



# COLLEGE CREDIT COURSE DESCRIPTIONS

The college credit courses listed in this section fall into three categories as identified by the following letter codes.

## KEY TO LETTER CODES:

**P-University Parallel**—This course is intended for transfer to a university.

**D-Dual Purpose** —Any course identified by this symbol is a university parallel offering. As well, the course is also part of certain occupational programs. Hence, it serves both university parallel and occupational objectives.

**O-Occupational** —The level and content of this course is tailored for those who wish to enter the business or industrial world.

All courses in the following list are not taught each term. Class schedules are published prior to each term that show the courses that will be offered. Many courses in this catalog have prerequisite courses listed in the course descriptions.

## Statement on Florida's Statewide Course Numbering System

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three digits.

The classifying and numbering of courses was done by community college and university faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions, who made suggestions and criticisms to be incorporated into the system.

The course numbering system is, by law, descriptive, not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or de-

scriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty and other interested users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three digits as a course at the receiving institution. For example, if a student has taken SOC-000 at a community college, the student cannot be required to repeat SOC-000 at the school to which the student transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university, can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using non-equivalent courses for satisfying certain requirements.

## GENERAL RULE FOR COURSE EQUIVALENCIES

All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in over 40 postsecondary institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SOC-000.

## FIRST DIGIT

The first digit of the course number is assigned by the institution, generally to indicate the year it is offered—i.e., 1 indicates freshman year, 2 indicates sophomore year. In the sociology example mentioned before, one school which offers the course in the freshman year will number it SOC 1000; a school offering the same course in the sophomore year will number it SOC 2000. The variance in first numbers does not affect the equivalency. If the prefix and last three digits are the same, the courses are substantively equivalent.

## TITLES

Each institution will retain its own title for each of its courses. The sociology courses mentioned be-

fore are titled at different schools "Introductory Sociology," "General Sociology," and "Principles of Sociology." The title does not affect the equivalency. The courses all carry the same prefix and last three digits; that is what identifies them as equivalent.

### EQUIVALENCY OF SEQUENCES

In certain cases, sequences of courses in a given discipline are equivalent rather than the individual courses which make up these sequences. (For example, MAC-132, -133, -134). In these cases the subject matter topics may not be taught in the same sequence, course by course, in several institutions; however, upon completion of the full sequence at any of the several institutions, students have completed substantively equivalent content. These sequences are clearly identified in the Course Equivalency Profiles.

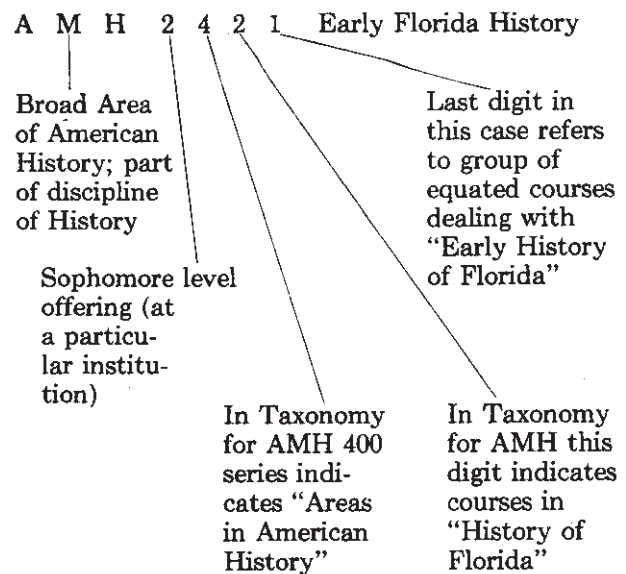
### EXPLANATION OF PREFIXES AND NUMBERS

Prefixes and numbers in the course numbering system are not chosen at random; they are designed to describe course content in an organized fashion within a classification system developed for each subject matter area.

Generally, each of the major classifications in a discipline is represented by a three-alpha prefix. In some cases, one three-alpha prefix has been sufficient for the entire discipline. A discipline may use as many prefixes as necessary to accommodate its major classifications. The logic of the system allows it to be infinitely expandable with minimal disruption to existing numbers.

History, for example, has seven prefixes: AFH, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, History-General; LAH, Latin American History; and WOH, World History. All history courses in the state will carry one of these prefixes.

A more specific example is AMH 2421, (not a current course at this institution):



(Local titles are used for each particular course. The last three numbers are used to indicate equivalency.)

### EXCEPTIONS TO THE RULE FOR EQUIVALENCIES

The following are exceptions to the general rule for course equivalencies:

- A. All graduate level courses (except those which the faculty and their reviewing colleagues have determined to be substantively equivalent with undergraduate courses) are not automatically transferable.
- B. All numbers which have a second digit of 9 (Ex: ART 2905) are "place keeper" numbers for such courses as directed independent study, thesis hours, etc. Courses with -900 numbers must be evaluated individually and are not automatically transferable.
- C. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.
- D. Performance or studio courses in Art, Dance, Theatre, and Music are not automatically transferable but must be evaluated individually.



- ACC 1009 General Accounting I (D) 3 cr.**  
Prerequisite: None. A study of the sole proprietorship form of business organization with an emphasis on the following topics: the accounting cycle, journalizing and posting, deferrals and accruals, adjusting and closing procedures, the worksheet, preparing financial statements, and the use of special journals and subsidiary ledgers. The course includes special problems for both a service-oriented business and a merchandising concern and requires the completion of a practice set. Three contact hours.
- ACC 1029 General Accounting II (D) 3 cr.**  
Prerequisite: ACC 1009. A further study of proprietorship accounting with an introduction to partnerships and corporations. Emphasis will be placed on the following topics: inventory valuation, depreciation and fixed asset valuation, an introduction to the voucher system, bank reconciliations, the petty cash fund, payroll accounting, the use of data processing in accounting with an emphasis on internal control, and an introduction to partnership and corporate accounting, including the basic characteristics and financial structure of these two business forms. A practice set is also included. The satisfactory completion of ACC 1009 and ACC 1029 is equivalent to the completion of ACC 2001. Three contact hours.
- ACC 2001 Principles of Accounting I (D) 3 cr.**  
Prerequisite: None. A study of the principles of double entry records as related to the sole proprietorship form of organization. ACC 2001 includes all of the topics listed under ACC 1009 and ACC 1029 with the exception of partnership and corporate accounting. A practice set is included. ACC 1009 and ACC 1029 may be substituted for credit in ACC 2001. Three contact hours.
- ACC 2021 Principles of Accounting II (D) 3 cr.**  
Prerequisite: ACC 2001. A study of accounting as related to partnerships and corporations with emphasis on the following topics: formation, liquidation, and dissolution of partnerships and corporations; accounting for stocks, long term liabilities and investments; job order cost systems, budgeting, and standard cost systems; analysis of financial statements, consolidated statements, and tax considerations in business decisions. Completion of a practice set is required. Three contact hours.
- ACC 2109 Intermediate Accounting I (D) 3 cr.**  
Prerequisite: ACC 2021. A continuation of accounting principles including a review of the accounting cycle with special attention given to: working capital, an in-depth study of financial statements, cash, receivables, current liabilities, inventories, plant and equipment assets and intangible assets. Three contact hours.
- ACC 2129 Intermediate Accounting II (D) 3 cr.**  
Prerequisite: ACC 2109. A continuation of ACC 2021 with coverage of the following topics: a study of corporate contributed capital, retained earnings and dividends, stockholders equity, long term debt and investments, pension plans and leases, accounting for income taxes, accounting for price level changes, and further statement analysis. Three contact hours.
- ACC 2409 Cost Accounting (D) 3 cr.**  
Prerequisite: ACC 2021. Interpretation and analysis of cost into three major areas: (1) planning and controlling routine operations (break-even analysis; job order process cost systems), (2) inventory valuation and income determination (standard costing), (3) policy making and long-range planning (capital budgeting). Three contact hours.
- ACC 2501 Individual Taxes (O) 3 cr.**  
This course is a study of the Federal Revenue Code regulations and cases which apply to the determination of income taxes for individuals. Topics considered will be the preparation of the tax return form 1040 and appropriate supplemental forms. This course is recommended for Accounting, Associate in Science students. Three contact hours.
- ACC 2529 Corporate, Estate and Trust Taxes (O) 3 cr.**  
This course is a study of the Federal Internal Revenue Code regulations and cases which apply to the determination of income taxes for corporations, estates, and trusts. Topics covered will be the preparation of the returns and supplemental forms for corporations, estates, and trusts. This course is recommended for Accounting, Associate in Science students. Three contact hours.
- ACC 2815 Hotel-Motel Accounting (O) 3 cr.**  
A course of study related to the need of and the application of accounting principles and concepts through financial analysis, cost, budgeting and investment, for hospitality properties with emphasis on controller functions, profit and loss statements, statistical analysis and forecasts. Three contact hours.
- ACC 2869 Fund Accounting (O) 3 cr.**  
This course is a study of the accounting methods and procedures used by not-for-profit organizations such as governmental agencies, hospitals, and charitable organizations. Three contact hours.
- ACC 2887 Credit Union Accounting (O) 3 cr.**  
This course covers the specific areas needed to account for the transactions found in credit union operations. Topics include credit union accounting with: books of original entry; subsidiary ledgers and controlling accounts; purchases, sales, and uncollectable accounts; voucher systems; cash receipts and cash disbursements; accruals and deferrals; payroll; financial statements and managerial accounting. Three contact hours.
- ACT 1020 Introduction to Air Conditioning and Refrigeration (O) 4 cr.**  
A course designed to teach the refrigeration, heat production, heat transfer and specific heat, temperature pressure chart, pressure relations, silver brazing, soft soldering, flaring and swagging. Eight contact hours.
- ACT 2050 Major Components of Air Conditioning and Refrigeration (O) 4 cr.**  
A course designed to teach the major components of the refrigeration and air conditioning unit, functions of compressors, types of compressors, condensers theory evaporators, metering devices and definitions of cycle controls. Eight contact hours.
- ACT 2060 Psychrometrics and Heat Load Calculations (O) 4 cr.**  
A course designed to teach psychrometrics charts, measurement and properties of air and heat load calculations on residential and commercial buildings. Eight contact hours.
- ACT 2620 Air Conditioning: Commercial and Residential (O) 4 cr.**  
A course designed to teach installation and service techniques including piping refrigerant lines and piping water cooled condensers. Eight contact hours.

**ACT 2850 Basic Air Conditioning Trouble-shooting (O) 4 cr.**

Prerequisite: EER 1210. A course designed to teach basic air conditioning trouble-shooting. Trouble faults on the electrical circuits, heating or cooling complaints, problem solving of faults. Eight contact hours.

**ADV 2000 Advertising (D) 3 cr.**

Prerequisite: None. Introduction to the field of retail advertising, its purpose, institutions and functions. Includes planning and advertising, local media and types of retail advertising. Three contact hours.

**AER 1000 Basic Technician Skills (O) 1 cr.**

This course is designed to teach the basic fundamentals of the vehicle mechanical trade. Topics include: Hand tool use/care and identification, specialized equipment use and functions, and parts and assemble identification. Emphasis will be placed on tools, equipment and general shop safety. One contact hour.

**AER 1100 Vehicle Electrical and Support Systems (O) 4 cr.**

A course designed to teach the principles and operations of the basic electrical systems found in automotive equipment and to provide practical experience in the service and repair of or adjustment to these systems. Topics include batteries, starters, alternators, regulators, ignition systems, chassis electrical circuits, and electrical accessory circuits. Special emphasis will be given to safety procedures and the specific tools and equipment to be used. Eight contact hours.

**AER 1120 Steering and Suspension Systems (Theory & Lab) (O) 4 cr.**

A course designed to teach the principles of steering systems, suspension systems, and wheel alignment and to provide practical experience in repairing automobile suspension and steering, aligning front ends, and balancing tires. Topics include wheel balancing, suspension system, suspension angles and lines, wheel alignment, standard steering gears, power steering systems and frames. Special emphasis will be given to safety procedures, and the specific tools and instruments to be used. Eight contact hours.

**AER 1121 Brake Systems and Chassis Repair (Theory and Lab) (O) 4 cr.**

A course designed to teach the principles and operations of brake systems, disc systems, split systems, hydraulic cylinders, valving systems, chassis components, and exhaust systems and to provide practical experience in the repair of these systems. Topics include chassis inspection procedures, basic brake theory, drum brake systems, split systems, disc brake systems, hydraulic cylinders, machining and measuring techniques, power boosters, chassis alignment and repair, exhaust systems, delivery procedures, and road test procedures. Special emphasis will be given to safety procedures and the specific tools and equipment to be used. Eight contact hours.

**AER 1131 Transmission and Drive Systems (Theory and Lab) (O) 4 cr.**

A course designed to teach the principles and operations of automatic transmissions, standard transmissions, clutches, overdrive units, pressure plates, propeller shafts, differentials, and drive axles and to provide practical experience in diagnosing, removing, maintaining, and repairing transmissions and drive systems. Topics include conventional and automatic transmissions, overdrive systems, drive lines, differentials, and axles. Special emphasis will be given to safety procedures, and the specific tools and instruments to be used. Eight contact hours.

**AER 1145 Fuel Injection and Control Systems (O) 4 cr.**

This is a course designed to teach the requirements of a fuel injection system, injection nozzles, engine controls including governors and safety devices, and to provide practical experience in the overhaul and maintenance of various fuel injection and control systems. Special emphasis will be given to safety precautions and the tools and instruments to be used. Eight contact hours.

**AER 1160 Introduction to Vehicle Service/ Parts Supervision (O) 3 cr.**

This course is designed to teach the organization and operation of service and parts departments. Topics include: Floor planning, floor plan alteration, equipment, and software selection; employee/interdepartmental/ customer relations, finance, forecasting; inventory methods, merchandising and marketing. Emphasis will be placed on communications and productive supervisory methods. Special emphasis will be placed on noise/pollution environmental procedures, quality control and the prevention of customer/employee dissatisfaction. Three contact hours.

**AER 1180 Integrated Automotive Systems (Theory and Lab) (O) 4 cr.**

A course designed to teach the principles and components of cooling and lubrication systems, intake systems, ignition systems, and charging/starting systems and to provide practical experience in the identification, repair, and replacement of the components of these systems. Topics include engine fundamentals, cooling and lubricating systems, intake systems, ignition systems, fuel systems, minor tune-ups, trouble shooting, charging and starting systems, schematics, and shop manuals. Special emphasis will be given to shop safety procedures, and the fasteners, specific tools and equipment to be used. Eight contact hours.

**AER 1221 Auto Paint Formulas and Application (O) 4 cr.**

A course designed to teach the principles of automotive paint repairing and vehicle refinishing. Topics include paint formulas, mixing, color matching and additives to be used in all phases of spot repairing and total vehicle color application. Special emphasis will be given to safety and health and procedures, special tools and equipment to be used. Eight contact hours.

**AER 1271 Introduction To Body Shop Supervision (O) 3 cr.**

This is a course designed for the in-depth study of body shop management. Topics include organization plan of body shops, work schedules and distribution, use of pricing manuals, estimating and pricing of work, personnel management, marketing and promotional methods, financial analysis management, cost accounting, inventory control and customer relations. Three contact hours.

**AER 2004 Power Plant Overhaul (Theory and Lab) (O) 4 cr.**

A course designed to teach the principles, operations and procedures required in rebuilding gasoline powered engines. Topics include testing and diagnosing engine malfunctions, engine removal, cleaning, disassembly; recognizing symptoms of wear, of failure, the cause and measurements related to manufacturer specifications. Emphasis will be placed in determining machine shop assistance, accepted reassembly methods and final adjustment/inspection procedures. Special emphasis will be placed on safety, equipment usage and quality control procedures. Eight contact hours: two class hours; six laboratory hours.



**AER 2112 Advanced Engine Diagnosis (O) 4 cr.**

Prerequisites: AER 1100, AER 1180. A course designed to teach methods of diagnosing failures, adjustments or problems which affect standard vehicle operation. Specialized topics include engine electrics/electronic, vacuum and emission systems. Also advanced invehicle electrical, vacuum and accessory circuits. Emphasis will be given to the use of analytic equipment, diagnostic manuals and procedures. Eight contact hours.

