packaging, and transportation of patients. Includes experience necessary to meet initial certification requirements. Lab Fee: \$37.00. Lab fee includes BTLS card fee.

EMSP 2135. Advanced Cardiac Life Support. (1-0-2-0)

Prerequisite: EMSP 1355, 2434, & 2262 with a grade of “C” or better.

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. Lab Fee: \$23.00. Lab Fee includes ACLS card fee.

EMSP 2262. Paramedic Clinical II. (2-0-0-6)

Prerequisite: EMSP 1438, 1356 & 1261 with a grade of “C” or better, or current certification as an EMT – Intermediate by TDSHS and successful completion of advanced placement requirements.

Co-requisite: EMSP 2434, & 1355

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Lab Fee: \$33.00 (Liability insurance required.) Lab fee includes liability insurance premium. Fee is subject to change if insurance premium changes.

EMSP 2434. Medical Emergencies. (4-4-1-0)

Prerequisite: EMSP 1438, 1356 & 1261 with a grade of “C” or better, or current certification as an EMT – Intermediate by TDSHS and successful completion of advanced placement requirements.

Co-requisite: EMSP 1355 & 2262

A detailed study of the knowledge and skills in the assessment and management of patients with medical emergencies. Lab Fee: \$20.00

EMSP 2147. Pediatric Education for Pre-hospital Providers. (1-0-2-0)

Prerequisite: EMSP 2262, 1355, & 2434

Co-requisite: EMSP 2243, 2463, 1145 & 2135

A course in the pre-hospital management of the pediatric patient experiencing difficulties in medical and/or trauma-related emergencies. Lab Fee: \$20.00

EMSP 2243. Assessment Based Management. (2-2-0-0)

Prerequisite: EMSP 2262, 1355, & 2434

Co-requisite: EMSP 2147, 2463, 1145 & 2135

The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management.

EMSP 1355. Trauma Management. (3-2-2-0)

Prerequisite: EMSP 1438, 1356, & 1261 with a grade of "C" or better, or current certification as an EMT – Intermediate by TDSHS and successful completion of advanced placement requirements.

Co-requisite: EMSP 2434 & 2262

A detailed study of the knowledge and skills in the assessment and management of patients with traumatic injuries.

EMSP 2463. Paramedic Clinical III. (4-0-0-12)

Prerequisite: EMSP 1355, 2434, & 2262

Co-requisite: EMSP 2147, 2243, 2135, & 1145

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Upon successful completion of EMSP 2135, 1145, 2147, 2243 and 2463 and Texas Department of State Health Services (TDSHS) requirements, the student will be eligible to take the Emergency Medical Technician – Paramedic certification examination. Liability insurance required.

Engineering

ENGR 1101. Introduction to Engineering. (1-0-1)

An introduction to the engineering fields of study, the methodology of the engineering profession and skills needed for success as an engineering student. The student will be expected to participate in lectures, seminars, field trips, and individual or group projects or presentations.

ENGR 1102. Introduction to Engineering. (1-0-1)

Prerequisite: ENGR 1101

A continuation of ENGR 1101.

ENGR 1304. Engineering Graphics I. (3-2-4)

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. The student will demonstrate an understanding of geometric construction, various view selections, and principles of working drawings. The student will demonstrate competency in drafting principles in plane geometry, technical sketching, orthographic projection theory and practice, auxiliary views and competency in sectioning, dimensioning, and tolerancing. Lab Fee: \$20.00

ENGR 1305. Engineering Graphics II. (3-2-4)

Examination of the graphical solution to problems involving points, lines, and planes in space. The student will demonstrate the ability to visualize spatial relationships; exhibit good engineering form by being neat in work and accurate in solutions; develop sequential thinking; set patterns of analysis; and spatial visualization through problem-solving. The student will analyze and graphically solve problems which may be difficult to solve mathematically. Lab Fee: \$20.00.

ENGR 2301. Engineering Mechanics I - Statics. (3-3-0)

Prerequisite: Credit for or registration in MATH 2314 and PHYS 2425.

A detailed study of rigid body statics and the analysis of structures, frames and beams. Topics covered will include Newton's laws as applied to static bodies, force vectors, free body diagrams, equilibrium of particles, moment of inertia, and friction.

ENGR 2302. Engineering Mechanics II - Dynamics. (3-3-0)

Prerequisite: ENGR 2301 and MATH 2314

A detailed study of moving bodies using the principles of kinematics and dynamics as applied to rigid bodies and systems of particles. Topics covered will include impulse and momentum, mass and acceleration, work and energy.

English

ENGL 1301. (ENG 1311) English Composition and Rhetoric (3-3-0)

English 1301, the first half of freshman English, aims to help the student acquire and/or improve skills in producing effective writing which observes the conventions of Edited American English – i.e., writing which is acceptable in the academic and professional world. The student will be guided through the composition process, encouraged to find and improve his/her own writing style, and guided in the analysis and evaluation of his own and others' writings.

ENGL 1302. (ENG 1312) English Composition and Literature. (3-3-0)

Prerequisite: ENGL 1301.

A continuation of ENGL 1301 with emphasis on the study and critical evaluation of modern literature, primarily from American writers of fiction, poetry, and drama. Oral and written communication, a research paper, and elementary original critical evaluation techniques are used.

ENGL 1313. (REA 1303) Analytical Reading and Critical Thinking. (3-3-0)

Prerequisite: DEVL 0307 or placement at reading level eleven and above.

This course is designed to improve higher level reading comprehension and thinking skills. In particular, there is an emphasis on inferring relationships (cause/effect, comparison/contrast, etc.), attitudes, and conclusions, as well as evaluating facts vs. opinion, validity, and quality of thought. Skills will be practiced and applied in regard to such matters as textbook and pre-professional test comprehension in various major content areas.

ENGL 2307. (ENG 2315) Creative Writing. (3-3-0)

Students will examine and practice principles of writing effective poetry and short stories. They will focus on creating their most effective style by workshop practice, interactions, and peer review.

ENGL 2311. (ENG 2316) Technical Writing. (3-3-0)

Prerequisite: ENGL 1301.

An opportunity for intensive practice in writing for business, technical, or occupational fields is provided in this course. In addition to standard writing procedures, students study specialized techniques such as the use of layout and design, methods of problem-solving, interview techniques, and oral presentations.

ENGL 2322. (ENG 2319) Survey of British Literature I. (3-3-0)

Prerequisite: ENGL 1302.

A study of British literature from Beowulf to the Romantic era. Authors studied include but are not limited to Chaucer, Shakespeare, and Milton. A fully documented research paper is required as part of the course work.

ENGL 2323. (ENG 2320) Survey of British Literature II. (3-3-0)

Prerequisite: ENGL 1302.

Continues the study of British masterworks, from the Romantic era to the present. A critical analysis is required as part of the course work, which will also include careful reading, analysis, research, and writing.

ENGL 2326. (ENG 2312) Survey of American Literature. (3-3-0)

Prerequisite: ENGL 1302.

A study of representative major works of American literature, with emphasis on careful reading, critical writing, and research.

ENGL 2332. (ENG 2331), (ENG 2317) Survey of World Literature I. (3-3-0)

Prerequisite: ENGL 1302.

A study of world masterworks from the Greek era through the Renaissance. Authors studied include but are not limited to Homer, the Greek playwrights, Plato, Vergil, Dante, and other European writers. A fully documented research paper is required as part of the course work.

ENGL 2333. (ENG 2332), (ENG 2318) Survey of World Literature II. (3-3-0)

Prerequisite: ENGL 1302.

A study of world masterworks from the Renaissance to the present. Content includes but are not limited to writers from Italy, Spain, France, Germany, and Russia. A critical analysis is required as part of the course work, which will also include careful reading, analysis, research and writing.

Fire Science Technology

FIRT 1301. (FIRE 1371) Fundamentals of Fire Protection. (3-3-0)

The objectives and views of inspections, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire Prevention organization; public cooperation and image, recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to the fire hazards.

FIRT 1303. (FIRE 2374) Fire and Arson Investigation. (3-3-0)

A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics.

FIRT 1305. (FIRE 2378) Public Education Program. (3-3-0)

Deals with giving material aid in teaching the public about fire prevention. Fire demonstration kits, indicative of flame spread, flammable liquids, gases, explosions, home and industrial hazards; methods of teaching the sick or immobile patient supervisors evacuation and safety in hospitals and nursing homes. How to teach children in kindergarten and elementary grades fire safety. Methods to use in fire brigade organization and training for industrial occupancies, along with industrial safety demonstrations, extinguishment techniques, public relations and news media relations, and utilization of the five-step planning process for public fire safety education.

FIRT 1307. Fire Prevention Codes and Inspections. (3-3-0)

Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices, and procedures. Identify and apply provisions of local building and fire prevention codes to fire prevention inspections; and describe the fire inspection practices and procedures including hazard recognition and correction.

FIRT 1309. (FIRE 2371) Fire Administration I. (3-3-0)

An in-depth study of the organization and management as related to fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire Service Leadership as viewed from the Company Officer's position.

FIRT 1311. Fire Service Hydraulics. (3-3-0)

Study of water distribution systems and fire stream development as related to fire protection and suppression. Describe basic principles of hydraulics including principles of fluids and fluid dynamics; identify and describe components of a water distribution system; determine fire flows for various types of occupancies; recognize and explain various types of fire pumps and pump operational procedures; calculate pump pressure for various types of hose lays; and describe various types of nozzles and the application of each type.

FIRT 1315. (FIRE 1373) Hazardous Material I. (3-3-0)

Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e. flammable liquids, combustible solids and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting and control.

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

Study of firefighter occupational safety and health in emergency and nonemergency situations. The student will identify and describe components of a firefighter safety and health program; explain safety practices and procedures related to emergency and nonemergency operations and outline the components of a firefighter wellness program.

FIRT 1327. (FIRE 1374) Building Construction. (3-3-0)

Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns; review of related statutory and suggested guidelines, both local and national in scope. Review of Model Building Codes and Life Safety Code.