**AER 2171 Heating and Air Conditioning (Theory and Lab) (O) 4 cr.**

A course designed to teach the principles and operations of automotive heating systems, air-conditioning systems and accessories and to provide practical experience in testing, analyzing, installing and repairing heating systems; air-conditioning systems operation; refrigeration system; air-conditioning tools and equipment; lines, fittings, and valves; operational checks and adjustments; minor repairs, and the special tools and instruments to be used. Eight contact hours.

**AER 2210 Auto Metal Damage Analysis and Repair (O) 4 cr.**

A course designed to teach the principles of analyzing damaged vehicle body metal and stages of repair. Topics include metal stress, heat shrinking, hydraulic stretching, forming, filling and preparation for painting. Special emphasis will be given to safety procedures, specific tools and equipment to be used. Eight contact hours.

**AER 2214 Auto Body Panel Replacement and Frames (O) 4 cr.**

Prerequisite: AER 2210. A course designed to teach the principles of metal panel installation, frame alignment measuring and straightening. Topics include inner and outer panel removal, sectioning and replacement; using techniques of cutting, brazing, welding and fiberglass filling, and methods of vehicle frame and unibody restoration. Special emphasis will be given to safety procedures, specific tools and equipment to be used. Eight contact hours.

**AER 2241 Auto Glass Replacement Alignment and Sheet Metal Adjustment (O) 4 cr.**

Prerequisite: AER 2210. A course designed to teach the principles of windshields, and rear stationary tailgate glass replacement and sealing. Topics include glass operating mechanism repair and adjustment, procedures of aligning sheet metal assemblies, doors, decks, gates, "t" tops and sun roofs. Special emphasis will be given to safety procedures, specific tools and equipment to be used. Eight contact hours.

**AER 2272 Advanced Auto Body Major Repair & Appraising (O) 4 cr.**

Prerequisite: AER 2214. A course designed to teach the principles of estimating, appraising and contracting. Topics include major sectioning of quarter and half units, preparation procedures of minor, major, fire and water submersion appraisals, estimates and contract bids. Special emphasis will be given to safety procedures, financial calculating, and specific tools and equipment to be used. Eight contact hours.

**AER 2306 Outdoor Powered Equipment (O) 4 cr.**

Prerequisites: AER 1100, AER 2171, ETI 1700, AER 1131, AER 1000, IEA 1305. This course is designed to teach the techniques of proper maintenance for small gasoline engine powered equipment. Topics include: Lawnmower blade sharpening, adjustment and/or replacement of belts, throttle cable adjustment, engine removal and minor repair, self-propelled gearbox servicing and repair, lubrication, and checking RPM with a tachometer. Special emphasis will be given to safety procedures, manufacturer's manuals, and the proper use of special tools. Eight contact hours.

**AER 2361 Small Engine Repair (O) 4 cr.**

Prerequisite: AER 1100, ETI 1700, AER 2171, AER 1131, AER 1000, IEA 1305. This course is designed to teach the accepted repair procedures for both the two-stroke and four-stroke cycle small gasoline engines used on lawnmowers, riding lawn mowers, edgers, chain saws, etc. Special emphasis will be given to safety procedures and the development of a systematic approach to troubleshooting. Eight contact hours.

**AER 2505 Advanced Truck Repair (O) 4 cr.**

Prerequisite: AER 2705. A course designed to teach the principles and procedures of diagnosis and repair of medium and heavy duty trucks. Topics include diagnosis and repair of drive trains, air brakes, heavy duty electrical systems, steering and suspension. Special emphasis will be given to manufacturers' procedures, safety, special tools and equipment to be used. Eight contact hours.

**AER 2601 Maintenance Procedures for Motorcycles and Mopeds (O) 4 cr.**

Prerequisite: AER 1100, AER 2171, ETI 1700, AER 1131, AER 1000, IEA 1305. This course is designed to teach the theory of operation and the techniques of proper maintenance necessary to comply with manufacturer's service instructions. Topics include: Engine removal, disassembly, inspection, reassembly, initial adjustments and hookup, front fork, brakes, fuel system, reading wiring schematics, and troubleshooting. Special emphasis will be placed on safety procedures, manufacturer's manual and the use of special metric tools. Eight contact hours.

**AER 2705 Diesel Engine Fundamentals (O) 4 cr.**

A course designed to teach the principles and operations of diesel engines and provide practical experience in engine disassembly and reassembly. Topics to include two- and four-cycle designs, fuel delivery methods, cooling, lubricating and exhaust systems, measuring and fitting engine parts, calibrating pumps and fuel injectors. Special emphasis will be given to safety procedures, special tools and equipment to be used. Eight contact hours.

**AER 2706 Diesel Engine Diagnosis and Repair (O) 4 cr.**

Prerequisite: AER 1100. A course designed to teach the principles and procedures of preventative maintenance, problem diagnosis and repair. Topics to include compression testing, valve train, tune-up, engine frame assembly and fuel system diagnosis and repair. Special emphasis will be given to manufacturers' procedures, safety, special tools and equipment to be used. Eight contact hours.

**AET 2103 Passive Solar Construction (O) 3 cr.**

This is a course designed to provide the student with an understanding of architectural details and construction techniques, in the design and construction of structures that utilize solar energy without primary dependence on mechanical means, to collect, transport and distribute solar heat/cooling. The areas to be studied are heat and cooling by means of direct gain, indirect gain, isolated gain and hybrid/combination systems. Three contact hours.

**AMH 2010 United States History I (P) 3 cr.**

Prerequisite: None. United States History to 1865. Emphasizing the European background, Revolution, Articles of Confederation, the Constitution, problems of the new republic, sectionalism, manifest destiny, slavery and the War Between the States. Three contact hours.



**AMH 2020 United States History II (P) 3 cr.**

Prerequisite: None. A history of the United States from 1865 to the present. Includes the Reconstruction, growth of big business, the agrarian revolt, Latin American affairs, the Progressive Movement, the first World War, and political, economic, and world affairs since World War II. Three contact hours.

**AMH 2420 History of Florida (P) 3 cr.**

Prerequisite: None. History of Florida with emphasis on the explorations, U.S. acquisitions, Convention of St. Joseph, Civil War and Reconstruction, and Florida's growth in the 20th Century. Three contact hours.

**AMH 2571 Afro-American History and Culture I (P) 3 cr.**

Prerequisite: None. A survey course dealing with the trends, institutions, events, and personalities among black people in the American past. A brief treatment of the African origin, the black people during the Revolutionary War, the development of slavery and the black people and the Civil War and Reconstruction is presented. The origin of racism, general minority problems, cultural appreciation, and black ideas are stressed. Three contact hours.

**AMH 2572 Afro-American History and Culture II (P) 3 cr.**

Prerequisite: None. A continuation of AMH 2571 with special emphasis on present and future projected developments among black people. The black people and the two World Wars and their aftermath are presented, as well as the roots and manifestations of the Civil Rights and Black Power movements. Three contact hours.

**AML 2012 American Literature I (P) 3 cr.**

Prerequisite: ENC 1102. A critical study of selections from American Literature: Colonial period to the late 19th century. Three contact hours.

**AML 2023 American Literature II (P) 3 cr.**

Prerequisite: ENC 1102. A critical study of selections from American Literature: late 19th century to the present. Three contact hours.

**AML 2271 Afro-American Literature (P) 3 cr.**

A survey course that treats the major periods of Afro-American literature from its beginnings in America to the present. Attention will be given to the African background. Concentration centers on the writers' views of themselves and the political, economic, and social forces that operate on them. Thematically, the course considers the cyclic patterns of assimilation, self-awareness, and the desire for self determination in the literature. Three contact hours.

**ANT 2310 Introduction to North American Indians (P) 3 cr.**

A survey of North American Indians from their first appearance on this continent through their development into tribes. Three contact hours.

**ANT 2410 Cultural Anthropology (P) 3 cr.**

Prerequisite: None. The study of humanity, the concept of culture, and components of culture with emphasis on the different cultural adaptations of humanity world wide. Three contact hours.

**ANT 2511 Physical Anthropology (P) 3 cr.**

Prerequisite: None. The study of the human as a biological and cultural animal including evolutionary adaptations, and the human place in the ecological system. Three contact hours.

**APB 1150 Life in Its Biological Environment (P) 3 cr.**

Prerequisite: None. An introduction to biological structure, function processes, principles and concepts. This course is designed to fulfill the general education requirement. Three contact hours.

**APB 1150L Biology Lab (P) 1 cr.**

Corequisite: APB 1150. To provide each student individualized, self-paced practice in specific areas of need as the student attempts to improve biological skills. Two contact hours.

**APB 1220C Dental Assisting Anatomy and Physiology (0) 4 cr.**

This course is intended for students in the Dental Assisting program. The course consists of a systematic study of the human body in health and disease. The sciences of anatomy, physiology and pathology are emphasized, but elements of microbiology and chemistry are included in the examination of the structure and function of all of the body's systems. Five contact hours.

**APB 1260 Cardiopulmonary Anatomy and Physiology (D) 4 cr.**

Prerequisite: None. This course is designed to offer a thorough anatomical and physiological examination of the cardiopulmonary system. An introduction to electrocardiology and chest roentgenology is included. Additionally, a correlated examination of the renal system and circulatory system will be included where it is relevant. Four contact hours.

**APB 1650 Pharmacology for the Respiratory Therapist (D) 2 cr.**

Prerequisite: APB 1260. This course offers the student a detailed understanding and knowledge of the basic factors involved in the field of pharmacology for the respiratory therapist and the application of this field to pulmonary diseases. Two contact hours.

**APB 2190C Human Anatomy and Physiology I (P) 3 cr.**

The student will benefit by taking CHM 1020, CHM 1040C, APB 1150, BSC 1011C, ZOO 1010C, or High School Chemistry prior to enrolling in APB 2190C, which is a study of the gross morphology and physiology of the human. The course includes sections concerned with cells, tissues, musculoskeletal system, circulation, the lymphatic system, the excretory system and fluids and electrolyte balance. Four contact hours: two hours lecture; one two-hour laboratory.

**APB 2191C Human Anatomy and Physiology II (P) 3 cr.**

Prerequisite: APB 2190C. A continuation of APB 2190C. Topics considered are the endocrine system, reproductive system, nervous system, special senses; respiratory system, digestive system and the integument. Four contact hours: two hours lecture; and one two-hour laboratory.

**APB 2293 Pulmonary Pathology (D) 3 cr.**

Prerequisite: APB 1261. Pulmonary pathology gives an in-depth study of the more common diseases of the cardiopulmonary system including their etiology, pathophysiology, clinical picture and treatment. Three contact hours.

**ARC 2120C Architectural Drafting (D) 3 cr.**

Prerequisite: ETD 1100C. A survey of the theory and practices involved in the preparation of a set of architectural plans. Emphasis is placed on the floor plan design, details, elevations and perspectives. Consideration is also given to FHA standards, site selections, and common home construction techniques. Six contact hours: two class hours; four laboratory hours.

- ARH 1000 Art Appreciation (P) 3 cr.**  
A course designed to supply the non-art major with a foundation for understanding the visual arts through introduction to different media of art expression. Three contact hours.
- ARH 2050 Art History I (P) 3 cr.**  
A history and critical study of painting, sculpture, and architecture from prehistoric times to the Renaissance. Three contact hours.
- ARH 2051 Art History II (P) 3 cr.**  
Prerequisite: ARH 2050. A continuation of the history and criticism of art from the Renaissance to the present. Three contact hours.
- ART 1101C Crafts as an Element of Design (Evening) (P) 2 cr.**  
This course is planned as an introduction to contemporary and traditional crafts. Weaving, batik, silk screening, tie dye, block printing, and leathercrafts will be included. This course may be repeated for additional credit for up to a combined total of three semesters. Maximum, six semester hours credit total. Four contact hours: one class hour and three laboratory hours.
- ART 1130C Textile Design (P) 3 cr.**  
This course is an introduction to textile processes including silk-screen printing, batik, tie and dye, and block printing. Six contact hours: two class hours and four laboratory hours.
- ART 1134C Beginning Weaving (P) 3 cr.**  
This course is an introduction to fiber processes including off-loom techniques, primitive loom construction and weaving, and simple four-harness loom weaving. Techniques will include coiling, twining, dyeing, knotting, tapestry, and will variations. Students who have already received credit for ART 1100C, Crafts as an Element of Design, (no longer a current course) cannot also receive credit for ART 1134C. Six contact hours; two class hours and four laboratory hours.
- ART 1135C Intermediate Weaving (P) 3 cr.**  
Prerequisite: ART 1134C or permission of the instructor. This course is designed to supplement beginning weaving and to increase the student's weaving vocabulary. Processes include double weave, supplemental weft techniques, pattern drafting, and color study. Six contact hours: two class hours and four laboratory hours.
- ART 1136C Advanced Weaving (P) 3 cr.**  
Prerequisites: ART 1134C and ART 1135C or permission of the instructor. This course is designed for the experienced weaver who wants to investigate advanced processes and further skills. Emphasis will be placed on the aesthetic handling of fibers. Six contact hours: two class hours and four laboratory hours.
- ART 1600C Art and Photography (P) 3 cr.**  
This course is an introduction to the use of the camera, laboratory and materials, and methods and procedures for the creative applications of individual expressions in photography. Emphasis will be on color slide materials. The student must have a 35mm camera or equivalent. Laboratory fee \$15.00. Six contact hours: two class hours and four laboratory hours.
- ART 2701C Sculpture I (P) 3 cr.**  
This course is designed for the beginning sculpture student. Modeling, carving and casting will be explored in a variety of techniques and materials such as plaster and clay. Laboratory fee \$15.00. Six contact hours: two class hours and four laboratory hours.
- ART 2702C Sculpture II (P) 3 cr.**  
Prerequisite: ART 2701C or permission of the instructor. This course is a continuation of ART 2701C. New and more advanced techniques and materials will be explored. Individual projects will be encouraged. This course may be repeated twice for additional credit to a maximum of nine credit hours. Laboratory fee \$15.00. Six contact hours: two class hours and four laboratory hours.
- ARTA 1201C Design I (P) 3 cr.**  
An analytical approach to the elements and principles of design. Emphasis on line, form, texture, and color in both two- and three-dimensional space organizations. Six contact hours: two class hours; four laboratory hours.
- ARTB 1201C Design I (Evening) (P) 2 cr.**  
While the scope of this evening studio course is the same as the day class (ART 1201C) the volume of work will be less due to fewer studio hours. This course is planned as an analytical approach to the elements and principles of design. Both two- and three-dimensional space organizations are explored with emphasis on line, form, texture, and color. ARTB 1201C meets for four contact hours: one class hour, three laboratory hours.
- ARTA 1202C Design II (P) 3 cr.**  
Prerequisite: ARTA 1201C. A continuation of ARTA 1201C. Six contact hours: two class hours, four laboratory hours.
- ARTB 1202C Design II (Evening) (P) 2 cr.**  
Prerequisite: ARTB 1201C. While the scope of this studio course is the same as the day class (ARTA 1202C) the volume of work will be less due to fewer studio hours. This course is a continuation of ARTB 1201C. ARTB 1202C meets for four contact hours; one class hour, three laboratory hours.
- ARTA 1300C Drawing I (P) 3 cr.**  
Introduction to the basic disciplines of drawing through the use of still life, landscape, and the figure. Six contact hours: two class hours; four laboratory hours.
- ARTB 1300C Drawing I (Evening) (P) 2 cr.**  
While the scope of this evening studio course is the same as the day class (ARTA 1300C) the volume of work will be less due to fewer studio hours. This course is designed as an introduction to the basic disciplines of drawing and to varied media through the use of still life, landscape, and the figure. ARTB 1300C meets for four contact hours; one class hour, three laboratory hours.
- ARTA 1301C Drawing II (P) 3 cr.**  
Prerequisite: ARTA 1300C. A continuation of ARTA 1300C. Six contact hours: two class hours; four laboratory hours.
- ARTB 1301C Drawing II (Evening) (P) 2 cr.**  
Prerequisite: ARTB 1300C. While the scope of this evening studio course is the same as the day class (ARTA 1301C) the volume of work will be less due to fewer studio hours. This course is a continuation of ARTB 1300C. ARTB 1301C meets for four contact hours; one class hour, three laboratory hours.
- ARTA 2110C Ceramics: Hand-Building I (P) 3 cr.**  
The student will benefit by taking ARTA 1300C and ARTA 1201C prior to enrolling in ARTA 2110C. This course introduces the basic methods of ceramic production in hand-building and glaze application. Six contact hours: two class hours; four laboratory hours.