FIRT 1331. (FIRE 2373) Fire Fighting Tactics and Strategy. (3-3-0)

Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis to be placed on pre-planning, study of conflagration problems, fire ground organization problem solving related to fire ground decision making and attach tactics and strategy. Use of Mutual Aid and large scale command problems.

FIRT 1336. Fire Insurance Fundamentals. (3-3-0)

Examination of the relationship between fire defense, fire losses, and insurance rates. In-depth study of the insurance grading system.

FIRT 1338. (FIRE 1372) Fire Protection Systems. (3-3-0)

Study of the required standard for water supply; special hazards protection systems; automatic sprinklers and special extinguishing systems; automatic signaling and detection systems; rating organizations and underwriting agencies.

FIRT 1345. (FIRE 2377) Hazardous Materials II. (3-3-0)

Concentrated study of ammonium nitrate, explosives, unstable materials, rocket propellants and exotic fuels, water reactive materials, toxic materials - Class B poison, pesticides and Class A poisons, corrosives, toxic combustion products, radioactive materials, explosive safety and bomb search procedures.

FIRT 1347. (FIRE 2379) Industrial Fire Protection I. (3-3-0)

Occupational Safety history and growth. The Occupational Safety and Health Act of 1970, safety program organization, Workmen's Compensation Insurance, human behavior and safety. Industrial toxicology and chemical hazards.

FIRT 1349. (FIRE 2380) Fire Administration II. (3-3-0)

This is an in-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies.

FIRT 1353. (FIRE 2376) Legal Aspects of Fire Protection. (3-3-0)

A study of legal rights and duties, liability concerns and responsibility of fire organizations. Introduction and basic concepts of civil and criminal law, the Texas and Federal Judicial structure, and liability for acts by fire organizations. An in-depth study of case histories concerning fire personnel and organizations.

FIRT 1355. Methods of Teaching. (3-3-0)

Preparation of public safety personnel to effectively teach technical skills, techniques, and information. The student will outline instructor qualities and responsibilities, identify principles of learning and teaching, demonstrate methods and techniques of teaching; and produce teaching aids.

FIRT 1391. Special Topics in Fire Protection and Safety Technology/Technician. (3-3-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends.

FIRT 2380, 2381. (FIRE 2372, 2375) Cooperative Seminar. (3-1-20)

The cooperative-seminar is a course through which the student can earn college credit for their on-the-job training. The actual work experience for each student will be developed by the employer and the teacher-coordinator. The cooperative training will be planned to provide the student with technical experience in the field of fire technology. Lab Fee: \$20.00

French

FREN 1300. (FRN 1311) Conversational French. (3-3-0)

An introductory course in conversational French with emphasis on syntax composition, speaking, and comprehension.

FREN 1310. (FRN 1312) Conversational French. (3-3-0)

A continuation of FREN 1300.

FREN 1411. (FRN 1411) Beginning French. (4-3-3)

Beginner's pronunciation, oral practice and dictation. Lab Fee: \$20.00

FREN 1412. (FRN 1412) Beginning French. (4-3-3)

A continuation of French 1411. Lab Fee: \$20.00

Geography

GEOG 1301. (GEO 1311) Physical Geography. (3-3-0)

A study is made of the relationships between human activities and the regional environment of the world. Consideration is given to earth-sun behavior, climate, land and water forms, mineral and water resources, and soil and natural vegetation. Emphasis is placed on physical geography.

GEOG 1302. (GEO 1312) Cultural Geography. (3-3-0)

A study of human interactions and adaptations to their physical environment. Emphasis is placed on cultural geography.

GEOG 1303. World Regional Geography. (3-3-0)

Study of major world regions with emphasis on prevailing conditions and developments, including emerging conditions and trends, and the awareness of diversity of ideas and practices to be found in Those regions. Course content may include one or more regions.

Government

GOVT 2301. (PS 2311) American and Texas Constitutions. (3-3-0)

Suggested Prerequisite: Sophomore standing is preferred.

Study of the United States and Texas Constitutions, civil liberties, federalism, interest groups, public opinion, political parties, voting and elections (satisfies requirements for Texas State Teacher Certification.)

GOVT 2302. (PS 2312) American and Texas Government. (3-3-0)

Suggested Prerequisite: Sophomore standing is preferred.

Emphasizes the executive, legislative and judicial branches; bureaucracy; economics and taxation; foreign policy and local government.

History

HIST 1301. (HIS 1311) United States History to 1877. (3-3-0)

A survey is made of the American colonies, their struggle for independence, the development of a political structure and the formative years, the westward movement, the growth of sectionalism, and the Civil War. The social, economic, and political trends are shown.

HIST 1302. (HIS 1312) United States History from 1877. (3-3-0)

This is a continuation of the history course surveying American growth, world conflicts, and the emergence of America as a world power. The social, economic, and political trends are shown.

HIST 2301. (HIST 2303), (HIS 1315) The History of Texas. (3-3-0)

This course covers a brief geography of Texas and the history of its people from the time of the Indians to the present. Special emphasis will be placed on Spanish influence, independence from Mexico, the period of the Republic, the Civil War and Reconstruction, and the development of the modern state. This course may not satisfy general education history requirements at some colleges and universities. Students are encouraged to contact the Guidance Center for information on transferability.

HIST 2311. (HIS 1313) History of Western Civilization. (3-3-0)

This course gives students an insight into past civilizations to acquaint them more fully with the civilization in which they live. The course will give a general background and relationship to all histories and effects of European history on American history.

HIST 2312. (HIS 1314) History of Western Civilization. (3-3-0)

This course will be a continuation of HIST 2311, and will give the student a survey of the activities of mankind and man's contribution to the development of the nations of the world.

HIST 2327. Mexican-American History I. (3-3-0)

An introductory course which surveys the historical, economic, social, and political development of Mexican-Americans and Latinos from the Pre-Columbian era to the 1846 Mexican-American War.

HIST 2328. Mexican-American History II. (3-3-0)

An introductory course which surveys the historical, economic, social, and political development of Mexican Americans and Latinos from the 1846 Mexican-American War to the contributions of Mexican-Americans and Latinos to United States society in present times.

Home Economics

HECO 1322 Nutrition and Diet Therapy. (3-3-0)

Cross-listing as BIOL 1322.

A study of the fundamental principles of human nutrition applied to health of the individual, family and community. Topics covered in the course include the chemical, physical, and sensory properties of food. Nutritional quality, food use, and diet applications are also stressed. Designed for majors in Nursing and Elementary Education. (formerly Home Economics 1311).

Students may register for either BIOL 1322 or HECO 1322 but may receive credit for only one of the two courses.

Horticulture

HALT 1191, 1291, 1391. Special Topics in Horticulture.

1191 (1-1-0)

1291 (2-2-0)

1391 (3-3-0)

Each course is designed to provide special topics related to current needs in the field of horticulture.

HALT 2386. Horticultural Internship. (3-1-20)

Students participate in problem-solving situations encountered in the field of horticulture. Lab Fee \$20.00

HALT 1375. Horticulture for the Homescape. (3-0-0)

Landscape horticulture, vegetable gardening, fruit growing, indoor plant care, hobby greenhouse construction and maintenance and related concepts for the home environment.

HALT 1301. Principles of Horticulture. (3-2-4)

This course involves the principles of plant science applied to propagation improvement, culture and utilization of horticultural plants in a landscape, garden and commercial operations. Lab Fee: \$20.00

HALT 2407. Horticultural Food Crops. (4-3-3)

A study of commercial and home food crops cultivated in East Texas: vegetable crops, blueberries, strawberries, blackberries, peaches, pecans, watermelons, peanuts and others will be covered. Lab Fee: \$20.00

HALT 2408. Greenhouse Management. (4-3-3)

This is a study of greenhouses and greenhouse crop production. Here the student will become familiar with all types of growing as well as managing greenhouse operations. Lab Fee: \$20.00

HALT 1325. Landscape Plant Materials. (4-2-4)

This course will cover the nature, identification, classification and landscape use of ornamental plants: shade and ornamental trees, shrubs, and vines, flowers and ground covering materials. Lab Fee: \$20.00

HALT 1403. Herbaceous Plants. (3-3-3)

The identification, culture, propagation, and maintenance of indoor plants will be studied in this course. Interior landscaping in relation to homes, office buildings, shopping malls and other commercial buildings will also be studied. Lab Fee: \$20.00

HALT 1322. Landscape Design. (3-2-4)

This course will acquaint the student with fundamental design, plan design, specifications and cost estimates. Applications towards residential and commercial landscaping are considered. Lab Fee: \$20.00

HALT 2380, 2381. Horticulture Coop/Seminar. (3-1-20)

Students will earn college credit for on-the-job training through cooperative programs with local industry. Students will also attend scheduled classes three hours a week to discuss relative problems, new concepts and innovations that have occurred during the summer internship term. Lab Fee: \$20.00

HALT 2420. Nursery Management. (4-3-3)

The application of basic plant sciences to principles and practices involved in production, harvesting, grading, and marketing of plants grown in modern nurseries, greenhouses, and garden centers. Production costs and salesmanship also will be studied. Lab Fee: \$20.00

HALT 2415. Landscape Maintenance. (4-3-3)

This course deals with the execution of landscape designs, planning and the maintenance of landscapes for both residential and commercial grounds. Lab Fee: \$20.00

HALT 2323. Horticultural Pest Control. (3-2-4)

This course covers the identification of the cause and control of common plant pests (diseases, insects, weeds). Also a study of pesticide equipment for prevention and control is constituted in the course. Lab Fee: \$20.00

Humanities

HUMA 1301. (HUM 1311) Introduction to Humanities. (3-3-0)

HUMA 1301 introduces major artists, musicians, writers, and philosophers and their masterpieces, which often reflect and shape the ideas and arts of their cultures. Through an interdisciplinary (or multi-disciplinary) approach to studying the arts, themes, and philosophies that emerged in selected periods from the Renaissance to the Modern Era, students will develop analytical skills by observing, critiquing, and evaluating arts and ideas that they (the students) might become discerning, culturally literate critics of modern media.

Journalism — Photography (See Communications)

Kinesiology* (Formerly Physical Education)

Activity courses may be repeated for credit.

KINE 1111, 1131, 2111, 2131. (PE 1111-2111) Conditioning and Weight Training. (1-0-3)

Fundamental instruction in conditioning and weight training. Lab Fee: \$20.00

KINE 1112-1132. (PE 1112-2112) Basketball. (1-0-3)

Fundamental skills and practice in basketball. Lab Fee: \$20.00

KINE 1113-1133. (PE 1113-2113) Softball and Volleyball. (1-0-3)

Fundamental skills and practice in softball and volleyball. Lab Fee: \$20.00

KINE 1114, 1134, 2114, 2134. (PE 1114-2114) Aerobics and Physical Fitness. (1-0-3)

Implementation of different activities designed to maintain and develop a student's current level of physical fitness. Lab Fee: \$20.00

KINE 1115-1135. (PE 1115-2115) Bowling. (1-0-3)

Fundamental instruction and practice in bowling skills. Lab Fee: \$50.00. Additional fees may be assessed. Transportation is the student's responsibility.

KINE 1116, 1117, 1136, 1137. (PE 1116, 1117, 2116, 2117) Cardettes, Band, & Cheerleaders. (1-0-3)

Designed for all students who have been selected in either of the three athletic related organizations. Includes marching band, drill team, and cheerleaders who have completed a tryout, and are chosen on the basis of advanced skill in these areas. Lab Fee: \$20.00

KINE 1119-1139. (PE 1119-2119) Pistol and Rifle Shooting. (1-0-3)

A beginning course in the basic principles of pistol and rifle range marksmanship. Lab Fee: \$20.00

KINE 1121-1141. (PE 1121-2121) Tennis and Badminton. (1-0-3)

Fundamental instruction and practice in tennis and badminton. Lab Fee: \$20.00

KINE 1122, 1123, 1142, 1143. (PE 1122, 1123, 2122, 2123) Varsity Sports Skills. (1-0-3)

Designed for students who have been selected for varsity competition in football and basketball. Advanced techniques, skills, and methods are introduced to the student. Lab Fee: \$20.00

KINE 1125-1145. (PE 1125-2125) Racketball. (1-0-3)

Fundamental instruction and practice in racketball. Lab Fee: \$20.00

KINE 1126-1146. (PE 1126-2126) Volleyball. (1-0-3)

Fundamental instruction and practice in volleyball. Lab Fee: \$20.00

KINE 1127. (PE 1127) Karate. (1-0-3)

Fundamental and intermediate skills and practice in Karate. Lab Fee: \$20.00

KINE 1128. (PE 1128) Swimming. (1-0-3)

Instruction in elementary and intermediate swimming. American and Red Cross certification for swimming may be obtained. Lab Fee: \$35.00 Additional fees may be assessed.

KINE 1129. (PE 1129) Physical Education for Correctional Officers. (1-0-3)

This course is designed to provide physical training activities for correctional officers. In addition, instruction is provided in defense tactics, restraint tactics, range marksmanship, CPR, first aid, substance abuse and chemical dependency, safety and AIDS awareness. Lab Fee: \$50.00

KINE 1238. Fitness Concepts and Applications. (1-1-2)

This course is a presentation of the fundamentals of developing a healthy lifestyle including the effects of disease and mortality in the United States, the effects of physical activity and fitness levels on health, nutrition, and health problems such as obesity, low back pain, and arthritis. Kine. 1238 will count as one of the two required activity classes for degrees. Lab Fee: \$20.00

KINE 1151. Scuba. (1-0-3)

Fundamental instruction and practice in scuba diving. Lab Fee: \$20.00

KINE 1301. (PE 1311) Orientation and Introduction to Human Movement and Performance. (3-3-0)

This is a general survey course in human movement that includes the historical development of movement and sport from ancient to contemporary cultures. Physiological, sociological and psychological principles affecting human movement and sport are also studied.

KINE 1304. (PE 1312) Personal Health and Hygiene. (3-3-0)

This course provides a study of personal and community health programs, agencies, and health careers. Special attention is given to problems in consumer and environmental health as they relate to daily life.

KINE 1306. (PE 2311) First Aid Safety. (3-3-0)

This course is designed to develop the knowledge and skills necessary to be effective as a first responder to accidents. Life saving skills and accident prevention principles will also be included.

KINE 1308. (PE 2313) Sports Officiating I. (3-3-1)

This course is designed to develop basic knowledge necessary for officiating volleyball, and football. Students will study rules and practice appropriate signals to enable them to have the skills to officiate these sports. Lab Fee: \$20.00

KINE 1309. (PE 2315) Sports Officiating II. (3-3-1)

This course is designed to develop basic knowledge necessary for officiating basketball and softball. Students will study rules and practice appropriate signals to enable them to have the skills to officiate these sports. Lab Fee: \$20.00.

KINE 1321. (PE 2312) Football and Basketball Coaching. (3-3-0)

This course is designed to develop basic knowledge necessary for coaching football and basketball. Students will study rules, game strategies, and analysis of skills as they relate to coaching these sports.

KINE 1346. (PE 2314) Substance Use and Abuse. (3-3-0)

This course provides an examination of the physiological and social effects of drugs and other harmful substances. Legal and ethical implications are considered. May be used as a substitute for two activity courses to satisfy graduation requirements. Substitution applies only to students with medical disabilities or handicaps.

*All Kinesiology Classes are Coeducational.

Legal Assistant Technology

POFL 1305. Legal Terminology. (3-3-0)

An introduction to legal terminology including spelling, pronunciation, and definition of legal terms and an overview of the law and the professions. Develop a legal vocabulary; and explain fundamental legal concepts, procedures, terminology, and current issues in law.

LGLA 1401. Legal Research and Writing. (4-3-3)

A study of basic legal research and writing procedures, including techniques for conducting research with the use of computers. Emphasis is on finding the law, gathering, analyzing, and organizing the facts through the use of state and federal codes. Lab Fee. \$20.00

LGLA 1307. Law and the Legal Profession. (3-3-0)

This course is a comprehensive overview of the legal system and the role of the legal assistant within the system. The course focuses on the major principles and functions of our legal system, and introduces the students to various legal fields and special topics.

LGLA 1219. Legal Ethics. (2-2-0)

This course examines the moral responsibilities and duties a member of the legal profession owes to the public, to the court, to professional brethren and to clients.

LGLA 1345. Civil Litigation. (3-3-0)

A survey of the principles of the preparation for trial of both civil and criminal cases. Students will draft pleadings, motions, and other documents required for civil or criminal action.

LGLA 1351. Contracts. (3-3-0)

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.

LGLA 1353. Wills, Trusts, and Probate Administration. (3-3-0)

Explores the legal concepts of wills and trusts and the fundamental principles of law applicable to each. The organization and jurisdiction of the probate court and an analysis of estate administration and fiduciary accounting are also covered.

LGLA 1355. Family Law. (3-3-0)

A variety of topics are explored in this course including: divorce, separation, custody, legitimation, adoption, change of name, guardianship support, domestic relations court procedures, and separation agreements.

LGLA 1380, 2380. Cooperative Education – Paralegal/Legal Assistant (3-1-20)

Mixture of academic and work-related activities in student's major. College cooperates with employing supervisor in setting and achieving learning objectives. Weekly seminars in conjunction with on-the-job training. Lab Fee: \$20.00.

LGLA 2303. Torts and Personal Injury Law. (3-3-0)

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

LGLA 2305. Interviewing and Investigating. (3-3-0)

This course is a study of Principles, methods, and investigative techniques utilized to locate, gather, document, and manage information. Emphasis on developing interviewing and investigative skills to prepare the paralegal to communicate effectively while recognizing ethical problems.

LGLA 2307. Law Office Management. (3-3-0)

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. The student will identify and explain the fundamental principles of management and administrative and substantive systems of the law office; explain the role of technology in the management and administration of the law office; apply management principles and technology; and explain ethical issues relating to law office operations.

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

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. The student will define and properly use terminology relating to criminal law; describe sources of law relating to criminal law; locate and analyze cases and statutes relating to criminal law; describe the role and ethical obligations of the paralegal relating to criminal law; and draft documents commonly used in criminal law.

Management

BMGT 1301. (MGMT 1372) Supervision. (3-3-0)

This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis on the supervisor's major functions, such as facilitating relations with others, leading, motivating and communicating.

BMGT 1303. (MGMT 1371) Principles of Management. (3-3-0)

This course emphasizes the managerial functions of planning, organizing, staffing, directing, and controlling. Communication, motivation, leadership, and decision making are included.

BMGT 1394. Special Topics in Management — Sports & Entertainment Marketing. (3-3-0)

This course will reflect current issues and problems in the management of a business, i.e. Customer Relations and Sales, Total Quality Management and Sports and Entertainment Marketing, etc.

MRKG 2349. (BMGT 1349) Advertising and Sales Promotion. (3-3-0)

A course designed to provide the student with the opportunity to examine the advertising field not only as a consumer but as a potential advertiser. It enables the student to become acquainted with the basic elements of advertising and sales promotion and to relate sales promotion to the total economy. In addition it provides the student with an understanding of the accepted tools, plans, and procedures in advertising and helps to distinguish between mediocrity and excellence in sales promotion and advertising.

BUSG 2309. Small Business Management. (3-3-0)

A course on how to start and operate 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.

BMGT 2368. (MGMT 2374) Management Practicum-Seminar. (3-1-20)

Prerequisite: Sophomore standing

The coop-seminar is a course through which the student earns college credit for his or her on-the-job training. The Management coop-seminar can only be taken while enrolled in a management course. The coop-seminar will be planned to prepare the student to think creatively, critically, and productively. Lab Fee: \$20.00

HRPO 2301. (MGMT 2372) Human Resources Management. (3-3-0)

This course includes the study of personnel policies and administration, education, training, job classification and analysis, labor supply, employment and testing, hours of work, labor union relations, and employee safety and health problems.