**ARTB 2110C Ceramics: Hand-Building I (Evening) (P) 2 cr.**

The student will benefit by taking ARTB 1300C and ARTB 1201C prior to enrolling in ARTB 2110C. While the scope of this evening studio class is the same as the day class (ARTA 2110C) the volume of work will be less due to the basic methods of handbuilding; coil and slab work. Some glazing is also included. ARTB 2110C meets for four contact hours: one class hour; three laboratory hours.

**ARTA 2111C Ceramics: Hand-Building II (P) 3 cr.**

Prerequisite: ARTA 2110C. This course is a continuation of ARTA 2110C. Emphasis on creativity and special problems. Kiln stacking and firing also included. Six contact hours: two class hours; four laboratory hours.

**ARTB 2111C Ceramics: Hand-Building II (Evening) (P) 2 cr.**

Prerequisite: ARTB 2110C or ARTA 2110C. While the scope of this evening studio class is the same as the day class (ARTA 2111C) the volume of work will be less due to fewer studio hours. This course is designed as a continuation of ARTB 2110C and ARTA 2110C. ARTB 2111C meets for four contact hours; one class hour, three laboratory hours.

**ARTA 2112C Ceramics: Wheel Throwing I (P) 3 cr.**

Prerequisite: ARTA 2110C. This course introduces the basic methods of wheel throwing along with kiln stacking and glazing techniques. Six contact hours: two class hours; four laboratory hours.

**ARTA 2113C Ceramics: Wheel Throwing II (P) 3 cr.**

Prerequisite: ARTA 2112C. This course is a continuation of ARTA 2112C. Emphasis is on perfecting the technique of wheel throwing and on creativity. Ceramic sculpture is included. Six contact hours: two class hours; four laboratory hours.

**ARTA 2115C Glaze Exploration (P) 3 cr.**

This course includes practice in the use of the nature of glazing techniques such as mishima and sgraffito, plus application and testing procedures. Six contact hours: two class hours; four laboratory hours.

**ARTA 2400C Printmaking I (P) 3 cr.**

Prerequisite: ARTA 1300C or ARTA 1301C. This course consists of experimentation with line, tone etching, intaglio and relief printing. Six contact hours: one class hour; five laboratory hours.

**ARTA 2401C Printmaking II (P) 3 cr.**

Prerequisite: ARTA 2400C. A more detailed study of intaglio materials and techniques. Six contact hours: two class hours; four laboratory hours. (This course may be repeated for additional credit for up to a combined total of three semesters with permission of the instructor. Nine semester hours total maximum.)

**ARTA 2510C Painting I (P) 3 cr.**

Prerequisite: ARTA 1301C. A comprehensive analysis of painting techniques and contemporary approach to still life, landscape, and figure compositions. Six contact hours: two class hours; four studio hours.

**ARTB 2510C Painting I (Evening) (P) 2 cr.**

Prerequisite: ARTB 1300C. While the scope of this evening studio class is the same as the day class (ARTA 2510C) the volume of work will be less due to fewer studio hours. This course is designed as an introduction of painting techniques with emphasis on still life, landscape, and figure compositions. ARTB 2510C meets for four contact hours; one class hour, three studio hours.

**ARTA 2520C Painting II (P) 3 cr.**

Prerequisite: ARTA 2510C. A continuation of ARTA 2510C with emphasis on exploratory work achieved by means of research, evaluation of traditional and contemporary compositions, and contributions of artists; past and present. Emphasis on the abstract and non-objectives. Six contact hours: two class hours; four studio hours.

**ARTB 2520C Painting II (Evening) (P) 2 cr.**

Prerequisite: ARTB 2510C. While the scope of this evening studio class is the same as the day class (ARTA 2520C) the volume of work will be less due to fewer studio hours. This course is designed as a continuation of ARTB 2510C with emphasis on research evaluation of traditional and contemporary compositions and contributions of past and present artists. ARTB 2520C meets for four contact hours: one class hour, three studio hours.

**ARV 1200 Theory of Printing Processes (O) 5 cr.**

Prerequisite: None. A lecture course designed to give an introduction to three of the major processes of the printing industry. Typesetting and form makeup (hand and machine composition), lockup and letterpress press operation, cold type and photo typesetting and mechanical art preparation are included in the course. Five contact hours.

**ARV 1201 Printing Process - Laboratory (O) 4 cr.**

Prerequisite: None. A laboratory course designed to be an introduction to and experience in the basic skills of three of the major processes of the printing industry. Typesetting and form makeup (hand and machine), lockup and letterpress press operation, cold type and phototypesetting, and mechanical art preparation are included in the course. Eight contact hours.

**ARV 1203 Layout and Design (O) 3 cr.**

A course designed to teach the technique of preparing layouts that will provide composing room instructions, as well as a comprehensive assimilation of work to be produced, for customer design approval. Constant design concepts will be employed. Three contact hours.

**ARV 1207 Theory of Lithographic Processes (O) 5 cr.**

A lecture course designed to give an introduction to three major processes of the lithographic industry. Negative stripping and platemaking, process camera operation, and offset press operation are included in the course. Five contact hours.

**ARV 1209 Lithographic Processes Laboratory (O) 4 cr.**

A laboratory course designed to give an introduction to an experience in the basic skills of three major processes of the lithographic industry. Negative stripping and platemaking, process camera operation, offset press operation, and related bindery functions are included in the course. Eight contact hours.

**ARVA 1260 Graphic Arts Estimating (O) 3 cr.**

A lecture course designed to develop the basic technique of estimating the cost of printed matter and its production, from layout to finished product, employing the pricing methods of the industry-accepted Franklin Printing Catalog. Three contact hours.

**ARV 2225 Cold Type Typesetting and Pasteup (O) 3 cr.**

A laboratory course designed to teach the basic technique of setting type by strike-on and phototypesetting machines. The composition and preparation of mechanical art forms, pen ruled and machine forms, are included in the course. Six contact hours.

- ARVA 2226 Advanced Cold Type Typesetting and Pasteup (O) 5 cr.**  
Prerequisite: ARV 2225. An advanced laboratory course designed to provide for skill development in the operation of strike-on and photographic typesetting equipment and form pasteup. Emphasis is placed on the application of the basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours: 10 hours laboratory.
- ARV 2230 Hand and Machine Composition and Form Makeup (O) 3 cr.**  
A laboratory course designed to teach the basic technique of setting type by hand and by Ludlow machine, along with form makeup (utilizing metal cutting devices and the broach method of rule form makeup), including the pulling of galley and reproduction proofs. Six contact hours.
- ARVA 2231 Advanced Composition and Makeup (O) 5 cr.**  
Prerequisite: ARV 2230. An advanced laboratory course designed to provide for skill development in the hand and machine composition and form makeup process of the printing industry. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality, and increased productivity. Ten contact hours: 10 hours laboratory.
- ARV 2234 Camera Operation and Film Processing (O) 3 cr.**  
A laboratory course designed to teach the technique of operating the process camera for the reproduction of line and halftone copy negative reproduction, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers. Six contact hours.
- ARVA 2241C Advanced Camera Operation and Film Processing (O) 5 cr.**  
Prerequisite: ARV 2234. An advanced laboratory course designed to provide for skill development in the operation of the process camera and the development of graphic arts film. Emphasis is placed on the application of the basic techniques toward greater job complexity, increased quality, and increased productivity. Ten contact hours: 10 hours laboratory.
- ARV 2250 Negative Stripping and Offset Platemaking (O) 3 cr.**  
A laboratory course designed to teach the basic technique and stripping up offset negatives for proper press position, separation for color, and to expose and develop offset press plates. Six contact hours.
- ARVA 2251 Advanced Stripping and Offset Platemaking (O) 5 cr.**  
Prerequisite: ARV 2250. An advanced laboratory course designed to provide for skill development in negative stripping and platemaking process of the lithographic industry. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality, and increased productivity. Ten contact hours: 10 hours laboratory.
- ARV 2253 Offset Press Operation (O) 3 cr.**  
A laboratory course designed to develop the basic technique of setting up, operating, and maintaining duplicator and offset presses in the 10x15, 11x17, and 14x20 inch ranges. Six contact hours.
- ARVA 2254 Advanced Offset Press Operation (O) 5 cr.**  
Prerequisite: ARV 2253. An advanced laboratory course designed to provide for skill development in the operation of offset duplicators and presses. Emphasis is placed on application of the basic techniques toward greater job complexity, increased quality, and increased job productivity. Ten contact hours: 10 hours laboratory.
- ARV 2256 Letterpress Press Operation and Lockup (O) 3 cr.**  
A laboratory course designed to teach the basic technique of setting up, operating and maintaining the platen press, the automatic cylinder press. Six contact hours.
- ARVA 2257 Advanced Letterpress Operation and Lockup (O) 5 cr.**  
Prerequisite: ARV 2256. An advanced laboratory course designed to provide for skill development in the operation of letterpress presses and form lockup. Emphasis is placed on the application of the basic techniques toward greater job complexity, increased quality, and productivity. Ten contact hours: 10 hours laboratory.
- ARV 2945 Practicum (O) 6 cr.**  
The student will be assigned to a business-industrial setting in a local printing or trade related firm. Here the student will be engaged in the performance of printing specialty duties, functioning under normal production conditions. This course will be directed by the professor. Eighteen contact hours.
- ASC 1000 Principles of Flight (O) 3 cr.**  
An introduction to the fundamentals of flight, including basic aerodynamics, aircraft characteristics, and a look at aircraft of the past, present and future. Three contact hours.
- ASC 1001 Introduction to Aviation/Aerospace (O) 3 cr.**  
The impact of aviation and space is stressed. An exploratory course of general interest to the novice and of special value for elementary and secondary school teachers due to its interdisciplinary approach. Aviation history, air and space age, careers in aviation and aerospace, nature of space, rocketry, science of flight, weather theory, cartographics, airports, cross-country flying, and physiology of flight are introduced. Three contact hours.
- ASC 1005 History of Air Transportation (O) 3 cr.**  
A chronological history of man's quest for flying and how the Air Traffic Control System came into existence. Three contact hours.
- ASC 1210 Aviation Weather (O) 3 cr.**  
A study of the fundamentals of aviation meteorology and its effects on aircraft and the air traffic control system. Three contact hours.
- ASC 1310 Federal Air Regulations (O) 3 cr.**  
A course designed to familiarize the student with federal regulations that govern pilots, aircraft operations and air traffic control. Three contact hours.
- ASC 1600 Environment of the Air Traffic Controller (O) 3 cr.**  
A candid look at the air traffic controller's language, tools and profession. Three contact hours.



**ASH 2300 History of the Far East (P) 3 cr.**

A history of the Far East from early modern times. Three contact hours.

**AST 1002 Introduction to Astronomy (P) 3 cr.**

The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in this course. This is a general education course and is not intended for the student who is going to major in astronomy or other sciences. The student will become acquainted with the solar system with emphasis on the student's own planet and its satellite, the moon. The student will also study other planets, satellites, comets, meteors, the Milky Way and other galaxies, and the theories of the universe. The stars and planets will be discussed relevant to the most modern ideas. Three contact hours.

**AST 1022L Astronomy Laboratory (P) 1 cr.**

Pre- or Corequisite: AST 1002. This is a laboratory course which is intended to supplement AST 1002, Introduction to Astronomy. It is recommended that the student have a working knowledge of mathematics at a level equivalent to MAT 1024. Observations of the moon, planets, stars, and other objects will be made. Students will learn to use various types of equipment and simple procedures for obtaining useful astronomical data. If the weather is unfavorable, indoor laboratory exercises will be scheduled. Two contact hours.

**ATF 1000 Basic Flight I (D) 3 cr.**

Corequisite: FAA Medical Certificate-Class III. This course consists of the instruction and flight training necessary for the student to accomplish a first solo flight in an airplane, and to achieve a high degree of flying proficiency in basic flying maneuvers. The stages that the student will progress through are: Pre-Solo, Supervised Solo, Basic Flying Techniques, and Solo Practice. Three contact hours.

**ATF 1010 Ground School – Private Pilot (D) 3 cr.**

Classroom instruction. Preparation for FAA Private Pilot's Written Examination. Includes: science of flight, airplane systems and instruments; weight, balance and performance; meteorology, physiology of flight, basic navigation, radio navigation, air traffic control and communications, Airman's Information Manual, and Federal Aviation Regulations. Three contact hours.

**ATF 1100 Basic Flight II (D) 3 cr.**

This course is a continuation of ATF 1000 and consists of the instruction and flight training necessary for the student to complete the minimum requirements that will qualify the student to take the FAA Private Pilot Certificate Flight test. In addition, the student will be introduced to advanced-maximum performance and precision flight maneuvers. The stages the student will progress through are: Pre-Solo Cross Country, Solo Cross Country, Private Pilot Certificate Review, Advanced Night Operations and Introduction to Advanced and Precision Maneuvers. Three contact hours.

**ATF 2201C Intermediate Flight I (D) 3 cr.**

Prerequisite: FAA Private Pilot Certificate or FAA Private Pilot Certificate plus equivalent experience based on CFI evaluation. This course consists of the instruction and flight training that will lead to the skill and competence necessary to maneuver the aircraft safely and accurately in VFR condition within the National Airspace System, during both day and night operations. The student will also receive additional introduction and practice in the advanced maximum performance and precision maneuvers. In addition, the student will receive instruction in Basic Attitude Instrument Flying and Radio Navigation. The stages the student will progress through are: Advanced Cross Country Navigation, Advanced Solo Cross Country Navigation, Precision Maneuver Proficiency, Basic Attitude Instrument Flying and Radio Navigation. Three contact hours.

**ATF 2202C Intermediate Flight II (D) 3 cr.**

A second of three phases of flight training leading to the Commercial Pilot Certificate. A total of 70 hours of instruction is provided, including 10 hours of dual flight, 30 hours of solo flight, 10 hours of oral instruction and briefing, and 20 class hours. Three contact hours.

**ATF 2203C Intermediate Flight III (D) 3 cr.**

The final of three phases of flight training leading to the successful completion of the FAA Commercial Pilot Certificate. A total of 48 hours of instruction is provided, including eight hours of dual flight, 32 hours of solo flight, eight hours of oral instruction and flight briefings. Three contact hours.

**ATF 2300 Advanced Flight (D) 3 cr.**

Prerequisites: FAA Private Pilot Certificate or FAA Private Pilot Certificate, plus equivalent experience based on Certified Flight Instructor's evaluation. This course consists of the instruction and flight training necessary to qualify for the FAA Instrument Pilot Rating. The total of 70 hours of instruction includes 30 hours of dual flight, 10 hours of oral instruction and briefing, and 30 hours of oral instruction and briefing in the classroom. Three contact hours.

**ATM 1300 Aircraft Airframe Mechanic (0) 3 cr.**

This course will provide instruction in theory, maintenance procedures and safety precautions associated with aircraft airframe mechanics. Successful completion of the course will assist the student in preparing for the FAA licensing examination as an Airframe and Powerplant Mechanic. Three contact hours.

**ATM 1500 Aircraft Powerplants Mechanics (0) 3 cr.**

This course will provide instruction in theory, maintenance procedures, and safety precautions associated with aircraft powerplants. Successful completion of the course will assist the student in preparing for the FAA licensing examination as an Airframe & Powerplant Mechanic. Three contact hours.

**ATM 1700 Aviation Technology Maintenance (0) 3 cr.**

This course will provide instruction in theory, maintenance procedures, and safety precautions associated with airframe and powerplant mechanics. Successful completion of the course will assist the student in taking the FAA licensing examination as an Airframe & Powerplant Mechanic. Three contact hours.

**ATM 1800 Aircraft Powerplants Mechanic Practicum (0) 2 cr.**

This course will provide instruction in theory, maintenance procedures and their practical application along with safety precautions associated with powerplant mechanics. Successful completion of the course will assist the student in preparing for the FAA licensing examination as an Airframe & Powerplant Mechanic. Four contact hours.