HRPO 2307. (MGMT 1373) Organizational Behavior. (3-3-0)

This course presents a study of accepted principles of present day psychology that will be of practical value in business, personal efficiency, human relations and morale, personality and emotional health, personal leadership and teamwork exercises.

MRKG 1311. (MGMT 2371) Principles of Marketing. (3-3-0)

An introduction to marketing related to the principles of marketing and marketing management including an analysis of economics, psychological, and sociological factors that influence marketing.

Mathematics

MATH 1314. (MAT 1312) College Algebra. (3-3-0)

Prerequisite: A minimum score of 240 on the THEA test (formerly TASP) or an equivalent score on any approved TSI test, or successful completion of Intermediate Algebra (DEVL 0310).

Topics covered in this course may include a rapid review of exponents and radicals and rational expressions, linear and quadratic equations, complex numbers, graphing lines and curves, higher degree equations, logarithmic and exponential functions, matrices and systems of equations, etc. as time permits. Either a programmable or nonprogrammable calculator is required.

MATH 1316. (MAT 1313) Plane Trigonometry. (3-3-0)

Prerequisite: MATH 1314 or equivalent.

This is a complete course in Trigonometry including circular functions, solutions of right triangles, graphs, identities, trigonometric equations and the use of calculators. Either a programmable or nonprogrammable calculator is required.

MATH 1324. (MAT 1318) Mathematics for Business and Social Sciences I. (finite mathematics) (3-3-0)

Prerequisite: Two years of high school algebra or DEVL 0310.

Linear equations, systems of equations, matrix algebra, Gaussian elimination, linear inequalities, systems of inequalities, linear programming by graphing and by simplex method, permutations and combinations, probability, statistics, and mathematics of finance. Either a programmable or nonprogrammable calculator is required.

MATH 1325. (MAT 1319) Mathematics for Business and Social Sciences II. (business calculus) (3-3-0)

Prerequisite: MATH 1324, MATH 1314 or equivalent.

A continuation of MATH 1324 including functions, limits, differential calculus, maxima, minima, and integral calculus. Either a programmable or nonprogrammable calculator is required.

MATH 1332. (MAT 1316) Contemporary Mathematics I. (3-3-0)

Prerequisite: DEVL 0310 or equivalent.

This course is designed to meet the needs of liberal arts, education and vocational-technical students not specializing in mathematics. It surveys the history of various topics in mathematics and their place and uses in our society. Topics covered include sets of numbers and their structure, consumer mathematics, probability, statistics and the metric system.

MATH 1333. (MAT 1317) Contemporary Mathematics II. (3-3-0)

Prerequisite: DEVL 0310 or equivalent.

This course is designed to meet the needs of liberal arts and education students not specializing in mathematics. It surveys the history of various topics in mathematics and their place and uses in our society. Topics covered include sets, logic, systems of numeration, algebra, and geometry.

MATH 1342. (MAT 2313) Statistics. (3-3-0)

Prerequisite: MATH 1314.

An elementary course in statistics designed to meet the needs of business, education and behavioral science students. Included in the course are the following topics and their applications in various fields: descriptive statistics, probability, binomial distribution, normal distribution, confidence intervals, hypothesis testing, and linear regression. Either a programmable or nonprogrammable calculator is required.

MATH 1350. Fundamentals of Mathematics I. (3-3-0)

Prerequisite: College Algebra.

This course covers mathematical topics necessary for elementary school teachers of middle grades (4 through 8) as designated by NCTCM standards. This is a required part of the approved field of study curriculum for middle grades teacher certification. It may also be appropriate for early childhood education majors. Topics covered include: mathematical reasoning, sets, whole numbers & number theory, integers, rational numbers, decimals and percents and real numbers. The course emphasized the use of manipulatives, modeling, problem solving, critical thinking and technology.

MATH 1351. Fundamentals of Mathematics II. (3-3-0)

Prerequisite: College Algebra or MATH 1350.

This course covers mathematical topics necessary for elementary school teachers of middle grades (4 through 8) as designated by NCTCM standards. This is a required part of the approved field of study curriculum for middle grades teacher certification. It may also be appropriate for early childhood education majors. Topics covered include: statistics, probability, geometric figures, geometric measurement, and congruence and similarity in geometry. The course emphasizes the use of manipulatives, modeling, problem solving, critical thinking and technology.

MATH 2313. (MAT 1320) Calculus I. (3-3-0)

Prerequisite: 2 years of H.S. Algebra and H.S. Trigonometry or MATH 1314 and 1316.

This course begins the integrated study of analytic geometry and calculus. Topics normally covered include: limits, continuity, differentiation of algebraic and trigonometric functions, applications of differentiation, and an introduction to integration of algebraic and trigonometric functions.

MATH 2314. (MAT 1321) Calculus II. (3-3-0)

Prerequisite: MATH 2313.

This course is a continuation of MATH 2313. Topics normally covered include: applications of integration, differentiation and integration of logarithmic, exponential and hyperbolic functions, methods of integration, and improper integrals.

MATH 2315. (MAT 2314) Calculus III. (3-3-0)

Prerequisite: MATH 2314.

This course is a continuation of MATH 2314. Topics normally covered include: conic sections, polar coordinates, parametric curves, sequences, series, vectors and vector calculus.

MATH 2316. (MAT 2315) Calculus IV. (3-3-0)

Prerequisite: MATH 2315.

This course is a continuation of MATH 2315. Topics normally covered include: functions of several variables, partial derivatives, gradients and directional derivatives, differentials, double and triple integrals, cylindrical and spherical coordinates, line and surface integrals.

MATH 2320. (MAT 2316) Differential Equations. (3-3-0)

Prerequisite: MATH 2315 Calculus III

This is a first course in ordinary differential equations. Topics covered normally will include: first order linear differential equations, Bernoulli's equations, differential operators, homogeneous linear differential equations, undetermined coefficients, reduction of order, variation of parameters, power series solutions and Laplace transforms.

Medical Office Technology

MDCA 1313. Medical Terminology. (3-3-0)

A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms.

POFM 1309. Medical Office Procedures. (3-3-0)

Introduction to basic medical office skills including telephone techniques, filing and indexing, mail handling, appointment scheduling, travel arrangements, correspondence, and business transactions. Emphasis on human relations and customer service skills.

POFM 1331. Medical Transcription I. (3-3-3)

Fundamentals of medical transcription including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Emphasis on development of speed and accuracy. Lab Fee: \$20.00

POFM 1353. Medical Coding. (3-3-0)

Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems.

POFM 1327. Medical Insurance. (3-3-0)

Survey of medical insurance including the life cycle of various claim forms, terminology, litigation, patient relations, and ethical issues.

POFM 1380. Co-Op Education/Practicum. (3-1-20)

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines the 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. Lab Fee: \$20.00

POFM 2313. Medical Transcription II. (3-3-3)

Prerequisite: Medical Transcription I.

Skill development in the production of medical reports including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Emphasis on speed and accuracy. Select specific formats for dictated medical documents; utilize complex medical references as resource tools; transcribe physician dictation; identify medical inconsistencies and discrepancies; and increase transcription speed and productivity. Lab Fee: \$20.00

Music (General)

MUSI 0005. Recital Attendance Class. (0-0-0)

This class is mandatory for all music majors. Attendance at 10-15 department sponsored recitals/concerts per semester is required. Music majors must perform solos for the class twice per semester. No credit is awarded for the course, but the course provides the documentation for recital attendance required by upper division colleges and universities.

MUSI 1116. Elementary Sight Singing & Ear Training I. (1-0-3)

Corequisite: MUSI 1311

An aural study, including dictation of rhythm, melody, and diatonic harmony. The singing of tonal music in treble, bass, and moveable c clefs is included in the course. Lab Fee: \$20.00

MUSI 1117. Elementary Sight Singing & Ear Training II. (1-0-3)

Prerequisite: MUSI 1116

Corequisite: MUSI 1312

A continuation of MUSI 1116. Lab Fee: \$20.00

MUEN 1121, 1122, 2121, 2122. (MUS 1113, 1114, 2113, 2114) Band. (1-0-5)

This course is open to all qualified students who wish to be members of the college band. Lab Fee: \$20.00

MUEN 1123, 1124, 2123, 2124. Community Band. (1-0-3)

An open ensemble performance course designed especially for members of the community who desire to participate in a large instrumental ensemble. This group will perform music from various musical periods ranging from classical to contemporary. Lab Fee: \$20.00

MUEN 1131, 1132, 2131, 2132. (MUS 1117, 1118, 2117, 2118) Jazz Ensemble. (1-0-4)

Prerequisite: By audition.

A course concerned with the performance of all types of jazz, both for dance band and for smaller groups. This course also serves as an experimental laboratory for those members who are interested in composing and arranging for the band. Lab Fee: \$20.00

MUEN 1133, 1134, 2133, 2134. (MUS 1137, 1138, 2137, 2138) Woodwind Ensemble. (1-0-3)

This course provides students the opportunity to study and perform a variety of music written for small woodwind ensembles from the sixteenth to the twentieth century. This course is open to all woodwind students with the permission of the instructor. Lab Fee: \$20.00

MUEN 1135, 1136, 2135, 2136. (MUS 1139, 1140, 2139, 2140) Brass Ensemble. (1-0-3)

This course provides students the opportunity to study and perform a variety of brass literature from the major musical periods. The course is open to all brass students with the permission of the instructor. Lab Fee: \$20.00

MUEN 1137, 1138, 2137, 2138. (MUS 1141, 1142, 2141, 2142) Percussion Ensemble. (1-0-3)

This course provides percussion students the opportunity to gain experience in ensemble playing. The course is open to all percussion students with the permission of the instructor. Lab Fee: \$20.00.

MUEN 1139, 1140, 2139, 2140. Guitar Ensemble. (1-0-3)

Prerequisite: Students must audition for enrollment in this ensemble.

Performance of group guitar literature from selected composers and periods. Lab Fee: \$20.00

MUEN 1141, 1142, 2141, 2142. (MUS 1111, 1112, 2111, 2112) Cardinal Singers. (1-0-5)

This course is open to all students in the College. Public appearances scheduled during the academic year include Fall, Christmas, and Spring concerts. The choir performs both sacred and secular selections. Lab Fee: \$20.00

MUEN 1143, 1144, 2143, 2144. Community Chorus. (1-0-3)

An open ensemble performance course designed especially for members of the community who are interested in participating in a large choral organization. This group will perform a Christmas and Spring Concert of college level music literature including choral masterworks, and classical and popular literature. Lab Fee: \$20.00

MUEN 1151, 1152, 2151, 2152. (MUS 1115, 1116, 2115, 2116) Chamber Singers. (1-0-4)

Prerequisite: Approval of instructor.

A selective choral group specializing in the performance of advanced literature including major works, jazz, and madrigals. Public appearances scheduled throughout the academic year. Lab Fee: \$20.00

MEUN 1153, 1154, 2153, 2154. Encore. (1-0-4)

Prerequisite: By audition.

One of the three principle vocal ensembles of the TVCC Music Department. Encore is an auditioned ensemble of 10-14 voices that specializes in the performance of vocal music of the popular genre, especially vocal jazz. It is accompanied by a small instrumental ensemble. Encore is open to any TVCC student by audition. Lab Fee: \$20.00

MUSI 1159. Musical Theatre Workshop. (1-0-4)

This course introduces the student to the various aspects of producing a musical. Topics to be covered include audition and casting, rehearsal techniques, and scheduling, public relations, staging, and musical performance. The student will be required to participate in some aspect of a musical production. Lab Fee: \$20.00

MUSI 1181, 1182, 2181, 2182. (MUS 1119, 1120, 2119, 2120) Piano Class. (1-2-1)

Basic instruction in the fundamentals of keyboard technique. Lab Fee: \$20.00

MUSI 1183, 1184, 2183, 2184. (MUS 1121, 1122, 2121, 2122) Voice Class. (1-2-1)

A course in the basic fundamentals and knowledge of vocal problems. Students study breath control, basic tone production, basic diction, and performance techniques. Lab Fee: \$20.00

MUSI 1188. Percussion Class I (Handbells). (1-2-1)

Prerequisite: Basic reading music skills.

Bell structure, basic and specialized ringing techniques, and basic leadership. Lab Fee: \$20.00

MUSI 1192, 1193, 2192, 2193. (MUS 1123, 1124, 2123, 2124) Guitar Class. (1-2-1)

Basic instruction in guitar including tuning, chords, fundamentals of music, accompaniment, styles and technique. Lab Fee: \$20.00

MUSI 1300. (MUS 1312) Foundations of Music. (3-3-0)

This course is an introduction to the elements of music with emphasis upon the five phases of the music program for early childhood and elementary education: rhythmic activities, singing, playing simple instruments, listening, and creative activities. An examination of recently published materials in the field of music for the elementary grades is included. The opportunity for a field experience in public schools is offered.

MUSI 1301. (MUS 1315) Music Fundamentals. (3-3-0)

This course introduces students to the basic elements of music theory including scales, intervals, modes, keys, triads, chords, inversions, notation, meter and rhythm. Elementary ear training and sight-singing exercises are also included.

MUSI 1306. (MUS 1311) Music Appreciation. (3-3-0)

The foundation in enjoyment and understanding of music through lecture and the use of recorded music with emphasis upon the elements of music, form and design, styles and periods, and composers.

MUSI 1307. (MUS 2311) Music Literature I. (3-3-2)

Prerequisite: MUSI 1312 or consent of instructor.

The fundamentals of music terminology, standard instrumental and vocal forms, and representative composers and compositions from secular and sacred music of most eras are studied by means of records and live performances. A research paper is required. This course is designed for music majors or advanced music students. Lab Fee: \$20.00

MUSI 1311. (MUS 1313) Elementary Theory I. (3-3-0)

Prerequisite: MUSI 1301 or approval of instructor. A placement test will determine whether a student should be placed in MUSI 1301 or MUSI 1311. Corequisite: MUSI 1116

This course includes part writing of figured bass exercises and melodic harmonizations requiring principal triads, keyboard study, melodic composition of phrases, and periods with extensions.

MUSI 1312. (MUS 1314) Elementary Theory II. (3-3-0)

Prerequisite: MUSI 1311 and 1116. Corequisite: MUSI 1117

This course includes part writing of figured bass exercises and melodic harmonizations requiring all diatonic triads, dominant sevenths, supertonic seventh chords, non-harmonic tones, and elementary modulation. Students will study keyboard and enlargement of period in melodic composition. Students will sing melodies with harmonic backgrounds of all diatonic triads, dominant sevenths, and supertonic seventh chords. Students will study elementary modulation.

MUSI 2116. Advanced Sight Singing & Ear Training I. (1-0-3)

Prerequisite: MUSI 1117. Corequisite: MUSI 2311

An aural study, including dictation, of more complex rhythm, melody, chromatic harmony, and extended tertian structures. The singing of more difficult tonal music including modal, ethnic, and 20th century materials is included in the course. Lab Fee: \$20.00

MUSI 2118. Advanced Sight Singing & Ear Training II. (1-0-3)

Prerequisite: MUSI 2116. Corequisite: MUSI 2312

A continuation of MUSI 2116. Lab Fee: \$20.00

MUSI 2188. Percussion Class II (Handbells). (1-2-1)

Prerequisite: Handbell experience.

Multiple handbell techniques, specialized treble and bass bell techniques, solo and ensemble ringing and in-depth leadership issues. Lab Fee: \$20.00

MUSI 2311. (MUS 2313) Advanced Theory I. (3-3-0)

Prerequisite: MUSI 1312 and MUSI 1117. Corequisite: MUSI 2116

This course includes part writing of figured bass exercises and melodic harmonizations requiring all diatonic seventh chords, secondary dominant chords and modulation. Students will study keyboard and styles of writing other than those in the common practice period. Students will compose in binary and ternary forms.

MUSI 2312. (MUS 2314) Advanced Theory II. (3-3-0)

Prerequisite: MUSI 2311 and MUSI 2116. Corequisite: MUSI 2118

This course includes part writing of figured exercises and melodic harmonizations requiring altered chords, ninth, eleventh, and thirteenth chords and remote modulations. Students will study keyboard and compositional techniques of twentieth century composers.

APPLIED MUSIC

Applied music courses involve private instrumental and vocal instruction and are primarily limited to music majors. To enroll in applied music courses, a student must be enrolled in the full spectrum of music courses as prescribed in the music degree plans, receive special permission from the departmental coordinator, or receive a scholarship which requires private lessons. A one credit hour applied music course involves a half-hour private lesson each week, and a two credit hour course involves a one hour private lesson each week. All non-music majors enrolled in applied music courses will be required to either perform on a student recital or perform on a music jury at the end of the semester. Music majors will be required to **perform a** solo on their major, applied instrument (or voice) twice per semester and for a music jury at the end of the semester. Lab fees for applied music courses are \$75.00 for a one credit hour course and \$150.00 for a two credit hour course.

- MUAP 1117, 1118, 2117, 2118. Flute (1-0-1)
- MUAP 1121, 1122, 2121, 2122. Oboe (1-0-1)
- MUAP 1125, 1126, 2125, 2126. Bassoon (1-0-1)
- MUAP 1129, 1130, 2129, 2130. Clarinet (1-0-1)
- MUAP 1133, 1134, 2133, 2134. Saxophone (1-0-1)
- MUAP 1137, 1138, 2137, 2138. Trumpet (1-0-1)
- MUAP 1141, 1142, 2141, 2142. Horn in F (1-0-1)
- MUAP 1145, 1146, 2145, 2146. Trombone (1-0-1)
- MUAP 1149, 1150, 2149, 2150. Euphonium (1-0-1)
- MUAP 1153, 1154, 2153, 2154. Tuba (1-0-1)
- MUAP 1157, 1158, 2157, 2158. Percussion (1-0-1)
- MUAP 1161, 1162, 2161, 2162. Guitar (1-0-1)
- MUAP 1165, 1166, 2165, 2166. Organ (1-0-1)
- MUAP 1169, 1170, 2169, 2170. Piano (1-0-1)
- MUAP 1181, 1182, 2181, 2182. Voice (1-0-1)
- MUAP 1217, 1218, 2217, 2218. Flute (2-0-2)
- MUAP 1221, 1222, 2221, 2222. Oboe (2-0-2)
- MUAP 1225, 1226, 2225, 2226. Bassoon (2-0-2)
- MUAP 1229, 1230, 2229, 2230. Clarinet (2-0-2)
- MUAP 1233, 1234, 2233, 2234. Saxophone (2-0-2)
- MUAP 1237, 1238, 2237, 2238. Trumpet (2-0-2)
- MUAP 1241, 1242, 2241, 2242. Horn in F (2-0-2)
- MUAP 1245, 1246, 2245, 2246. Trombone (2-0-2)
- MUAP 1249, 1250, 2249, 2250. Euphonium (2-0-2)
- MUAP 1253, 1254, 2253, 2254. Tuba (2-0-2)
- MUAP 1257, 1258, 2257, 2258. Percussion (2-0-2)
- MUAP 1261, 1262, 2261, 2262. Guitar (2-0-2)
- MUAP 1265, 1266, 2265, 2266. Organ (2-0-2)
- MUAP 1269, 1270, 2269, 2270. Piano (2-0-2)
- MUAP 1281, 1282, 2281, 2282. Voice (2-0-2)

Nursing

Associate Degree Nursing

RNSG 1311. Nursing Pathophysiology. (3-3-0-0)

Prerequisite: BIOL 2401 and 2402

Basic principles of pathophysiology emphasizing nursing applications. Topics include principles of homeostasis related to body systems.