**ATM 1810 Aircraft Airframe Mechanic Practicum (0) 2 cr.**

This course will provide instruction in theory, maintenance procedures and their practical application along with safety precautions associated with airframe mechanics. Successful completion of the course will assist the student in preparing for the FAA licensing examination as an Airframe & Powerplant Mechanic. Four contact hours.

**ATT 1100 Ground School III – Commercial Pilot (O) 3 cr.**

Prerequisite: Private Pilot Certificate. Preparation for FAA Commercial Pilot Written Examination. Review of weight and balance; airplane performance; air traffic control and communication; airman's information manual; physiology of flight. Course concentrates on advanced flight computer, advanced meteorology, advanced VFR navigation and radio, and commercial pilot federal aviation regulations. Three contact hours.

**ATT 1120 Ground School IV – Instrument Pilot (O) 3 cr.**

Prerequisite: Private Pilot's Certificate. Preparation for FAA Instrument Pilot Written Examination. Review of airplane systems and instruments, advanced meteorology; basic radar and transponder. Course concentrates on IFR clearance shorthand, IFR flight charts, IFR planning and VOR flights, IFR regulations and procedures, and instrument approaches. Three contact hours.

**AVM 2431 The Flight Service Station (O) 3 cr.**

Prerequisites: ASC 1210, ASC 1311. A study of the operation in a flight service station to include weather observation, air-ground communications and flight planning briefing. Three contact hours.

**AVM 2821 The Air Traffic Control Tower (O) 3 cr.**

Prerequisites: ASC 1210, ASC 1310, ASC 1690. A study of the operation of a control tower, visual separation techniques and the inter-relationships of the control tower and the airport. Three contact hours.

**AVM 2823 Approach Control (O) 3 cr.**

Prerequisites: ASC 1210, ASC 1310, ASC 1690. A study of the operation of an approach control, radar and non-radar separation techniques, and the safe and expeditious movement of aircraft within the vicinity of the airport. Three contact hours.

**AVM 2825 Air Route Traffic Control Center (O) 3 cr.**

Prerequisites: ASC 1210, ASC 1211, ASC 1310, ASC 1690. A study of the operation of an Air Traffic Control Center, the radar and non-radar separation techniques, and the interface of towers, approach controls and other centers. Three contact hours.

**AVM 2831 Radar/Computer Interface (O) 3 cr.**

A history of the impact of radar on the air traffic system, the advent of the computer and an introduction to the computer/radar interface. Three contact hours.

**AVM 2941 Facility Internship (O) 4 cr.**

Prerequisites: AVM 2431, AVM 2821, AVM 2823, AVM 2825. Corequisite: AVM 2831. The course includes familiarization with the air traffic system via on-site orientation, in-depth visits to flight service stations, towers, approach control en route centers, weather stations, and radar sites. Four contact hours.

**BAN 1100 The Banking Starter Series (O) 3 cr.**

This is a series of three short orientation seminars at the entry level for new bank employees. In order to earn three credits, all three seminars must be completed. Your Place in Banking – This three-hour training unit is designed to give new employees information on the functions of the various parts of a bank and the financial services offered by the commercial bank. Your Personal Finances – This three-hour training unit is designed to show new employees the best methods of managing their personal income – how to spend it, save it, and borrow against it. Your Personal Image – This nine-to-twelve-hour training unit is designed to teach new employees office courtesies, telephone etiquette, and personal grooming. Three contact hours.

**BAN 1110 Principles of Bank Operation (D) 3 cr.**

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view the chosen profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement. Three contact hours.

**BAN 1160 Bank Letters and Reports (O) 3 cr.**

This course is designed for those bank officers, supervisors, and employees who dictate or review correspondence. Since bank letters are actually public relations documents, all persons should be familiar not only with the mechanical forms of bank letters but also with the psychological principles that help the letter writer achieve best results. The course reviews letter forms, emphasizes fundamental principles underlying modern correspondence, and examines different kinds of bank letters. Three contact hours.

**BAN 1210 Analyzing Financial Statements (O) 3 cr.**

This course is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. Three contact hours.

**BAN 1700 Financing Business Enterprise (O) 3 cr.**

The student may benefit by taking ACC 1009 or ACC 2001 before enrolling in BAN 1700. Stress is placed on the difference between lending and investing, and on the fact that investing in a corporation and financing a corporation are different aspects of the same subject. In this course, the material is presented from the viewpoint of the corporate treasurer who must safeguard the financial future of the corporation. Three contact hours.

**BAN 2150 Bank Public Relations and Marketing (O) 3 cr.**

This course discusses the basis of public relations, both internal and external, and seeks simply to explain the why, the what, and some of the how of public relations and marketing. It is intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing. Three contact hours.

**BAN 2200 Credit Administration (O) 3 cr.**

This course, directed toward the executive level, concerns itself partly with a statement and a discussion of factors influencing and determining loan policy. Methods of credit investigation and analysis, credit techniques, specific credit problems and regular as well as unusual types of loans are discussed. Three contact hours.

**BAN 2303 Savings and Time Deposits (D) 3 cr.**

This course reflects a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flows of income to capital investment. Three contact hours.

**BAN 2720 Bank Management (O) 3 cr.**

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. Since case study is becoming well established as an effective management learning technique, the text introduces the use of cases as a new element. Three contact hours.



- **BCH 2010C Bio-organic Chemistry for Allied Health Students (P)** 4 cr.  
Prerequisite: CHM 1040C or demonstration of equivalent knowledge. This course is designed for those students in Dental Hygiene, Respiratory Therapy, Emergency Medical Technology, Radiologic Technology, and Nursing with some previous exposure to chemistry. Subject matter includes a brief survey of inorganic chemistry (atomic structure, gas laws, acids and bases, solutions), and a study of organic chemistry (alkanes, alkenes, alkynes, hydrocarbons) and biochemistry (carbohydrates, lipids, proteins, nucleic acids, metabolism). Six contact hours: three hours lecture, three hours laboratory.
- BCN 1001C Building Construction (D)** 3 cr.  
Prerequisites: ETD 1100C, MAC 1104, SUR 1101C. A study of the qualitative aspects of structural design involved in the materials and types of construction used in various parts of buildings. Analysis and evaluation of work methods, equipment and specifications employed in the construction of residential, commercial and small industrial buildings. Four contact hours: two class hours; two laboratory hours.
- BCN 2614C Planning and Estimating (D)** 3 cr.  
Prerequisites: BCN 1001C, ETI 1421C. Analysis and determination of job requirements and costs of construction operations, including direct and indirect costs and preparation of bid proposals for construction projects. Four contact hours: two class hours; two laboratory hours.
- BCT 1001 Quantitative Methods for Building Trades (O)** 3 cr.  
A course designed to teach basic trade arithmetic, calculate problems dealing with area, to solve basic ratio and proportion problems, and basic estimating of materials. Three contact hours.
- BCT 1111 Woodworking for Building Trades (O)** 3 cr.  
Prerequisite: BCT 1113. This course provides an overview of the growth of wood and the way defects and blemishes occur. The course covers tools and machines necessary to the construction industry, the techniques and methods of joining wood products and a brief description of the major production areas in woodworking. Six contact hours.
- BCT 1113 Blueprint Reading for Building Trades (O)** 4 cr.  
Prerequisite: BCT 1001. A course designed to teach the fundamentals of blueprint reading and sketching common to all trades in the construction trades. This course will cover plans, elevations, shapes, details and views in sections. The course is divided into three major parts: interpreting, sketching and practical application of blueprint reading principles. Four contact hours.
- BCT 1114 Concrete Form Construction (O)** 4 cr.  
This course describes the construction and use of various concrete forms employed in building construction. The forms described include concrete footings, slabs, walls, columns, beams and stairs. This course enables the student to gain practical experience in making and setting forms under supervised work conditions. Eight contact hours.
- BCT 1401 Introduction to Brick and Block Masonry (O)** 4 cr.  
A course designed to teach the principles of brick and blocklaying. Topics included are development and manufacture of brick and block, tools and equipment, mortar, essentials of bonding brick and concrete block masonry, masonry practices and details of construction, scaffolding, cleaning, masonry work, and understanding and reading construction drawing and fireplaces. Special emphasis will be placed on shop safety procedures. Eight contact hours.
- BCT 1431 Wall Layout and Construction (O)** 4 cr.  
A course designed to teach the purposes of laying out brick bonds, to identify layout methods and types of bonds; distinguish between load bearing and nonload bearing walls; and types of tooling. Eight contact hours.
- BCT 1501 Introduction to Plumbing (O)** 4 cr.  
This course is designed to familiarize the student with the basic principles and definitions relating to the plumbing trade, review of related math, introduction to hand and power tools, understanding of basic blueprints, and familiarization with materials and fittings. Safe working practices will be stressed. Eight contact hours.
- BCT 1502 Estimating Plumbing Repairs (O)** 4 cr.  
This course is designed to teach the student how to estimate material and labor cost to do specific plumbing jobs. Eight contact hours.
- BCT 1504 Plumbing Repairs (O)** 4 cr.  
Prerequisite: BCT 1501. This course is designed to enable the student to locate and repair or eliminate problems related to drainage systems, fixtures, valves and water distribution systems. Systematic troubleshooting procedures and human relations (dealing with the customer) will be included. Eight contact hours.
- BCT 1505 Plumbing Code (O)** 4 cr.  
This course is designed to familiarize the student with the City of Jacksonville plumbing code. Also discussed will be the National and Southern Plumbing code. Eight contact hours.
- BCT 1523 Venting Systems (O)** 4 cr.  
Prerequisites: BCT 1501, BCT 2521. This course is designed to familiarize the student with the venting systems used in this area and the materials required to install them. Basic code requirements relating to venting systems will be covered. Eight contact hours.
- BCT 1525 Water Distribution System (O)** 4 cr.  
Prerequisite: BCT 1501. This course is designed to familiarize the student with water supply systems. Included are cold water systems, hot water systems, circulating systems, water softening systems and solar design applications. Applicable codes will be covered for each concept. Eight contact hours.
- BCT 1604 Introduction to Electrical Construction (O)** 3 cr.  
The student will learn the tools, equipment, materials and basic skills such as making terminations, reading blueprints and using the National Electrical Code to help the student enter and progress in the electrical trade. Six contact hours.
- BCT 1632 Raceway Installation (O)** 3 cr.  
A course covering the installation of all types of raceways recognized by the National Electrical Code (NEC). The student will learn to use benders and install conduit with emphasis on NEC requirements. Six contact hours.

- BCT 1710 Energy Efficient Construction (O) 3 cr.**  
This course is designed to provide an overview of energy use in buildings; the determination of heat loss/gain in buildings; specific construction techniques to control heat loss/gain; passive solar designs; and active solar systems. Three contact hours.
- BCT 2116 Framing Methods I (O) 4 cr.**  
This course is designed to teach the different kinds of wood framing methods. Special emphasis will be placed on floor, wall and ceiling framing and wall sheathing. Eight contact hours.
- BCT 2117 Interior Trim and Cabinets (O) 4 cr.**  
Prerequisite: BCT 2125. The students will benefit by taking other trade related courses, especially wall framing and exterior trim. The students will become acquainted with insulation, interior wall and ceiling finish, finish flooring, stairs, doors, and window trim. Eight contact hours.
- BCT 2118 Exterior Finish (O) 4 cr.**  
Prerequisite: BCT 2125. This course is designed to teach the different types of door, window and exterior finish. Special emphasis will be placed on styles of windows, doors and cabinetmaking plus roof trim. Eight contact hours.
- BCT 2125 Framing Methods II (O) 4 cr.**  
This course is designed to provide the student with an in-depth study of commercial carpentry and methods of construction. The various elements of design, function and quality control of exterior and interior wall systems, floor and roof construction techniques and types of base, wall display cabinets will be examined, and then full-size or scale models will be constructed. Eight contact hours.
- BCT 2405 Advanced Masonry (O) 4 cr.**  
This course is designed to teach laying out and constructing footing, foundations, chimney, fireplaces, modular coordination: glazed and prefaced masonry units arches, stone masonry, advance in masonry construction and job management practices. Eight contact hours.
- BCT 2416 Masonry Specialties, Stucco and Plaster (O) 4 cr.**  
Prerequisites: BCT 1114 and BCT 1401. This course is designed to teach several specialized masonry techniques and to focus upon the masonry products utilized in these techniques. Topics and work areas include: casting decorative concrete; special finishes; glass blocks, ceramic tile; terrazzo; stucco; plaster; veneer plaster; stone and rock masonry; and imitation brick and stone. Eight contact hours.
- BCT 2430 Cut Stone (O) 4 cr.**  
A course designed to teach the students to list types of stone layout and bonding, precaution when handling and scoring stone, and factors to consider when setting stone. Eight contact hours.
- BCT 2432 Arch-Construction and Related Layout (O) 4 cr.**  
A course designed to teach students to identify types of arches and various kinds of related layout and construction, to identify types of different materials used, and describe procedures for erecting various kinds of materials. Eight contact hours.
- BCT 2460 Chimneys and Fireplaces (O) 4 cr.**  
A course designed to teach identification of the types of fireplaces, parts of fireplaces, the factors to consider in constructing fireplaces, procedures for buttering a fire brick, to distinguish between fire brick mortar and brick mortar, and to construct a firebox and fireplace. Eight contact hours.
- BCT 2521 Isometrics and Layout (O) 4 cr.**  
Prerequisite: BCT 1501. This course is designed to enable students to make isometric projectors from flat plans, calculate fixture unit loads, properly size pipe, and layout venting, and water distributions systems. Eight contact hours.
- BCT 2527 Fixtures and Valves (O) 4 cr.**  
Prerequisite: BCT 1501. This course is designed to familiarize the students with plumbing fixtures and the proper method of their installation. Safe working habits will be stressed. Eight contact hours.
- BCT 2610 Codes for Electrical Exams (O) 3 cr.**  
Prerequisites: BCT 2691, BCT 2692 or eligibility for journeyman's exam. A course covering the latest revisions of the National Electrical Code and local codes intended to aid the experienced electrical worker in preparing for journeyman and master examinations. Three contact hours.
- BCT 2622 Electrical Calculations Intermediate (O) 3 cr.**  
Prerequisite: BCT 1604; Corequisite: BCT 2692. A study in making calculations required by the NEC such as conductor fill boxes and conduit, derating conductors, and wiring of equipment. Four contact hours.
- BCT 2623 Advanced Electrical Practice (O) 3 cr.**  
Prerequisite: BCT 2622; Corequisite: BCT 2691. A course covering the technical knowledge required in installing and troubleshooting installations such as transformers, motors, electric heating, electric cooling and power distribution systems. Course will include design of lighting installations and will emphasize current techniques and applications in the electrical field. Three contact hours.
- BCT 2624 Electrical Estimating and Job Control (O) 3 cr.**  
Prerequisite: BCT 2692. A course in estimating labor and materials to complete electrical installations and methods of doing cost control and evaluation of job progress. Three contact hours.
- BCT 2690 Commercial Electrical Installations (O) 3 cr.**  
Prerequisite: BCT 2622; Corequisite: BCT 2460. A study of plans, specifications, electrical services, branch circuit requirements, installation, special systems, over current protection, and design of electrical wiring for commercial buildings. Three contact hours.
- BCT 2691 Industrial Electrical Installations (O) 3 cr.**  
Prerequisite: BCT 1604. Corequisite: BCT 2622. A study of larger commercial installations and industrial applications of electrical wiring including feeders, transformers, and systems covered in National Electrical Code. Three contact hours.
- BCT 2692 Residential Electrical Installations (O) 3 cr.**  
Prerequisite: BCT 1604. Corequisite: BCT 2622. Instruction in the code requirements, installation, planning and design of a complete electrical system for residences, including the switch control of lighting and the use of non-metallic cable. Three contact hours.
- BOT 1010C Botany (P) 4 cr.**  
An evolutionary survey of the plant kingdom. Emphasis will be placed on principles which are applicable to all forms of plant life. Six contact hours: three class hours; three laboratory hours.



118 / COLLEGE CREDIT COURSE DESCRIPTIONS

**BOT 2140C Field Botany of Vascular Plants (P) 4 cr.**

Prerequisite: BOT 1010C. Survey of local vascular flora and local communities (Northeast Florida), and evolutionary relationships of vascular plants. Laboratory work will emphasize field work including collecting and identifying vascular plants. Six contact hours: two hours of lecture and four hours of lab.