RNSG 1119. Integrated Nursing Skills I. (1-0-3-0)

Prerequisite: BIOL 2401, PSYC 2314 or 2301, and acceptance into the ADN program

Corequisite: RNSG 1523, RNSG 1229, and RNSG 1160

Study of the concepts and principles essential for demonstrating competence in the performance of basic nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Lab Fee: \$20.00

RNSG 1523. Introduction to Professional Nursing for Integrated Programs. (5-5-0-0)

Prerequisite: BIOL 2401, PSYC 2314 or 2301, and acceptance into the ADN program

Corequisite: RNSG 1119, RNSG 1229, and RNSG 1160

Introduction to the profession of nursing including the roles of the registered nurse with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; the application of a systematic, problem-solving process to provide basic nursing care to diverse clients across the life span; and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework.

RNSG 1229. Integrated Nursing Skills II. (2-0-6-0)

Prerequisite: BIOL 2401, PSYC 2314 or 2301, and acceptance into the ADN program

Corequisite: RNSG 1119, RNSG 1523, and RNSG 1160

Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of diverse clients across the life span. Topics include knowledge, judgment, skills and professional values within a legal/ethical framework. Lab Fee: \$20.00

RNSG 1160. Clinical I. (1-0-0-3)

Prerequisite: BIOL 2401, PSYC 2314 or 2301, and acceptance into the ADN program

Corequisite: RNSG 1119, RNSG 1523, and RNSG 1229

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 1523 and 1160 concurrently in order to be able to progress to the Level II nursing courses. Lab Fee: \$81.00. Lab fee includes liability insurance premium, drug screening and criminal background checks. Fee is subject to change if insurance premium changes or fees.

RNSG 2504. Integrated Care of the Client with Common Health Care Needs. (5-5-0-0)

Prerequisite: RNSG 1119, RNSG 1523, RNSG 1229, and RNSG 1160

Corequisite: RNSG 2561

Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework.

RNSG 2561. Clinical II. (5-0-0-15)

Prerequisite: RNSG 1119, RNSG 1523, RNSG 1229, and RNSG 1160

Corequisite: RNSG 2504

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 2504 and 2561 concurrently in order to be able to progress to the Level III nursing courses. Lab Fee: \$20.00. Liability insurance required.

RNSG 2414. Integrated Care of the Client with Complex Health Care Needs. (4-4-0-0)

Prerequisite: RNSG 2535, RNSG 2660 and 2161

Corequisite: RNSG 2562 and RNSG 2307

Application of a systematic problem-solving process and critical thinking skills to provide comprehensive nursing care to diverse clients/families across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary disease prevention, health maintenance/restoration and collaboration with members of the multidisciplinary health care team. Topics include the role of the nurse as client advocate and coordinator of care and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework.

RNSG 2660. Clinical IIIA. (6-0-0-18)

Prerequisite: RNSG 2504 and RNSG 2561

Corequisite: RNSG 2535 and RNSG 2161

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 2535, 2660 and 2161 concurrently in order to be able to progress to the Level IV nursing courses. Lab Fee \$38.00. Lab fee includes liability insurance premium. Fee is subject to change if insurance premium changes.

RNSG 2161. Clinical IIIB. (1-0-0-3)

Prerequisite: RNSG 2504 and RNSG 2561

Corequisite: RNSG 2535 and RNSG 2660

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 2535, 2660 and 2161 concurrently in order to be able to progress to the Level IV nursing courses.

RNSG 2535. Integrated Client Care Management. (5-5-0-0)

Prerequisite: RNSG 2504, RNSG 2561

Corequisite: RNSG 2660 and RNSG 2161

Application of client assessment skills, critical thinking, and independent nursing interventions to care for diverse clients/families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical decision-making, nursing leadership skills, and client management. Topics include the significance of professional development, trends in nursing and health care, and applicable knowledge, judgment, skills, and professional values within a legal/ethical framework.

RNSG 2562. Clinical IV. (5-0-0-15)

Prerequisite: RNSG 2535, RNSG 2660, and RNSG 2161

Corequisite: RNSG 2414, RNSG 2307

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 2414 and 2562 concurrently in order to be able to graduate from the nursing program. Lab Fee: \$20.00. Liability insurance required.

RNSG 2307. Transition to Nursing Practice. (3-3-0-0)

Prerequisite: RNSG 2535, RNSG 2660, and RNSG 2161

Corequisite: RNSG 2414, RNSG 2562

Introduction to selected concepts related to the role of the professional nurse as provider of care, coordinator of care, and member of the profession. Review of trends and issues impacting nursing and health care today and in the future. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework.

RNSG 1327. Transition from Vocational to Professional Nursing. (3-3-0-0)

Prerequisite: Acceptance into the Transition Nursing Program

Corequisite: RNSG 1161 and 1140

Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the lifespan.

RNSG 1161. Transition Clinical. (1-0-0-3)

Prerequisite: Acceptance into the Transition Nursing Program

Corequisite: RNSG 1327 and 1140

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass both RNSG 1327, 1140 and 1417 or 1160 concurrently in order to be able to progress to the Level III nursing courses. Lab fee: \$68.00. Lab fee includes liability insurance premium, drug screening and criminal background checks. Fee is subject to change.

RNSG 1140. Nursing Skills for Articulating Students. (1-0-4-0)

Prerequisite: Acceptance into the Transition Nursing Program

Corequisite: RNSG 1327 and 1161

Validation of current skills and procedures in a variety of settings; application of a systematic problem-solving process and critical thinking skills; focus on the expansion of the scientific knowledge and principles underlying nursing skills and procedures; and competency in knowledge, judgment, skills, and professional values within a legal/ethical framework. Lab Fee: \$20.00

RNSG 1417. Concepts of Nursing Practice I for Articulating Students. (4-3-4-0)

Prerequisite: Acceptance into the Transition Nursing Program

Corequisite: RNSG 1161

Provides the articulating student the opportunity to examine the role of the professional nurse; application of a systematic problem solving process and critical thinking skills which includes a focus on the adult population in selected settings; and competency in knowledge, judgment, skill, and professional values within a legal/ethical framework. Lab Fee: \$20.00

Patient Care Technology

NURA 1401. Nurse Aide for Health Care Organizations 1. (4-3-3-0)

Co-requisites: NURA 1407, HPRS 1105 and 1106, NUPC 1320 and 1260

Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team. Lab Fee: \$20.00

NURA 1407. Nurse Aide for Health Care Organizations II. (4-3-3-0)

Co-requisites: NURA 1401, HPRS 1105 and 1106, NUPC 1320 and 1260

A basic study of the structures and functions of the human body. Lab fee: \$20.00

NUPC 1260. Clinical – Patient Care Technology. (2-0-0-6)

Co-requisites: NURA 1401, 1407, HPRS 1105 and 1106, NUPC 1320

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Lab Fee: \$61.00. Lab fee includes liability insurance premium, drug screening and criminal background checks. Fee is subject to change if insurance premium changes or fees.

HPRS 1106. Medical Terminology. (1-1-0-0)

Co-requisites: NURA 1401, 1407, NUPC 1320 and 1260, HPRS 1105

A study of common medical terminology, word origin, structure and application.

HPRS 1105. Medical Law/Ethics for Health Professionals. (1-1-0-0)

Co-requisites: NURA 1401, 1407, NUPC 1320 and 1260, HPRS 1106

Introduction to the relationship between legal aspects and ethics in health care with emphasis on responsibilities of health care professionals.

NUPC 1320. Patient Care Technician. (3-3-1-0)

Co-requisites: NURA 1401, 1407, NUPC 1260, HPRS 1105 and 1106

A course designed to provide the student with the necessary training, skills, and knowledge needed to gain employment as a Patient Care Technician in a hospital setting. A national certification test is offered upon successful completion of the course. Lab Fee: \$20.00

Philosophy

PHIL 1301. (PHI 1311) Introduction to Philosophy. (3-3-0)

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 relations to religion, science, and art.

PHIL 1304. (REL 2313) World Religions. (3-3-0)

A comparative study of the living religions of the world including Hinduism, Jainism, Buddhism, Judaism, Islam and Christianity with emphasis on origin and development.

PHIL 1316. (REL 1311) Survey of Old Testament. (3-3-0)

A history of Judaism during the Old Testament period as seen from the perspective of all the Old Testament writers.

PHIL 1317. (REL 1312) Survey of New Testament. (3-3-0)

A history of Christianity during the New Testament period as seen from the perspective of all the New Testament writers.

PHIL 2303. (PHI 1313) Introduction to Logic. (3-3-0)

Study of the nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.

PHIL 2306. (PHI 1312) Introduction to Ethics. (3-3-0)

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

PHIL 2307. Introduction to Social and Political Philosophy. (3-3-0)

An introduction to the study of the foundations and the nature of society and "the state." This will be accomplished through a critical examination of the major theories and concepts involved in understanding the organization of societies and government.

PHIL 2316. History of Philosophy. (3-3-0)

An introduction to Philosophy through a World Wide presentation of Philosophers and the historical events that have shaped Philosophy through the years. Includes a study of ancient, medieval, and modern philosophy from the cultural perspective of both Eastern and Western thought.

PHIL 2321. (REL 2311) Philosophy of Religion I. (3-3-0)

An examination of religious issues such as the existence of God, the problem of evil, religious language.

Physical Education (See Kinesiology)

Physics

PHYS 1401. (PHY 1411) College Physics I. (4-3-3)

An introductory college Physics course for life science and non-science majors who are not required to have calculus based Physics. Topics covered include Newtonian mechanics, gravitation, energy, mechanical properties of gases and fluids, heat and the laws of thermodynamics. Requires proficiency in introductory algebra. Lab Fee: \$20.00

PHYS 1402. (PHY 1412) College Physics. (4-3-3)

Prerequisite: PHYS 1401 or consent of instructor.

A continuation of PHYS 1401. Topics covered will include electricity, magnetism, wave motion, optics and modern physics. Lab Fee: \$20.00

PHYS 1415. (PSC 1411) Physical Science I. (4-3-3)

A course designed for non science majors. Topics include the nature of the earth as revealed by astronomy, meteorology and geology. The nature and philosophy of science is illustrated and experienced by lectures, laboratory and self-paced instruction. Lab Fee: \$20.00

PHYS 1417. (PSC 1412) Physical Science II. (4-3-3)

A course designed for non science majors. Stress is placed upon the methods of science, the basic nature of science, and cultural values in today's society. The relevance of science to man and society is illustrated and experienced by lecture, laboratory, and self-paced instruction. Lab Fee: \$20.00

PHYS 2425. (PHY 2411) University Physics I. (4-3-3)

Prerequisite: Credit for or registration in MATH 2313 (Calculus I).