**BSC 1011C Principles of Biology (P) 4 cr.**

An introduction to biological structure, function processes, principles and concepts. Laboratory experience using plant and animal materials to reinforce the subject matter is a required part of the course. This course is designed to fulfill the general educational requirements while also fulfilling the laboratory requirement needed by many students who plan to transfer to a four-year institution. Five contact hours: three class hours; two laboratory hours.

**BUL 2111 Business Law (D) 3 cr.**

The basic principles of law as related to business. Areas covered include criminal law, law of torts, contracts, employment, personal and real property, consumer protection, consumer credit, environmental law, and community planning. Three contact hours.

**BUL 2112 Business Law (D) 3 cr.**

Prerequisite: BUL 2111. The legal principles involving agency, commercial paper, bailments and sales are stressed. Three contact hours.

**CAP 1001 Data Processing Applications (D) 3 cr.**

Prerequisite: COC 1300. This course will include an overview of computer-based "applications." Areas covered will include Payroll, Invoicing, Accounts/Receivable, Cash Receipts, Accounts/Payable, Order Entry, Inventory, Forecasting, Work Scheduling, and Purchasing Systems. Emphasis will be placed on application system objectives, input-output requirements, file structures, and processing utilizing system flowcharting. Four contact hours.

**CCJ 1010 Introduction to Criminology (D) 3 cr.**

The course provides a survey of deviant behavior as related to the concept and definition of crime, concept and purposes of the law, measurement of crime, causes of crime, and societal reactions to criminal behavior, from historical through contemporary periods. Three contact hours.

**CCJ 1020 Introduction to Criminal Justice (D) 3 cr.**

Introduction to the philosophical and historical backgrounds of law enforcement. Organization, purpose and functions of law enforcement and other agencies involved in the administration of criminal justice in the United States. Career orientation. Three contact hours.

**CCJ 1030 Introduction to Criminal Behavior (D) 3 cr.**

A basic study of the nature and peculiarities of human behavior in direct relationship to crime and delinquency. Three contact hours.

**CCJ 1220 Criminal Law (D) 3 cr.**

Study of the scope, purposes and principles of criminal law, the classification and analysis of crimes and criminal acts in general, and the examination of selected specific offenses. Three contact hours.

**CCJ 1300 Introduction to Corrections (D) 3 cr.**

An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. Career orientation. Three contact hours.

**CCJ 1400 Police Organization and Administration (D) 3 cr.**

Principles of organization and administration in law enforcement; functions and activities; planning and research; public relations, personnel and training; inspection and control; records and communications, custody, etc. Three contact hours.

**CCJ 1420 Police Operations (D) 3 cr.**

Principles of organization and administration as applied to operations units. Patrol functions, traffic administration, criminal investigation, intelligence and vice units, juvenile units, and coordination and consolidation of police services, etc. Three contact hours.

**CCJ 2230 Criminal Evidence and Procedure (D) 3 cr.**

Study and examination of the criminal rules of evidence; kinds, degrees, admissibility, competence and weight, specifically as they affect the law enforcement officer in the processes of arrest, force, search, seizure, preservation, custody, testimony and courtroom procedures. Three contact hours.

**CCJ 2250 Constitutional Law (D) 3 cr.**

The study of the United States and Florida Constitutions. An in-depth analysis of those constitutional amendments having a bearing on contemporary legal issues and case law interpreting those constitutional amendments. Three contact hours.

**CCJ 2330 Probation, Pardons and Parole (D) 3 cr.**

Probation as a judicial process and parole as an executive function are examined as community-based correctional programs and the use of pardons is reviewed. Three contact hours.

**CCJ 2340 Introduction to Correctional Treatment (D) 3 cr.**

The basic principles of human behavior and some of the techniques of changing attitude and behavior are evaluated, and the individual and group approaches to counseling are reviewed. Three contact hours.

**CCJ 2360 Introduction to Contemporary Practices in Corrections (D) 3 cr.**

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. Three contact hours.

**CCJ 2500 Juvenile Delinquency (D) 3 cr.**

Study of the major issues of crime causation, rehabilitation, and juvenile delinquency participation among the lower, middle, and upper social classes. The process of handling juvenile delinquents from confrontation with authorities, to detention, to release and aftercare is covered. Three contact hours.

**CCJ 2930 Seminar in Police Problems (D) 3 cr.**

This course is designed to allow the student to pursue an individually selected critical issue in our contemporary law enforcement system. A thorough in-depth analysis of the issue is undertaken so that ideas for improvement in this area of the law enforcement system are shared and critiqued in class. Three contact hours.

- CCJ 2933 Introduction to Special Problems in Corrections (D) 3 cr.**  
Research writing and discussion of selected subject areas related to corrections, such as correctional planning for short term offenders and misdemeanants, handling of "unusual" prisoners, classification of offenders, authority and responsibility of correctional officers, professional and legal standards, and analysis of contemporary correctional problems. Three contact hours.
- CHD 1110 Infant and Toddler Care I (Development) (D) 3 cr.**  
This course acquaints infant and toddler care workers in public, private, and church-sponsored child care centers with the stages of human development from birth to two years. The impact of health, parenting, environment, nutrition, mental health and self-esteem on normal and abnormal development are studied. Three contact hours.
- CHD 1220 Child Growth and Development I (D) 3 cr.**  
This course is an introductory study of the physical, social, emotional, and intellectual development of the young child. Guidance, behavior problems, feelings, attitudes, and values are discussed. Three contact hours.
- CHD 1230 Child Growth and Development II (D) 3 cr.**  
Prerequisite: CHD 1220. This course is designed to further the student's understanding of the physical, social, emotional, and intellectual development of the young child. Special children (handicapped, minorities, behavior problems, children in crisis), nutrition and development, and safety and emergency procedures are also studied. Three contact hours.
- CHD 1850 Training of Residential Child Care Workers I (D) 3 cr.**  
This course is for residential child care workers or foster parents and for those who are preparing for those professions. Course I deals with understanding developmental planning, developmental needs, and separation. Three contact hours.
- CHD 1851 Training of Residential Child Care Workers II (D) 3 cr.**  
This course is also for residential child care workers or foster parents and for those who are preparing for those professions. Course II deals with the understanding of cottage life, discipline, the group, and the job. Three contact hours.
- CHD 2120 Infant and Toddler Care II (Education) (D) 3 cr.**  
Prerequisite: CHD 1110. This course acquaints infant and toddler care workers in public, private, and church-sponsored child care centers with educational strategies for children from birth to two years. Minimum standards, classroom management, teacher preparation, assessment, discipline, and parent participation are studied. Three contact hours.
- CHM 1020 Chemistry for Liberal Arts (P) 3 cr.**  
The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in this course. This course is designed to meet the general education requirement for the non-science major. It is designed especially for the student who wishes to gain an understanding of the fundamental nature of physical science from the chemical point of view. The treatment utilizes an approach to scientific concepts and methods, stressing and illustrating principles rather than merely listing phenomena. Three contact hours.
- CHM 1040C Introductory Chemistry I (P) 4 cr.**  
The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in this course. Introduction to the principles of modern inorganic chemistry, including topics in structure of matter, gas laws, solutions, ionization, chemical equations, atomic theory, acids and bases, metals and non-metals. This course is designed for those students who have had no previous chemistry, and for those planning to major in physical education, health related fields, medical technology, and home economics. Six contact hours: three class hours; one three-hour laboratory.
- CHM 1041C Introductory Chemistry II (P) 4 cr.**  
Prerequisite: CHM 1040C. This course is a continuation of CHM 1040C with an introduction to organic chemistry. Six contact hours: three class hours; one three-hour laboratory.
- CHM 1045C General Chemistry and Qualitative Analysis I (P) 4 cr.**  
Prerequisite: One year of high school chemistry and two years of high school algebra or grade of C or better in CHM 1041C. This course is designed to introduce the student to modern chemical concepts. Subject matter includes modern atomic structure and periodicity, chemical bonding, states of matter, gas laws and solutions. The laboratory work will be quantitative in nature, stressing accurate laboratory techniques. This course is designed to meet the first year college requirements for those majoring in science, engineering, premedicine and pharmacy. Six contact hours: three class hours; one three-hour laboratory.
- CHM 1046C General Chemistry and Qualitative Analysis II (P) 4 cr.**  
Prerequisite: Grade of C or better in CHM 1045C. This course is a continuation of CHM 1045C and will stress chemical equilibrium, chemical kinetics, electrochemistry, oxidation-reduction, and selected families of metals and non-metals. Laboratory work will include studies of ionic equilibrium in aqueous solutions and semi-micro qualitative analysis. Six contact hours: three class hours; one three-hour laboratory.
- CHM 2210C Organic Chemistry I (P) 4 cr.**  
Prerequisite: CHM 1046C. This course emphasizes the general principles and theories of organic chemistry with emphasis on classification, nomenclature, methods of preparation, characteristic reactions, stereo-chemistry and structure determination of organic compounds. Six contact hours: three class hours; one three-hour laboratory.
- CIS 2100 Data Management & Utility Programs (D) 3 cr.**  
Prerequisite: CAP 1001. A study of the organizations, access methods, job control statements, and the use of utility programs as components of an application system. Students will be required to build and maintain files. Topic will include an introduction to data bases and data base management systems. Four contact hours.
- CIS 2321 Systems Development and Design (D) 3 cr.**  
Prerequisite: CAP 1001. This course is designed to provide students with knowledge and skills that are basic to system analysis for business data processing. Emphasis will center around life-cycle concept, and will amplify the study, design, development and implementation phases of the systems approach. This course also presents the analyst's role, tools, techniques and case studies for consideration. Four contact hours.



**CJD 2310 Police Supervision (D) 3 cr.**

An introductory course designed to acquaint future and present police supervisors with an understanding of the various functions of supervision. The supervisor's responsibilities and assignments are examined. The general topical areas covered will be: techniques of working with people, communications, personnel selection and training, motivation, principles of organization and management, disciplinary methods, and performance ratings. Three contact hours.

**CJT 2100 Criminal Investigation (D) 3 cr.**

Fundamental course of the most important phases of criminal investigation. Branches of crime detection dealt with are methods of investigation, note taking, report writing, handling the crime scene, interrogations, admissions and confessions, missing persons, undercover assignments and such specific offenses as arson, narcotics, larceny, burglary, robbery, and forgery. Three contact hours.

**CJT 2110 Introduction To Criminalistics (D) 3 cr.**

Basic course of general investigation and special criminalistic matters, including such topics as homicide, rules of evidence, testimony in court, observation and description, hairs and fibers, invisible radiation, documentary evidence, arrests, searches of persons and raids. Three contact hours.

**CNM 1001 Computer-Oriented Mathematics (P) 3 cr.**

Prerequisite: MAC 1104. The course presents basic ideas and methods of mathematics as oriented to the computer. It is designed to utilize a classroom computer, electronic calculators, and logic trainer in use in the mathematics laboratory. Students will, after studying number systems, logic, Binary Boolean Algebra, numerical methods and computer mathematics, write programs in machine language for problems compatible with their own interest and areas of study for the Math-Master. While the emphasis will be on the mathematics of computers, the course will provide a foundation for further study in programming and computer science. (This course does not contain the more common computer languages.) Three contact hours.

**CNM 1005 Data Processing Mathematics (D) 3 cr.**

Corequisite: COC 1300. An essential course for Data Processing majors who do not have a strong background in mathematics and for those who need an introduction to the algorithmic process prior to undertaking computing programming. Topics include the real number system; approximations; accuracy and precision; scientific notations and floating-point numbers; binary, octal, and hexadecimal numbers; binary-coded decimals; logical forms and operations; algorithms and flowcharts; and basic algebraic concepts. Four contact hours.

**COA 1100 Consumer Decisions (D) 3 cr.**

A study of practical money management applied to the family with emphasis on expenditures for food, clothing, housing, transportation, and health care. The course includes a study of credit retirement protection, taxes, consumer protection, and the consumer movement. Three contact hours.

**COC 1300 Introductory Computer Concepts (D) 3 cr.**

This course is intended for students with no previous experience in data processing. It introduces the student to the field of data processing and includes a brief history of the development of computers, a review of pertinent number systems, a study of the basic components of the computer and how they work in the system, elementary problem solving, a look at the "cast of characters" in data processing, and a discussion of advanced computer systems. Four contact hours.

**COC 2001 Computer Concepts (D) 3 cr.**

An introduction to the computer. This course is intended for students with no previous training in computers or programming, historical development, overview of computer input/output devices, processing techniques, introduction to programming languages and engineering/industrial applications. Three contact hours.

**COE 1000 Cooperative Education Seminar (P) 1 cr.**

The seminar is designed to prepare the student for entry into the Cooperative Education Program. During the seminar, the student will receive career counseling, job orientation and placement. One contact hour.

**Prefix will be assigned according to student work experience.****--- 1949 Cooperative Education Work Experience I (P) 3 cr.**

The first work experience in Cooperative Education is designed to provide the student with meaningful experiences that will enhance the student's college education through career exploration and job training. Forty contact hours.

**Prefix will be assigned according to student work experience.****--- 2949 Cooperative Education Work Experience II (P) 3 cr.**

The second work experience in Cooperative Education is designed to provide the student with further meaningful experiences that will enhance the student's college education through career exploration and job training. Forty contact hours.

**COP 1160 RPG Programming (D) 3 cr.**

RPG (Report Program Generator) is a problem oriented programming language designed essentially to obtain data from single or multiple rules, perform calculations and table lookup as required and write reports and/or update files. Students will solve elementary to moderately complex business problems by (A) writing RPG programs, (B) submitting programs for compilation and running on the College's computer system, and (C) thoroughly debugging programs until the output is perfect. Four contact hours.

**COP 1400 Basic Assembly Language Programming (D) 3 cr.**

Prerequisites: COC 1300 and CNM 1005. This course introduces basic concepts in computer programming using a low-level, machine-oriented language. It may also be referred to as BAL/360-370 Programming, Introductory ALC, or Beginning ALP. Students will analyze business problems involving sequential files (cards, magnetic disks and tapes, and printed reports); develop logic flowcharts; translate flowcharts into IBM System/360-370 DOS Assembler Language codes; incorporate job control statements to form a program deck; and test, debug, and document their computer solutions to business problems. Those desiring to specialize in systems programming are strongly urged to continue with COP 2401 Advanced Assembly Language Programming. Four contact hours.

**COP 2110 FORTRAN Programming (D) 3 cr.**

Prerequisites: COC 1300 and one of the following: MTB 1321, CNM 1005, MAT 1033. A comprehensive study of a scientific programming language which is also used in business applications in batched-job processing environments. Emphasis will be placed on file manipulation, including disk, files, and efficient programming techniques, interactive programming and simulation. Lab problems will include business, engineering, and scientific applications. Four contact hours.

**COP 2120 Basic COBOL Programming (D) 3 cr.**

Prerequisite: COC 1300 or equivalent experience. COBOL (Common Business Oriented Language) is the programming language specifically designed to solve business problems. Students will solve elementary to moderately complex business problems by (a) writing COBOL programs, (b) submitting programs for compilation and running on the College's computer system, and (c) thoroughly debugging programs until the output is perfect. Four contact hours.

**COP 2121 Advanced COBOL Programming (D) 3 cr.**

Prerequisite: COP 2120 or equivalent experience. COBOL (Common Business Oriented Language) is the programming language designed to solve business problems. Students will solve moderately complex business problems by (a) writing COBOL programs, (b) submitting programs for compilation and running on the College's computer system, and (c) thoroughly debugging programs until the output is perfect. Four contact hours.

**COP 2130 PL/I Programming (D) 3 cr.**

Prerequisites: COP 1400 and COP 2120. This course will include the study and application of PL/I as applied to business operations. Included within the curriculum will be six weeks of application programming where the student will write and run programs on the College computer system. Four contact hours.

**COP 2170 Programming In BASIC (D) 3 cr.**

Prerequisites: COC 1300 or COC 2001 and one of the following: MTB 1321, CNM 1005, MAT 1033. A beginning-level computer programming course using a popular general-purpose language in an interactive or time-sharing environment. The primary machine will be the Prime 300 minicomputer system with the central computer in the FJC Data Center used as back-up in a remote, batched processing environment. Students will solve problems, involving business applications, engineering computations, mathematical games and simulation. Four contact hours.