A calculus based study of mechanics and heat for science or mathematics majors and pre-engineering students. Lab Fee: \$20.00

PHYS 2426. (PHY 2412) University Physics II. (4-3-3)

Prerequisite: PHYS 2425 or consent of Instructor.

A calculus based study of electricity, sound and light for science and mathematics majors and pre-engineering students. Lab Fee: \$20.00

Political Science (See Government)

Psychology

PSYC 1100. (PSY 1111) Freshman Orientation. (1-1-0)

This course is designed as a group study approach to student problems. Course content will evolve from student interests and needs. Some probable areas of study are adjusting to college, acquiring basic study skills, using the library, improving the personality, making a wise vocational choice, planning for marriage, and developing a sound philosophy of life. Emphasis is placed upon active student participation in group activities and "self" study. This is a non-credit course.

PSYC 1300. Learning Framework. (3-3-0)

A study of the (1) research and theory in the psychology of learning, cognition, and motivation, (2) factors that impact learning, and (3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Students may register for either EDUC 1300 or PSYC 1300 but may receive credit for only one of the two.)

PSYC 2301. (PSY 1311) General Psychology. (3-3-0)

This course is an introduction to the study of psychology. General Psychology has as its objectives to help students develop insight into their own psychological processes and to suggest how psychological principles and procedures are applicable to the solution of personal and social problems as well as to the many problems in business and industry.

PSYC 2302. (PSY 2313) Applied Psychology. (3-3-0)

A survey of the applications of psychological knowledge and methods in the fields of Business industry, Education, Medicine, Law Enforcement, Correctional Science, Social Work, and Government Work.

PSYC 2306. Human Sexuality. (3-3-0)

This course is a detailed study of both Human Sexuality and "Intimacy-in-Context" (Schnarch, 1997). It emphasizes the systemic concept of "humans as sexual beings" while, at the same time, examining the socio-cultural barriers to intimate wholeness. Students will study the anatomy and physiology of sexuality, the psychology of sexual dysfunction and disease, the historical roots and contradictions of patriarchal dominance, and the influences of family-of-origin processes on the sexual being.

PSYC 2308. Child Psychology. (3-3-0)

For psychology majors. This course is not a substitute for TECA 1354.

This course provides an overview of cognitive, linguistic, perceptual, motor, social and personality development. The student will examine development from conception through middle childhood with an emphasis on the pre-school years. Work will focus on major developmental theories as tools to explore the contributions of environment, heredity and social factors to the developing child and on strategies for meeting the developmental needs of children.

PSYC 2314. (PSY 1312) Human Growth and Development. (3-3-0)

A detailed study of human growth and development from conception to death. Several processes of both physical and psychological development and operation will be covered.

PSYC 2315. (PSY 2311) Personality Adjustment. (3-3-0)

This course deals with adjustment problems of normal and abnormal people. Emphasis will be on principles of mental hygiene in relation to family, school, or community.

PSYC 2319. Social Psychology. (3-3-0)

An introduction to the study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. Specifically, students will study the effects of group influence on individual perception, learning, motivation and the development of attitudes and opinions. Emphasis will be given to conformity, prejudice, aggression and persuasion.

Ranch Management

AGCR 1441. Forage Management and Utilization. (4-3-3)

This course is designed to provide basic information on selection, establishment, development, and maintenance of improved native and introduced species of forage. Course content will include information on seedbed preparation, seeding and sodding techniques, fertilization, weed control, and grazing management involved in the use of such pastures. Lab Fee: \$20.00

AGEQ 1411. Equine Science. (4-3-3)

A course of study in the principles and concepts of horse genetics, reproduction, nutrition, health, feeding, parasites, disease control, structural anatomy, care of feet and unsoundness. Lab Fee: \$20.00

AGME 1415. Farm and Ranch Shop Skills I. (3-3-3)

Study and application of shop skills used in agricultural processes including arc welding, oxy-acetylene cutting and welding, drawing and planning projects, tool maintenance, and metal working. The student will demonstrate safe oxyacetylene cutting and welding procedures; demonstrate safe arc welding; identify shop tools; summarize safe shop practices; and exhibit safe use of shop hand tools. Lab Fee: \$20.00

AGAH 2413. Feeds and Feeding. (4-3-3)

Study of the principles of livestock feeding to give a student an understanding of the nutritional requirements of livestock, the nutritive value of different feeds, and modern feeding practices. The processes of digestion, absorption, and circulation are studied. Lab Fee: \$20.00

AGAH 1453. Beef Cattle Production. (4-3-3)

An overview of the beef cattle industry. Topics include the organization and operation of beef cattle enterprises, selection breeding, reproduction, health, nutrition, management, and marketing. Lab Fee: \$20.00

AGMG 1311. Introduction to Agribusiness. (3-3-0)

Farm Records - A basic course in farm and ranch records pertaining to all items of income and expenses, adjusting enterprises, herd production records, breed registry records, labor cost and management records.

AGEQ 1301. Equine Behavior and Training I. (3-3-3)

A course to give basic knowledge of equipment and facilities, halter training of young horses for basic performance through saddle breaking of older horses, and various marketing techniques used by today's procedures. Lab Fee: \$20.00

AGEQ 1391. Special Topics in Equestrian/Equine Studies. (3-2-4)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupational and relevant to the professional development of the student. Lab Fee: \$20.00

AGAH 1447. Animal Reproduction. (4-3-3)

Study of the principle concepts involved in the breeding and reproduction process of domestic farm animals to include: Anatomical and physiological differences of the male and female reproductive system, management systems to allow for maximum reproductive performance, artificial insemination, and embryo transfer. Lab Fee: \$20.00

AGMG 2380, 2381. Internship – Agriculture (3-1-20)

Career related activities encountered in the student's area of specialization, offered through a cooperative agreement between the college, employer, and student. Under supervision of the college, the student combines classroom learning with work experience. A seminar class will help guide the student through the stated learning objectives. Lab Fee: \$20.00

Sociology

SOCI 1301. (SOC 1311) Introduction to Sociology. (3-3-0)

This course deals with human nature and human behavior in group life, culture and personal traits, the organization of society and the social processes involved.

SOCI 1306. (SOC 1312) Contemporary Social Problems. (3-3-0)

This course deals with identification and analysis of contemporary social problems, and the development of criteria for evaluating problems of social betterment.

SOCI 1371. Leadership Development. (3-3-0)

This course is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership.

SOCI 2301. (SOC 2315) Marriage and the Family. (3-3-0)

A sociological analysis of marriage and family relationships based on concepts introduced in Introduction to Sociology. Areas explored are courtship practices, marriage and family patterns, and the family in transition.

SOCW 2361. (SOC 2311) Introduction to Social Work. (3-3-0)

A study of the development of the philosophy and practice of social work in the United States; survey of the fields and techniques of social work; the nature of vocational opportunities in the field.

Spanish

SPAN 1300. (SPA 1311) Conversational Spanish. (3-3-0)

The aim of this course is the development of a student's ability to speak the language. Idiomatic expressions, such as are used in daily speech and conversation in the language will be stressed. This course may not be counted as part of the requirements for Spanish major or minor, and is not open to students who speak in the vernacular. This course is not designed for transfer.

SPAN 1310. (SPA 1312) Conversational Spanish. (3-3-0)

Prerequisite: SPAN 1300 or consent of instructor.

This course is designed to continue developing the conversational skills established in SPAN 1300. It focuses on recognition of colloquial forms encountered in everyday life.

SPAN 1411. (SPA 1411) Elementary Spanish. (4-3-3)

This course is for students who have never studied Spanish. The course includes a study of grammar, composition, conversation, and reading. Lab Fee: \$20.00

SPAN 1412. (SPA 1412) Elementary Spanish. (4-3-3)

Prerequisite: SPAN 1411.

A continuation of SPAN 1411. Lab Fee: \$20.00

SPAN 2311. (SPA 2311) Intermediate Spanish. (3-3-2)

Prerequisite: SPAN 1412 or its equivalent.

This is a continued emphasis on pronunciation and writing of Spanish. A thorough study of grammar and a maximum assimilation of vocabulary is made. There will be abundant readings in more steeply graded material for reading experience. Stress will be placed on Latin American Culture and the significance of Pan-Americanism with extensive readings in both Spanish and English dealing with these topics. Lab Fee: \$20.00

SPAN 2312. (SPA 2312) Intermediate Spanish. (3-3-2)

Prerequisite: SPAN 2311.

A continuation of SPAN 2311 with a maximum amount of conversational practice consistent with the background of the students. Lab Fee: \$20.00

Speech

SPCH 1144, 1145, 2144, 2145. (SP 1111, 1112, 2111, 2112) Forensic Activities. (1-0-3)

A laboratory course for students who participate extensively in Forensic Activities. Lab Fee: \$20.00

SPCH 1311. (SP 1311) Fundamentals of Speech. (3-3-0)

This course introduces students to both theory and practice in oral communication. Students are given the opportunity to participate in a variety of communication situations ranging from interpersonal and small group communication to public speaking.

SPCH 1321. (SP 1312) Business and Professional Speech. (3-3-0)

This course is designed for students entering a business or professional career. Students are introduced to oral communication theory and are able to participate in various oral communication contexts including interpersonal, small group and public speaking. Additional topics of study in the course include listening, nonverbal communication, decision making, and communication in the organizational setting.

SPCH 1342. (SP 1314) Voice and Diction. (3-3-0)

This course includes a study of the physiology and mechanics of effective voice production. Practice is provided in breath control, articulation, enunciation, pronunciation, and phonetics.