**COP 2401 Advanced Assembly Language Programming (D) 3 cr.**

Prerequisite: COP 1400. This course is an extension of COP 1400. Topics include file labels, direct-access storage devices, modular concepts in programming, physical ICOS, macro definitions, subroutines, core dumps, program libraries, floating-point arithmetic, and efficient programming in virtual storage environments. Four contact hours.

**COP 2610 Advanced Computing and Programming Systems (D) 3 cr.**

Prerequisite: COP 2120 and proficiency in computer programming. This course will include the study of computer architectures, operating systems, language translators, and data communication/teleprocessing. Lectures, discussions, demonstrations, and lab problems will be based primarily on the software currently implemented on the ECP-18, Prime 300, and the central computer system in the Florida Junior College at Jacksonville Center. Four contact hours.

**CPO 2002 Introduction to Comparative Government (P) 3 cr.**

An introductory study of political systems in various countries, showing institutions and stressing some economic characteristics of particular systems compared with institutions and economic systems in other countries. This comparison will be related to specific countries. Three contact hours.

**CRM 1039 Data Processing Workshop (D) 3 cr.**

Prerequisite: CAP 1001. This course provides the opportunity for students to gain actual work experience within operational data processing centers. Primary emphasis will be placed on the operation of equipment in the Florida Junior College at Jacksonville Data Center and the Data Processing Lab., including the Prime 300 computer system. Efforts will be made to familiarize students with the operation of computer systems and special peripheral devices in other data processing shops. Eight contact hours.

**CRW 2000 Imaginative Writing (P) 3 cr.**

Prerequisite: ENC 1102. A course to develop the student's capacity for imaginative writing in prose and/or poetry. Critical discussion of student's work and of selected literary techniques. Individual conferences. Three contact hours.

**CTE 1310 Basic Clothing Construction (D) 3 cr.**

This course includes the selection and use of commercial patterns; simple alterations; selection, use, and care of modern sewing and pressing equipment; planning and construction of garments, and developing basic construction skills. The selection of suitable accessories will also be included. Four contact hours: two hours lecture; two hours laboratory.

**CTE 1340 Advanced Clothing Construction (D) 3 cr.**

Prerequisite: CTE 1310. This course presents to the participant the problems encountered in fitted garments construction. Skill in figure analysis, pattern alterations; and advanced clothing construction techniques will be exhibited by the student. Four contact hours: two hours lecture; two hours laboratory.

**CTE 1350 Tailoring I (D) 3 cr.**

Prerequisite: CTE 1310 or the equivalent. This course is designed for the student who is interested in creating individual fashions which meet the student's special preferences and requirements. Emphasized is an individualized approach to custom design, fit, advanced construction, and tailoring techniques. Four contact hours: two hours lecture; two hours laboratory.

**CTE 1401 Basic Textiles (D) 3 cr.**

A study of fabrics used for clothing and house furnishings with emphasis on fibers, yarns, constructions, designs and finishes that determine qualities and the performance of a fabric. Use and care of fabrics and cost factors will be included. Four contact hours: two hours lecture; two hours laboratory.

**CTE 1402 Advanced Textiles (D) 3 cr.**

Prerequisite: CTE 1401. A study of recent developments in textiles for apparel and home furnishings with emphasis on man-made fibers, new construction techniques, finishes, and care. End use performance standards and legislation will also be included. Four contact hours: two hours lecture; two hours laboratory.

**CTE 2851 Fashion Sales Promotion (O) 3 cr.**

This course is designed to study the methods most commonly used by fashion merchants for promoting sales. Instruction will include an evaluation of the effectiveness of the various types of advertising, visual merchandising, fashion show, and personal selling according to individual retail needs. Three contact hours.

**DAA 1000 Recreational Dance (P) 1 cr.**

The introduction and practice of the basic dance skills for enjoyment and recreation. Course content includes round, folk, square, social, and current "Teen-age" dancing. Two contact hours.



**DAA 1340 Folk Dance (P) 1 cr.**

Exploration and enjoyment of the fundamental steps, positions, and formations of the popular American and ethnic folk and round dances. Two contact hours.

**DEA 1000 History and Jurisprudence of Dentistry (O) 1 cr.**

This course presents a knowledge of the Code of Ethics for dental assistants and the laws which govern the practice of dentistry. Previous dental experience is required before taking this course. One contact hour.

**DEA 1100 Science for Dental Assistants (O) 3 cr.**

This course will be preceded by Anatomy and Physiology. Oral Pathology — A knowledge of etiology dental caries control. A familiarity with common periodontal diseases. Pharmacology — A knowledge of the drugs commonly used in the dental treatment and the responsibilities in the use of such drugs. A knowledge of the standards set forth by the Food and Drug Administration of the Department of Health, Education and Welfare. First Aid — a knowledge of and ability to administer first aid treatment or combat emergency situations which may occur. Three contact hours.

**DEA 1820 Dental Assisting Expanded Duties (O) 2 cr.**

This course is designed to teach the dental assistant student expanded duties as permissible by the Florida State Dental Practice Act. New procedures will be included as traditional expanded functions are ratified by the Department of Professional Regulations, Board of Dentistry. (Chapter 21G-16) Manipulation of Dental Materials utilizing dental assisting techniques will be included. Three contact hours: one lecture, two laboratory.

**DEA 2210 Office Management (O) 3 cr.**

This course is designed to develop the student's ability to receive and dismiss patients; understand the behavior patterns of people, including parental attitudes; make appointments and maintain appointment books, communicate by telephone with patients and salesmen, respond to emergencies and patients with a grievance, keep financial records, maintain an efficient recall and patient record file, keep books and records for tax purposes, do banking, write business letters, and purchase and maintain supplies. Three contact hours.

**DEA 2800 Clinical Practice I (O) 5 cr.**

This course is designed to give the dental assisting student: a knowledge of chairside assisting, equipment and its installations, basic maintenance and care of equipment; a knowledge of names, design, use of, and the understanding of sterilizing agents for the proper care and maintenance of all instruments commonly employed in a dental office; the ability to select and prepare properly all instruments for operative, prosthetic, endodontic, orthodontic, and surgical procedures in accordance with instructions from the dentist; the ability to recognize promptly the operative needs of the dentist; and ability to properly maintain a clear operation field. Eight contact hours: two lecture hours, six laboratory hours.

**DEA 2801 Clinical Practice II (O) 6 cr.**

This course consists of two hours of lecture, four hours of laboratory and eight hours of field experiences covering clinical and chairside dental assisting skills. Fourteen contact hours.

**DEA 2802 Clinical Practice III (O) 3 cr.**

This course consists of twelve hours a week of field experience in the dental specialties such as orthodontics, endodontics, and oral surgery. Fourteen contact hours.

**DEA 2803 Clinical Practice IV (O) 5 cr.**

This course consists of twenty hours a week of clinical practice in the dental office in the field. This course encompasses all the functions performed by a dental assistant under the supervision of a dentist. Twenty contact hours.

**DEH 1000C Principles of Dental Hygiene (O) 3 cr.**

Principles of Dental Hygiene is a basic introductory course to teach the theories and practices in dental hygiene, and a prerequisite to Clinical Dental Hygiene I. As such, it is offered during the student's first term of the first year of clinical studies. Through lectures, demonstrations, laboratory and clinical experiences, and task assignments, the student gains knowledge and comprehension of dental hygiene services, and a proficiency in coordination in technical skills necessary to prepare the student to begin preventive periodontic patient services the following semester. Eight contact hours: two lecture, six laboratory.

**DEH 1001 Clinical Dental Hygiene I (O) 6 cr.**

This course is a continuation of the Principles of Dental Hygiene. It is a didactic and clinical course comprised of lectures, laboratory exercises, and actual clinical experience on patients. The purpose of this course is to provide the students with clinical hygiene practice for continuing refinement of technical skills and an opportunity to gain extensive experience in the areas of dental hygiene education. CPR will also be included in this course. Ten contact hours: two lecture, eight clinic.

**DEH 1701 Dental Health Education (O) 3 cr.**

This course incorporates the principles, practices, methods, and visual aids used in teaching dental health education to the public who may be in a dental office, school, public health institution, club, or industry. It is a study of teaching concepts and practices of preventive dentistry. Practical experience is gained through teaching dental health education in elementary and secondary schools in the community during the entire National Children's Dental Health Week. Three contact hours (lecture).

**DEH 1802C Clinical Dental Hygiene II (O) 8 cr.**

This course is a continuation of the practical application of the competencies and skills acquired in Principles of Dental Hygiene, DEH 1000C, and Clinical Dental Hygiene I, DEH 1001. The time is devoted to providing oral prophylaxis care for patients, who present varying classifications of prophylaxis needs. Emphasis is on continuing refinement of the techniques and skills in performing an oral prophylaxis including Gracey curets in root planing, periodontal and dental charting, radio-graphic techniques and interpretations, dietary analysis, and efficiency and care in the management of patients, including those with special needs. Sixteen contact hours; (clinic).

**DEH 2101 Oral Histology and Embryology (O) 3 cr.**

A detailed microscopic study of normal human embryology and histology of facial and oral structures is presented. Laboratory work is coordinated with the lectures, utilizing histological slides. Four contact hours: two lecture, two laboratory.

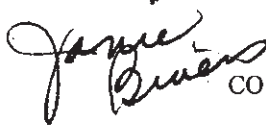
**DEH 2303 Pharmacology (O) 2 cr.**

This course is designed to give the student a detailed study of the principles, characteristics, actions, reactions, and uses of anesthetics, drugs, medicaments, and preparations used to prevent, control and treat diseases. Two contact hours; (lecture).

- DEH 2401 Oral Pathology (O) 2 cr.**  
This course is designed to give the student a detailed understanding and knowledge of the causes and mechanisms of oral disease, oral trauma and oral developmental anomalies. It relates this knowledge to the systematic physiology of the body. Two contact hours.
- DEH 2507L Dental Hygienists Expanded Duties (O) 2 cr.**  
This course is designed to teach the dental hygiene students expanded functions as permissible by the Florida State Dental Practice Act. New procedures will be included as traditional expanded functions are ratified by the Department of Professional Regulations, Board of Dentistry. (Chapter 21G-16). Manipulation of Dental Materials utilizing dental hygiene techniques will be included. Three contact hours: one lecture hour, two laboratory hours.
- DEH 2600 Periodontics (O) 2 cr.**  
This course is designed to give the student a detailed study of the factors involved in periodontal pathology and its etiology. The anatomy, physiology, and histology of the periodontium is reviewed in detail. Diagnosis, prognosis and treatment of patients with periodontal involvement, and management of patients returning for maintenance care is emphasized. Procedures and techniques for soft tissue curettage, periodontal dressing placement and removal, and suture removal are also taught. Two contact hours; (lecture).
- DEH 2702 Community Dental Health (O) 2 cr.**  
This course is a comprehensive study of oral health problems of groups of people in the community. The students plan approaches to groups, assemble resources, deliver health material, survey and resurvey, and prepare statistical analysis on these groups. The student receives concentrated field experience in public health centers, Title I schools, hospitals and nursing homes, and centers for the handicapped. Four contact hours: one lecture, three field work.
- DEH 2804C Clinical Dental Hygiene III (O) 8 cr.**  
This course is a continuation of DEH 1802. Emphasis is on continuing refinement and increased efficiency of clinical skills including complete prophylaxis procedures, radiographs, tact and management of patients, individual responsibilities, achievement in responsibility toward the community, the profession, and dentistry in general. The student is expected to achieve an advanced level degree of proficiency. Sixteen contact hours; (clinic).
- DEH 2806C Clinical Dental Hygiene IV (O) 8 cr.**  
This course is a continuation in refinement of practical application of the competencies and the proficiencies in skills learned in all the past clinical didactic courses. Emphasis is on speed and quality improvement, and upon exposure to community dentistry participating in offices of general dentists, dental specialties, and hospital dentistry. The student is expected to achieve an exit level degree of proficiency. Sixteen contact hours (clinic).
- DEH 2930 Dental Hygiene Seminar I (O) 2 cr.**  
This course is designed to provide a more comprehensive content coverage in all specialties of dentistry, and to enable the dental hygiene student to become more cognizant of techniques and procedures in dentistry, outside the perimeters of dental hygiene. Discussions are designed to assist the dental hygiene student to understand and appreciate the several aspects of dentistry to which dental hygiene services are closely allied. Two contact hours, seminar discussion.
- DEH 2931 Dental Hygiene Seminar II (O) 2 cr.**  
This course is designed to provide a study of professional ethics and commitments, professional organizations, state dental practice acts, and practical consideration of methods and problems associated with operating and maintaining a dental practice. Emphasis is placed on the dental hygiene student's role as a professional person in the community, in private practice, and as an integral part of the dental auxiliary team. Two contact hours; (lecture).
- DEP 2004 Human Growth and Development (P) 3 cr.**  
A study of the development of the individual throughout the life cycle, including child, adolescent and adult patterns of behavior. Attention is given to physical, intellectual, cognitive, personality, and social development. Three contact hours.
- DEP 2102 Child Psychology (P) 3 cr.**  
Prerequisite: PSY 1012. A developmental study is made of the normal child, from birth to the adolescent years. Practical applications are stressed, with their implications for the parent and teacher, as well as for the evolving individual. Three contact hours.
- DEP 2302 Adolescent Psychology (P) 3 cr.**  
Prerequisite: PSY 1012. Development in the adolescent years with emphasis on psychological problems. Three contact hours.
- DEP 2401 Adult Psychology (P) 3 cr.**  
An examination of the physical, social, intellectual and personal characteristics of the human being during early, middle and late adulthood. Key events in adult life, such as marriage, choice of occupation, parenthood, and retirement will be investigated, along with other developmental tasks and stages. Three contact hours.
- DES 1000C Oral Anatomy (O) 3 cr.**  
This course is a comprehensive study of macroscopic anatomy of the primary and permanent dentitions. Students learn the anatomy of the individual teeth and their investing structures, and the human dentition in biological concept. Lectures on the science of occlusion, and on the anatomy and physiology of head and neck structures are also included. Four contact hours: two lecture, two laboratory.
- DES 1002 Oral Anatomy and Development (O) 2 cr.**  
This course covers the nomenclature and anatomy of the human dentition and all supporting structures, plus a detailed microscopic study of the deciduous and permanent teeth, and the surrounding area. Three contact hours: one lecture; two laboratory.
- DES 1102 Dental Materials and Laboratory (O) 3 cr.**  
A series of lecture-demonstrations designed to acquaint the dental assistant student with the nomenclature, proper manipulation, and application of the materials used in the laboratory and clinical practice of dentistry. The procedures for purchasing and storage of supplies will be considered. Four contact hours: two lecture, two laboratory.
- DES 1201C Dental Radiology (Dental Hygiene) (O) 3 cr.**  
This course is designed to teach the proper use of dental x-ray equipment, including radiation safety, in the taking, processing, and mounting of dental radiographs, both intra-oral and extra-oral. It includes evaluation techniques, identifying landmarks and deviations from the normal, and the filing of dental radiographs. Four contact hours: two lecture, two laboratory.



- DIE 1100 Dietetic Seminar (O) 1 cr.**  
This course includes a study of the role of dietetic personnel in health care food systems. Assigned problems in organization and management of dietary departments are included. Trends in methods of food service in health care facilities are studied. One contact hour.
- DIE 1201 Therapeutic Nutrition (D) 3 cr.**  
The student will acquire knowledge and skills in applying the principles of dietary modifications for specific physiological disorders. The course is closely related to the practices of local hospitals and extended care facilities. Three contact hours.
- ECO 2000 Foundations of the American Economy (P) 3 cr.**  
A survey of the American economic system and its development. The course is designed to guide the student in a practical examination of the contemporary operation of regulated capitalism in the United States. Consideration is given to business organizations, the market system, gross national product, banking and finance, problems in employment, and various other aspects of the Government's relation to the national economy. Three contact hours.
- ECO 2013 Principles of Economics I (P) 3 cr.**  
Macroeconomics. The foundations of economic analysis; theory of economic growth and stabilization; monetary theory; international trade and economic development. Three contact hours.
- ECO 2023 Principles of Economics II (P) 3 cr.**  
Prerequisite: ECO 2013 or consent of professor. Microeconomics. This course includes a study of the tools for economic analysis, the market system price theory, theory of the firm, and theories of production and distribution. Three contact hours.
- EDF 1005 Introduction to Education (P) 3 cr.**  
An introductory course in education designed to assist the student in understanding the American educational system in terms of its development and the present organization. The student is acquainted with the problems and the rewards of the profession. Three contact hours.
- EDG 2940 Observing & Recording Child Behavior (D) 6 cr.**  
Prerequisites: CHD 1220 and EEC 1001. This course is designed to increase the student's objectivity and proficiency in observing and interpreting children's behavior in addition to participating in supervised experiences with the children in the laboratory. Lecture, observation, and participation facilities are provided for the study of young children. Ten contact hours: two class hours; eight laboratory hours.
- EDG 2941 Supervised Student Participation (D) 6 cr.**  
Prerequisites: CHD 1230, EDG 2940, EEC 1201 and EEC 1202. This course is designed for participation, under qualified supervision, in the Child Care Laboratory. Ten contact hours: two class hours; eight laboratory hours.
- EDP 2002 Education Psychology (P) 3 cr.**  
Prerequisite: PSY 1012. An in-depth study of the relationships between sound psychology and educational process which will lend to the establishment of proper teaching techniques and understanding of personality dynamics of students. Three contact hours.
- EEC 1001 Introduction to Early Childhood Education (D) 3 cr.**  
This course is an introduction intended to acquaint the student with the basic principles involved in guiding the young child. History of the field of early childhood, objectives of early childhood programs, parent and community involvement, minimum licensing standards, and job opportunities are also included. Three contact hours.
- EEC 1201 Overview of Early Childhood Curriculum I (D) 3 cr.**  
Prerequisite: EEC 1001. This course is designed to acquaint the student with resources and basic principles involved in guiding the young child in the areas of Music, Art, Language Arts, and Social Studies. Language Development and Lesson Planning as related to the above curriculum areas are included. Three contact hours.
- EEC 1202 Overview of Early Childhood Curriculum II (D) 3 cr.**  
Prerequisite: EEC 1001. This course is designed to acquaint the student with resources and basic principles involved in guiding the young child in the areas of Math, Science, and Movement Education. Language Development and Lesson Planning as related to the above curriculum areas are included. Three contact hours.
- EER 1000 Math for Electricians I (O) 3 cr.**  
A course covering practical problems in electrical work including whole numbers, fractions, decimals, percentage, powers and roots, and ratio and proportion. Three contact hours.
- EER 1021 Pole Climbing (O) 3 cr.**  
A course designed to teach the techniques, safety rules and equipment usage in pole climbing. Three contact hours.
- EER 1030 Safety in the Electrical Trades (O) 3 cr.**  
A course covering general safety and fire fighting, electrical safety and fire fighting, first aid for the electrical shock victim, CPR, and an introduction to OSHA. Three contact hours.
- EER 1100 Electrical Theory I (O) 3 cr.**  
Prerequisite: EER 1200. A course covering the fundamental concepts of electricity, batteries, DC series, parallel, and complex circuits, electrical conductors, electromagnetism and magnetic circuits, and DC electrical indicating instruments. Three contact hours.
- EER 1200 Math for Electricians II (O) 3 cr.**  
Prerequisite: EER 1000. A course covering practical problems in electrical work including scientific notation, basic algebra, formulas and equations, surface measurement, rectangular and polar notation, and an introduction to metrics. Three contact hours.
- EER 1210 Electric Theory II (O) 3 cr.**  
Prerequisite: EER 1100. A course covering an introduction to alternating current, inductance, capacitance, inductive and capacitive reactance, fundamental AC circuitry, and single phase transformers. Three contact hours.
- EER 1211 Introduction to Circuit Analysis (O) 3 cr.**  
Prerequisite: EER 1210, or with the professor's consent. This course is a lecture/laboratory exercise in the design and application of L-C-R circuits; including motors, generators and transformers. Six contact hours.

**EER 1291 Basic Circuit Analysis (O) 3 cr.**

Prerequisite: EER 2411, or with professor's consent. This course includes the theory and design of vacuum tubes and semi-conductors. The various configurations, biasing methods, and basic applications will be explained in both class and laboratory conditions. Six contact hours.

**EER 2220 AC/DC Motor Controls (O) 4 cr.**

A study of motor controls involving electrical, mechanical, solid state control devices and associated protective features. A combination laboratory and classroom study beginning with principles and theory. Drawing schematic and wiring diagrams; connecting, operating and troubleshooting starters and controls. A study of SCR's variable frequency DC circuits, and single and polyphase AC circuits is included. Eight contact hours.

**EER 2261 AC/DC Machinery and Transformers (O) 4 cr.**

An introduction of AC/DC machinery beginning with electric motors and generators, covering their construction, operating characteristics, types, applications, troubleshooting and maintenance; single and polyphase transformers covering construction theory, operating characteristics, types, applications, troubleshooting and maintenance; a combination study of laboratory and classroom requiring drawing of schematic diagrams to connect, operate, and troubleshoot the AC/DC machinery and transformers. Eight contact hours.

**EER 2311 Home Appliance, Maintenance & Service I (O) 4 cr.**

This course is designed to teach the necessary skills in repair, service and installation of appliances, the correct use of test equipment, reading wiring diagrams, schematic tracing, timer sequence charts, the removal and reinstallation of components, and the troubleshooting of the clothes washer and dryer. Eight contact hours.

**EER 2312 Home Appliances, Maintenance & Service II (O) 4 cr.**

Prerequisites: EER 2311 and EER 2360. This course is designed to teach the necessary skills in service and repairs, the installation of appliances, the proper use of test equipment, reading wiring diagrams, schematic tracing timer sequences charts, the removal, test and reinstallation of major components, and the troubleshooting of the dishwasher and water heater. Eight contact hours.

**EER 2313 Cooking Appliances Maintenance & Service (O) 4 cr.**

This course is designed to teach the necessary skills in repair, service and installations of cooking equipment, the correct use of test equipment, reading wiring diagrams, schematic tracing, timer sequence charts, the removal and reinstallation of major components, and the troubleshooting of cooking appliances. Eight contact hours.

**EER 2351 Test Equipment Maintenance & Service (O) 4 cr.**

Prerequisite: EER 2411. This course includes instruction in the circuitry, troubleshooting method, repair and calibration of major types of test equipment used in the electronic field. "Hands-on" experiments will also be included. Eight contact hours.

**EER 2352 Advanced Electrical/Electronic Systems (O) 3 cr.**

Prerequisite: EER 2360, or with professor's consent. This course is a study in the measuring devices and control systems utilized in industrial electronics and other related fields such as power, motor control, light dimmers, smog detectors, fire alarms, burglar alarms, pressure, weight and frequency control circuits/devices. These will be designed and tested in both classroom and laboratory exercises. Six contact hours.

**EER 2360 Basic Circuit Diagnosis and Repair (O) 4 cr.**

Prerequisite: EER 2821, or with professor's consent. The tools used, the methods of troubleshooting and the repair of circuits described in EER 2821 will be demonstrated in the classroom and proven in the laboratory exercise with "live" equipment. Some communications circuits will be explored. Eight contact hours.

**EER 2411 Digital Electronics (O) 4 cr.**

Prerequisite: EER 2352. Base 2-5-8 and 16 numbering methods will be demonstrated and applied in mathematical problems along with Boolean algebra. The application of binary will be used in both lecture and laboratory to describe the function of various logic gates/families and operational amplifiers. Eight contact hours.

**EER 2811 Sinusoidal Electronics (O) 3 cr.**

Prerequisite: ETE 1291, or with professor's consent. The many circuits used in industry and other related electronic fields will be taught and tested. These circuits include power supplies, amplifiers, oscillators utilizing bipolar and special designed semiconductor devices. Printed circuit boards will be discussed and fabricated in the laboratory. Six contact hours.

**EER 2821 Non-Sinusoidal Electronics (O) 4 cr.**

Prerequisite: EER 2811. A study of various circuits and systems which are designed to operate with non-sinusoidal waveforms, and in some cases both sinusoidal and non-sinusoidal at the same time, will be explored in the classroom and laboratory. This course includes many of the circuits contained in radar, navigation aids and computer circuits. Eight contact hours.

**EER 2831 Computer Circuit Analysis (O) 4 cr.**

Prerequisite: EER 2411. Starting with a simplified block diagram of a computer, this course will expand to both discrete and I.C. circuit analysis of computers used today. Laboratory work will utilize microprocessor systems for programming and maintenance techniques. Eight contact hours.

**EEX 1000 Introduction to Exceptional Child Education (D) 3 cr.**

An introductory course surveying the characteristics and needs of exceptional children. Three contact hours.

**EGN 1130C Descriptive Geometry (D) 3 cr.**

Prerequisite: ETD 1100C. Theory and practice in solving graphic problems involving point, line, and space relationships. Six contact hours: two class hours; four laboratory hours.



- EHD 1000 Orientation to Deafness (D) 3 cr.**  
This is an introductory course in which the meaning, causes, and scope of deafness are considered with regard to its implications on personal, family and community life. This course includes a historical review of the education of the hearing impaired. A review of the linguistic background, dialects and systems of sign language will be given. Students will learn of referral sources and the various agencies on national, state and local levels which serve the hearing impaired. Language development will be studied as it relates to deafness, hearing and auditory pathology. Three contact hours.
- EHD 1400 Introduction to Interpreting (D) 3 cr.**  
This course will offer students an opportunity to observe actual classroom interpreting, to participate in minimal interpreting duties, and to periodically review and refine techniques and speed in interpreting. This course is designed primarily to improve and refine interpreting skills through observation and practice. Three contact hours.
- EMS 1059 First Responders: Emergency Care Training (D) 3 cr.**  
This course is designed to provide the student with basic skills necessary to save a life, minimize patient discomfort and prevent further injury. The content of this course is specifically designed for the non-medical person who wishes to learn basic life saving skills. Upon successful completion of this course one is qualified in basic life support and prepared to enter EMS 1119, as prerequisite skills are a part of the course content. This course may not be used as an elective by students entering the AS or Certificate Paramedic Program. Three contact hours (lecture).
- EMS 1119 Fundamentals of Emergency Medical Care (D) 6 cr.**  
Prerequisites: EMS 1059 or permission of professor. Corequisites: EMS 1119L, APB 2190C. This course is designed to prepare persons for initial employment as an EMT and includes current techniques practiced by a First-Level EMT, providing emergency medical care. On successful completion of this course and the corequisite: EMS 1119L, one is qualified to take the State Registry Examination for EMT Level I. Six contact hours (lecture).
- EMS 1119L Fundamentals of Emergency Medical Care Clinical Experience (D) 2 cr.**  
Emergency procedures for life-threatening problems will be demonstrated and practiced in the College laboratory. Clinical rotation will be required in local hospital emergency care facility. Four contact hours (lab/clinical).
- EMS 2231 EMT-Paramedic Phase I 4 cr.**  
Prerequisites: EMS 1119, EMS 1119L, APB 2190C; Corequisites: EMS 2231L, APB 2191C. The first part of a three-term sequence of instruction for the EMT-Paramedic. This course is designed to conform with the guidelines provided by the Department of Transportation. Unit of study includes the following modules: The EMT, Human Systems and Patient Assessment, Shock and Fluid Therapy, Respiratory System, and Emergency Care of the Emotionally Disturbed. Four contact hours (lecture).
- EMS 2231L EMT-Paramedic Phase I - Lab/Clinical 3 cr.**  
Prerequisites: EMS 1119, EMS 1119L, APB 2190C; Corequisites: EMS 2231 and APB 2191C. The clinical program consists of a three-term sequence. This clinical will include an emergency room, operating and recovery room, morgue and psychiatric in-hospital rotation. Laboratory and clinical application of experiences are a continuum of EMS 2231. Six contact hours (laboratory/clinical).
- EMS 2232 EMT-Paramedic Phase II 5 cr.**  
Prerequisites: EMS 2231, EMS 2231L and APB 2191. Corequisite: EMS 2232L. A continuation of EMT-Paramedic Phase I. The unit of study includes the Cardiovascular System, General Pharmacology, Central Nervous System, Telemetry and Communications. Five contact hours (lecture).
- EMS 2232L EMT-Paramedic Phase II - Lab/Clinical 3 cr.**  
Prerequisites: EMS 2231, EMS 2231L. Corequisite: EMS 2232. A continuation of Phase I. This clinical will include an intensive care and critical care in-hospital rotation. Six contact hours (laboratory/clinical).
- EMS 2233 EMT-Paramedic Phase III 4 cr.**  
Prerequisites: EMT 2232, EMS 2232L. Corequisite: EMS 2233L. The last part of the three term sequences of EMT-Paramedic instruction. Modules of study include: Soft Tissue Injuries, Musculoskeletal System, Medical Emergencies, Obstetric/Gynecologic Emergencies, Extrication/Rescue Techniques, Pediatric and Neonate Transport. Four contact hours (lecture).
- EMS 2233L EMT-Paramedic Phase III Lab/Clinical 6 cr.**  
Prerequisites: EMS 2232, EMS 2232L. Corequisite: EMS 2233. The last part of the three-term sequences of clinical experiences. This clinical rotation will require riding a Mobile Intensive Care Unit and hospital rotation in a local emergency care facility. Twelve contact hours (laboratory/clinical).
- ENC 1001 English Lab (P) 1 cr.**  
Corequisite: ENC 1002. To provide each student individualized, self-paced practice in specific areas of need as the student attempts to improve skills. Two contact hours.
- ENC 1002 Introduction to Composition (P) 3 cr.**  
This is a course designed to develop the student's skills in grammar, spelling, and vocabulary through writing. The primary emphasis is on writing and short communications. This course will not apply towards an Associate in Arts degree if taken after passing ENC 1101 or ENC 1102 with a grade of C or better or after earning credit in ENC 1101 or ENC 1102 through CLEP or AP (Advanced Placement). Students who enroll in the Developmental Program are required to do laboratory work in conjunction with this course. Three contact hours.
- ENC 1101 English Composition I (P) 3 cr.**  
Prerequisite: Satisfactory score on placement test. This course embodies the fundamentals of effective expression, with emphasis on the various forms of expository writing, logical and imaginative thinking, and reading for understanding. The course provides instruction in sentence structure, diction, organization of short essays and correct usage of standard American English. Three contact hours.
- ENC 1102 English Composition II (P) 3 cr.**  
Prerequisite: ENC 1101. A continuation of ENC 1101. This course includes study and practice in research writing. Three contact hours.
- ENC 2210 Technical Report Writing (D) 3 cr.**  
Prerequisite: ENC 1101. This is a communications course giving primary emphasis to writing for the professions. The course places stress on the use of factual information in descriptive, analytical and researched recommendation reports. The course also provides instruction in writing effective and timely letters, memoranda and informal reports; developing graphs and illustrations; and presenting oral reports. Three contact hours.