(Students may register for either SPCH 1342 or DRAM 2336 but may receive credit for only one of the two.)

SPCH 2335. (SP 2311) Debate. (3-3-0)

Prerequisite: SPCH 1311, or consent of instructor.

The study of the principles of argumentation and debate. Practice in preparing written and spoken arguments is afforded in this course.

SPCH 2341. (SP 2312) Oral Interpretation of Literature. (3-3-0)

This course includes an evaluation of literature suitable for interpretation with practice in the interpretation of different types of literature. The building of programs around the interpretations will also be included.

Surgical Technology

SRGT 1405. Introduction to Surgical Technology. (4-4-0-0)

Prerequisites: Admission to the surgical technology program and grade of "C" or better in BIOL 2401

Co-requisites: SRGT 1409 & 1260

Orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences and patient care concepts.

SRGT 1409. Fundamentals of Perioperative Concepts and Techniques. (4-2-6-0)

Prerequisites: Admission to the surgical technology program and grade of "C" or better in BIOL 2401

Co-requisites: SRGT 1405 & 1260

In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Lab Fee: \$20.00

SRGT 1260. Clinical I. (2-0-0-8)

Prerequisites: Admission to the surgical technology program and grade of "C" or better in BIOL 2401

Co-requisites: SRGT 1405 & 1409

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Lab Fee: \$81.00. Lab fee includes liability insurance premium, drug screening and criminal background checks. Fee is subject to change if insurance premium changes or fees.

SRGT 1341. Surgical Procedures I. (3-3-0-0)

Prerequisites: SRGT 1405, 1409, and 1260

Co-requisites: SRGT 1342, 2461, and 2462

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.

SRGT 1342. Surgical Procedures II. (3-3-0-0)

Prerequisites: SRGT 1405, 1409, and 1260

Co-requisites: SRGT 1341, 2461, and 2462

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.

SRGT 2461. Clinical II. (4-0-0-16)

Prerequisites: SRGT 1405, 1409, and 1260

Co-requisites: SRGT 1341, 1342, and 2462

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Lab Fee: \$20.00. Liability insurance required.

SRGT 2462. Clinical III. (4-0-0-16)

Prerequisites: SRGT 1405, 1409, and 1260

Co-requisites: SRGT 1341, 1342, and 2461

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Liability insurance required.

Theatre (See Drama)

Vocational Nursing

VNSG 1122. Vocational Nursing Concepts. (1-1-0-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Introduction to the nursing profession and its responsibilities and the legal and ethical issues in nursing practice. Concepts related to the physical, emotional, and psychosocial self-care of the learner/professional.

VNSG 1136. Mental Health. (1-1-0-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1400, 1402, 1413, 1231, and 1320

Introduction to the principles and theories of positive mental health and human behaviors. Topics include emotional responses, coping mechanisms, and therapeutic communication skills.

VNSG 1160. Clinical I. (1-0-5-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1231, and 1320

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass VNSG 1122, 1136, 1160, 1402, 1413, 1400, 1231, and 1320 concurrently in order to progress to Level II nursing courses. Lab Fee: \$81.00. Lab fee includes liability insurance premium for one year, drug screening and criminal background checks. Fee is subject to change.

VNSG 1219. Professional Development. (2-2-0-0)

Prerequisite: Palestine program - VNSG 1509, 1330, 1334, 1214, and 1461

Kaufman program - VNSG 1509, 1330, 1334, 1214, and 1361

Corequisite: Palestine Program - VNSG 1510, 1362, and 1226

Kaufman Program - VNSG 1510, 1462, and 1226

Study of the importance of professional growth. Topics include the role of the licensed vocational nurse in the multidisciplinary health care team, professional organizations, and continuing education.

VNSG 1402. Applied Nursing Skills I (4-2-6-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1136, 1400, 1413, 1160, 1231, and 1320

Introduction to and application of primary nursing skills. Emphasis on utilization of the nursing process and related scientific principles. Lab Fee: \$20.00

VNSG 1330. Maternal-Neonatal Nursing. (3-3-0-0)

Prerequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Corequisite: Palestine Program - VNSG 1509, 1334, 1461, and 1214

Kaufman Program - VNSG 1509, 1334, 1361, and 1214

Utilization of the nursing process in the assessment and management of the childbearing family. Emphasis on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonatal period including abnormal conditions.

VNSG 1334. Pediatrics. (3-3-0-0)

Prerequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Corequisite: Palestine Program - VNSG 1509, 1330, 1461, and 1214

Kaufman Program - VNSG 1509, 1330, 1361, and 1214

Study of childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process.

VNSG 1361. Clinical IIB. (3-0-0-15)

Prerequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Corequisite: Kaufman Program - VNSG 1330, 1334, 1509, and 1214

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass VNSG 1330, 1334, 1509, 1214, and 1361 concurrently in order to progress to Level III course. Lab fee: \$20.00

VNSG 1400. Nursing in Health and Illness I. (4-4-1-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1136, 1402, 1413, 1160, 1231, and 1320

Introduction to general principles of growth and development, primary health care needs of the client across the life span and therapeutic nursing interventions. Lab Fee: \$60.00. Lab fee includes diagnostic testing program.

VNSG 1461. Clinical IIA. (4-0-0-20)

Prerequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Corequisite: Palestine Program - VNSG 1330, 1334, 1509, and 1214

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The student must pass VNSG 1330, 1334, 1509, 1214, and 1461 concurrently in order to progress to Level III courses. Lab Fee: \$20.00

VNSG 1320. Anatomy and Physiology for Allied Health. (3-3-0-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, and 1231

Introduction to the normal structure and function of the body including an understanding of the relationship of body systems in maintaining homeostasis.

VNSG 1231. Pharmacology. (2-2-1-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1320, 1136, 1122, 1400, 1402, 1413, 1160

Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process.

VNSG 1226. Gerontology. (2-2-0-0)

Prerequisite: Palestine Program - VNSG 1214, 1509, 1330, 1334, 1461

Kaufman Program - VNSG 1214, 1509, 1330, 1334, 1361

Corequisite: Palestine Program - VNSG 1219, 1362, and 1510

Kaufman Program - VNSG 1219, 1462, and 1510

Overview of the normal physical, psychosocial, and cultural aspects of the aging process. Addresses common disease processes of aging. Exploration of attitudes toward care of the elderly.

VNSG 1509. Nursing in Health and Illness II. (5-5-0-0)

Prerequisite: VNSG 1122, 1136, 1400, 1402, 1413, 1160, 1231, and 1320

Corequisite: Palestine Program - VNSG 1330, 1334, 1461, and 1214

Kaufman Program - VNSG 1330, 1334, 1361, and 1214

Introduction to common health problems requiring medical and surgical interventions. Lab Fee: \$60.00. Lab fee includes diagnostic testing program.

VNSG 1510. Nursing in Health and Illness III. (5-5-0-0)

Prerequisite: Palestine Program - VNSG 1509, 1330, 1334, 1461, and 1214

Kaufman program - VNSG 1509, 1330, 1334, 1361, and 1214

Corequisite: Palestine Program - VNSG 1219, 1362, and 1226

Kaufman Program - VNSG 1219, 1462, and 1226

Continuation of Nursing in Health and Illness II. Further study of common medical-surgical health problems of the client including concepts of mental illness. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. Lab Fee: \$60.00. Lab fee includes diagnostic testing program.

VNSG 1413. Applied Nursing Skills II. (4-2-6-0)

Prerequisite: Acceptance into the Vocational Nursing Program

Corequisite: VNSG 1122, 1136, 1400, 1402, 1160, 1231, and 1320

Application of nursing skills to meet more complex client needs utilizing the nursing process and related scientific principles. Lab Fee: \$20.00

VNSG 1214. Applied Nursing Skills III. (2-1-3-0)

Prerequisite: VNSG 1320, 1136, 1231, 1122, 1400, 1402, 1413, and 1160

Corequisite: Palestine Program - VNSG 1509, 1330, 1334 and 1461

Kaufman Program - VNSG 1509, 1330, 1334 and 1361

Continuation of Applied Nursing Skills II. Application of nursing skills to meet complex client needs utilizing the nursing process and related scientific principles. Lab fee: \$20.00

VNSG 1362. Clinical IIIA. (3-0-0-15)

Prerequisite: Palestine Program - VNSG 1509, 1330, 1334, 1461, and 1214

Corequisite: Palestine Program - VNSG 1510, 1219, and 1226

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. A preceptorship at the end of the semester provides a capstone experience and allows the student to integrate technical skills, nursing concepts, and basic workplace competencies learned throughout the program in the care of clients at an assigned setting in a capstone experience. The student must pass VNSG 1510, 1219, 1226, and 1362 concurrently in order to graduate from the vocational nursing program. Lab Fee: \$20.00

VNSG 1462. Clinical IIIB. (4-0-0-20)

Prerequisite: Kaufman program - VNSG 1509, 1330, 1334, 1361, and 1214

Corequisite: Kaufman Program - VNSG 1510, 1219, and 1226

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. A preceptorship at the end of the semester provides a capstone experience and allows the student to integrate technical skills, nursing concepts, and basic workplace competencies learned throughout the program in the care of clients at an assigned setting in a capstone experience. The student must pass VNSG 1510, 1219, 1226, and 1462 in order to graduate from the vocational nursing program. Lab Fee: \$20.00

Welding

WLDG 1317. Introduction to Layout and Design. (2-3-0)

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

WLDG 1521. Introduction to Welding Fundamentals. (5-3-6)

An introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. Lab Fee: \$20.00

WLDG 1530. Introduction to Gas Metal Arc Welding. (5-3-6)

A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. Lab Fee: \$20.00

WLDG 1557. Intermediate Shielded Metal Arc Welding. (5-3-6)

A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Lab Fee: \$20.00

WLDG 1323. Welding, Safety, Tools, and Equipment. (3-3-0)

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 hand and power tools. Instruction on various types of welding equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints.

WLDG 2543. Advanced Shield Metal Arc Welding. (5-3-6)

Advanced topics on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Lab Fee: \$20.00