- ENL 2013 English Literature I (P) 3 cr.**  
Prerequisite: ENC 1102. An introduction to the main literary traditions from Beowulf through the Restoration and Eighteenth Century. A study of the best and most characteristic writings of these periods. Three contact hours.
- ENL 2023 English Literature II (P) 3 cr.**  
Prerequisite: ENC 1102. An introduction to the main literary traditions from the Romantic and Victorian periods to the present. Study of the best and most characteristic writings of these periods. Three contact hours.
- ETD 1100C Engineering Drawing (D) 3 cr.**  
A survey course of the principles and practices involved in making and reading engineering drawings. Emphasis is placed on lettering, industrial symbolism, orthographic projection, and multiview representation. Six contact hours: two class hours, four laboratory hours.
- ETD 1645C Mechanical and Electrical Drafting (D) 3 cr.**  
Prerequisite: ETD 1100C. Suggested corequisite: EGN 1130C. A course in mechanical and electrical drafting. Emphasis is on assembly and detail drawings of mechanical parts. Included is an introduction to electrical drafting. Six contact hours: two class hours; four laboratory hours.
- ETD 2121C Civil Drafting (D) 3 cr.**  
Prerequisite: ETD 1100C. A survey course covering structural and topographical drafting. Samples of drafting for buildings, bridges, towers, and other structures will be included, teaching structural design principles. The topographical unit will include drawing maps from information obtained in a survey, by aerial photography, etc. The making of contour maps, the meaning of various symbols, and the conventions peculiar to topography will be taught. Six contact hours: two class hours; four laboratory hours.
- ETE 1001 Fundamentals of General Electricity (D) 3 cr.**  
A survey course of the electrical field covering both direct current and alternating current theory, and basic electrical elements. It is designed for the non-electrical engineering technician to provide a general knowledge of electrical phenomena. Three contact hours.
- ETE 1010 DC Theory and Circuits (D) 3 cr.**  
Prerequisite: MAT 1033 or the equivalent. A course of study in the basic nature of electricity, covering: atomic structure as related to current carriers, electrical units, and conversion within and between systems of units; current, voltage, resistance, Ohm's Law, Kirchhoff's Current, and Voltage Laws; Thevenin's Theorem, power, work and energy, series and parallel circuits, magnetism, capacitors, inductors, and measuring instruments devoted to the application of acquired theory. Emphasis on the proper use of modern electronics measuring equipment is included. Five contact hours: three class hours and two laboratory hours.
- ETE 1020 AC Theory and Circuits (D) 3 cr.**  
Corequisite: MTB 1322 or MAC 1114, Prerequisite: ETE 1010. A study of wave-forms with emphasis on sinusoidal waves and the analysis of steady-state electrical circuits. Topical Units of instruction include: Sinusoidal Alternating Current, Phasors, Series and Parallel AC Circuits and Networks, Power, Transformers, Resonance, Polyphase Systems. A laboratory course designed to reinforce the student's understanding of important theoretical concepts. Five contact hours.
- ETE 1121 Advanced Electric Circuit Analysis (D) 3 cr.**  
Prerequisite: ETE 1020. The study of network theories, D.C. circuit analysis, filters, plot, lag and lead phase-shift networks, parallel series circuit conversions, resonance, anti-resonance, bandwidth selectivity, input and output impedance, universal resonance curve, transient analysis, and transformers. Four contact hours.
- ETE 1121 Advanced Electric Circuit Analysis (D) 3 cr.**  
Prerequisite: ETE 1020. A continuation of DC and AC Circuit Analysis and an introduction to the response of circuits to single pulse and periodic pulse input. Four contact hours.
- ETE 2101 Introduction to Solid-State Electronics (D) 3 cr.**  
Prerequisite: ETE 1010, Corequisite: ETE 1020. This is an introductory course covering the principles of operation of solid-state (semiconductor) devices and circuits. Emphasis is on PN junctions, junction diodes, and bipolar transistors. Participation in laboratory exercises is required. Four contact hours.
- ETE 2111 Amplifier Circuits (D) 3 cr.**  
Prerequisite: ETE 2101. This course covers small-signal and power bipolar transistor amplifiers. It also includes coverage of field-effect transistor and vacuum tube amplifier circuits. Laboratory participation is required. Four contact hours.
- ETE 2141 Semiconductor Circuit Design (D) 3 cr.**  
Prerequisite: ETE 2111. The study of field effect transistors and integrated circuits includes basic design procedures for the design of solid state and integrated circuits, digital integrated circuits, and other non-linear circuits. Four contact hours.
- ETE 2527 Electrical-Electronic Control Systems (D) 3 cr.**  
Prerequisites: ETE 2101, ETE 2111. A study of the operation and control of industrial equipment and processes including motors and the controlling systems involved in their operation and protection. Four contact hours.
- ETE 2601 Introduction to Digital Electronic (O) 3 cr.**  
Prerequisite: ETE 2101. This is an introductory course covering solid-state digital circuits, number systems, logic gates, digital codes, Boolean algebra, Karnaugh mapping, and combinational logic. Laboratory participation is required. Four contact hours.
- ETE 2633C Computer Logic Circuits (O) 3 cr.**  
Prerequisite: ETE 2112. A study of computer circuits and systems. Flip-flops and counters, registers, arithmetic units, computer memories, D/A and A/D conversions. Digital integrated circuits and introduction to microprocessors. Four contact hours.
- ETE 2680C Microprocessors (O) 3 cr.**  
Prerequisite: ETE 2633C. This course is designed to teach the fundamentals of programmable logic devices: the microprocessor integrated circuit device, peripheral input/output devices, and analog/digital interface devices. The principles common to all modern microprocessors are developed with emphasis on the microprocessor-based process control system and machine-level programming, along with the basic concepts involved in microprocessor hardware. Laboratory experiments are required. Four contact hours.



**ETG 1201C X-Ray Technology I (D) 3 cr.**

Corequisites: MAC 1104, ETE 1010. Basic concepts of effects of radiation in the x-ray and gamma ray spectrum. Study of the qualities of the radiography relative to density, contrast, and detail. Effects of radiation upon fluorescent materials and applicative to fluoroscopy. Study of radiation hazards and protection. Study of x-ray tubes and their ratings. Study of the x-ray film and darkroom procedures. Techniques involved in production of radiograph. Three contact hours.

**ETG 2202C X-Ray Technology II (D) 3 cr.**

Prerequisite: ETG 1201C, ETE 1020. Detailed studies of x-ray transformers and rectification, and safe handling procedures. Detailed studies of x-ray controls, including timers, stabilizers, autotransformation, and filament controls. Detailed studies of combination x-ray tables; bucky diaphragms, tube holders, and raceways for shockproof cables. Six contact hours.

**ETG 2204C X-Ray Technology III-Practicum (O) 3 cr.**

A study of installation and service problems in actual field work on diagnostic x-ray machines; radioisotopic therapeutic machines and nuclear medicine apparatus. A study of the use of radiation in non-destructive testing in the industrial field. Field trips to actual installations. Six contact hours.

**ETG 2205C X-Ray Technology IV (O) 3 cr.**

Corequisite: ETG 2204C. Study of television and videotape recording in radiology, emphasis on field work on actual installations, studies in hospital procedures, protocol studies in electrical codes, studies in radiation codes, service problems and solutions with emphasis on actual field work. Three contact hours.

**ETG 2300C Mechanical Laboratory (O) 3 cr.**

Prerequisites: ENC 2210, MAC 1114 or MTB 1322. This course is designed to give the student exposure to laboratory work and all that it involves. Laboratory experiments in the areas of Testing and Strength of Materials, Fluid Mechanics, Thermo-dynamics and Air Conditioning will be performed by the student and a lab report will be written for each experiment. The course will give practical support to theory learned in the classroom. Four contact hours.

**ETG 2504C Engineering Mechanics I: Statics (D) 3 cr.**

Prerequisites: MAC 1114 or MTB 1322, ETI 1421C. Introduction to the basic laws and principles of mechanics. A study of force systems, principles of moments, couples, and static equilibrium. In this development, friction, centroids, moment of inertia and the concept of work, energy, and power are presented. The application of these fundamental concepts to practical engineering problems as used in structural members and machine elements is emphasized. Three contact hours.

**ETG 2515C Engineering Mechanics II: Dynamics (O) 3 cr.**

Prerequisite: ETG 2504C. This course is designed to provide an introduction to the basic laws and principles of dynamics. A study of kinematics, plane motion, kinetics, work, energy, impulse and momentum. The application of the fundamental concepts to practical engineering problems is emphasized. Three contact hours.

**ETG 2535C Testing and Strength of Materials (D) 3 cr.**

Prerequisite: ETG 2504C. The study of the basic concepts involved in determining the resistance of engineering materials to various loads with emphasis on the applied use of various formulae for a systematic analysis. Three contact hours: three class hours; two laboratory hours.

**ETI 1121 Introduction to Nondestructive Testing (O) 3 cr.**

This course reviews the basic principles underlying nondestructive testing. It is anticipated that interested students will be stimulated by this course and seek additional information in more extensive works on nondestructive testing. Course will cover types of inspection, to include visual, radiographic, magnetic particle, ultrasonic, dye penetrant, eddy current, acoustical holographic, thermal, as well as new research and development in nondestructive testing. Three contact hours.

**ETI 1122 Nondestructive Testing: Liquid Penetrants and Magnetic Particles (O) 3 cr.**

Prerequisite: ETI 1121, or permission of professor. The study of types and uses of liquid penetrants as they pertain to non-destructive testing to include development, application, compatibility and tests of penetrant materials. A study of magnetic particle theory and test of materials and equipment. Four contact hours.

**ETI 1421C Engineering Materials and Processes (D) 3 cr.**

A survey of the basic materials used in industry, metallic and non-metallic, and the processes used to form, fabricate, and finish these materials. Three contact hours.

**ETI 1700 Industrial Safety (D) 3 cr.**

This course is designed to impart the knowledge essential to safe practices in industry. It covers all aspects of Federal Government regulations promulgated by the U.S. Department of Labor, Occupational Safety & Health Administration. Three contact hours.

**ETI 2440 Industrial Design (D) 3 cr.**

Prerequisite or corequisite: EGN 1130C. A course designed to give the student knowledge and practice in common industrial design methods. Emphasis is on elements of good design and functional and proper presentation of design. Six contact hours: two class hours; four laboratory hours.

**ETI 2681 Industrial Supervision (D) 3 cr.**

The purpose of this course is to prepare the student for a role in the world of work as the student assumes responsibilities leading toward supervisory positions and management. Three contact hours.

**ETM 2221 Elements of Applied Energy (D) 3 cr.**

Prerequisites: MTB 1322, ETI 1421C. An introduction to applied thermodynamics. The study of the transformation of energy to useful work through mechanical elements: heat engines, I.C. engines, compressors, turbines, and ancillary equipment. Three contact hours.

**ETM 2310 Fluid Mechanics (D) 3 cr.**

Prerequisites: MTB 1322, ETI 1421C. A general survey of the laws involving the flow of fluids, and their application to the processes, equipment and machines that are used in the energy-to-work transformation. Three contact hours.

**ETM 2610C Air Conditioning & Heating (D) 3 cr.**

Prerequisites: MAC 1114 or MTB 1322, ETI 1421C. An introductory course to environmental control of buildings and houses with emphasis on equipment performance and system design. Three contact hours.

- ETM 2800 Fundamentals of Metallurgy (O) 3 cr.**  
A course designed to teach the behavior, characteristics, terms and manufacturing process of ferrous and non-ferrous metals. Topics included are metal selection, altering metal performance with thermal and mechanical treatment, and powder metallurgy. Three contact hours.
- EUH 1000 Western Civilization (P) 3 cr.**  
A survey of the cultural beginnings of civilization and the diffusion and accumulation of culture through 1715: Ancient Egypt, Mesopotamia, Greece, Rome, Byzantium, Islam, the Medieval Period, the Renaissance, and the Protestant Revolt. Three contact hours.
- EUH 1001 Western Civilization (P) 3 cr.**  
Modern western institutions from 1715 to the present day. Includes the developing capitalistic system, absolutism, the Enlightenment, the era of revolutions, the Constitution of the United States, the development of democracy, the industrial revolution, nationalism, the world wars, and the cold war. Three contact hours.
- FAD 1230 Dynamics of Modern Living (D) 3 cr.**  
A study of the interpersonal relationship to include personal and family problems; analysis of the basic elements involved in courtship, mate selection, engagement, marriage, parenthood, and child development. Also covered are topics such as principles of good manners and acceptable standards of social behavior, personal appearance, social customs, personality development, human relations and consideration of the various occupational opportunities within the broad field of home and family life education. Three contact hours.
- FFP 1000 Introduction to Fire Protection (D) 3 cr.**  
A study of the philosophical and historical backgrounds of fire protection services; the role and responsibilities of the fire service; the organization and function of federal, state, county, and private fire protection agencies; review of municipal fire defenses, fire prevention principles, techniques of fire control, codes and ordinances; problems of the fire administrator, and survey of professional fire protection career opportunities. Three contact hours.
- FFP 1100 Introduction to Fire Organization and Administration (D) 3 cr.**  
Principles of organization and administration in fire protection service; a study of company personnel management and training, fire equipment, communications, maintenance, budgeting, records and reports, insurance rating systems, and public relations. Three contact hours.
- FFP 1110 Fire Company Supervision and Management (D) 3 cr.**  
A review of the structure and functions of a fire company as a component of a municipal organization. Stresses the duties and responsibilities of the company officer, including planning, training, records and reports, and employee supervision. Three contact hours.
- FFP 1203 Fundamentals of Fire Prevention (D) 3 cr.**  
Structure and function of the fire prevention organization; interpreting and applying code regulations; a study of the procedures and techniques of fire prevention, to include inspection, surveying and mapping, recognition and elimination of fire hazards; problems of public relations, and coordination with other governmental agencies. Three contact hours.
- FFP 2240 Fire Investigation (D) 3 cr.**  
A study of the principles of fire investigation; methods of determining area of fire origin, fire cause, and fire spread; location and preservation of evidence, interrogation of witnesses, arson detection, arson laws, case preparation and court procedures, and reports and records. Three contact hours.
- FFP 2310 Fire Codes and Building Construction (D) 3 cr.**  
A study of federal, state, and local laws applicable to the fire service, a survey of Fire Codes and Standards of the National Fire Protection Association and the Fire Prevention Code of the National Board of Fire Underwriters; role of the State Fire Marshal; principles and practices used in building construction. Three contact hours.
- FFP 2400 Fire Fighting Tactics and Strategy (D) 3 cr.**  
Basic concepts involved in fire fighting, including fire behavior, size-up, attack principles, and utilization of available manpower and equipment; preplanning fire problems. Emphasis will be on developing thinking skills in relation to crises. Three contact hours.
- FFP 2500 Flammable Hazardous Materials (D) 3 cr.**  
This course presents the basic fundamentals of chemistry used in fire science; types of chemicals and processes; and laws at federal, state, and local levels pertaining to use, storage, and transportation of chemicals. Also, topics covered include hazards of radioactives, precautions to observe in fighting fires involving hazardous materials, and laboratory demonstrations of incompatibles. Three contact hours.
- FFP 2524 Explosive and Toxic Hazardous Materials (D) 3 cr.**  
This course is divided into two sections. The first of these deals with why materials explode, why they are unstable, and how they react with water, air, and each other. The second section explores toxicity. Three contact hours.
- FFP 2600 Fire Fighting Equipment and Apparatus (D) 3 cr.**  
Principles of pumping, construction and operation of pumps and pumping accessories, driving and pumping practices, principles and operation of aerial ladders, hydraulic systems, water supply, trouble shooting, and related subjects. Also covered are principles of the care, maintenance, and operation of fire department vehicles. Subjects covered include theory of internal combustion engines, power development and transmission, torque and horsepower, electrical and brake systems, carburetion, engine tune-up and trouble shooting, characteristics of fuels and lubricants, and other related principles of automotive vehicles. Three contact hours.
- FFP 2660 Rescue Practices (D) 3 cr.**  
Instruction is given in life saving practices pertaining to the fire company. Training for resuscitator squads and rescue equipment, the fire department's role in civil defense and other disaster acts, chemicals and diseases that affect breathing, law on first aid, and the use of breathing apparatus are included. Three contact hours.
- FIL 1505 Film as Art (P) 3 cr.**  
Introductory study of history and methods of motion picture production. Emphasis on the appreciation of artistic methods of significant motion pictures. Four contact hours.



- FIN 2000 Principles of Finance (D) 3 cr.**  
Prerequisites: QMB 1001, ACC 1009 or ACC 2001, or consent of professor. Investment characteristics of stocks and bonds, securities market, introduction to securities analysis, commercial banks and the federal reserve system; inflation, deflation, and the money supply; history and nature of money, and financial management. Three contact hours.
- FIN 2100 Personal Finance (D) 3 cr.**  
A study of economic and personal goals including personal budgeting, credit buying, borrowing money, banking facilities, the nature of investments, life insurance, casualty insurance, medical insurance, home ownership, stocks and bonds, and retirement plans. Three contact hours.
- FIN 2230 Money and Banking (D) 3 cr.**  
This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply the student's knowledge to the particular job. Historical treatment has been kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios. It is recommended that BAN 1110 - Principles of Bank Operation - be taken prior to enrolling for FIN 2230. Three contact hours.
- FIN 2360 Foundation and Structure of Credit Unions (O) 3 cr.**  
The historical background and philosophy of the credit union movement is contained in this course. The structure and function of the credit union are clearly portrayed. Emphasis is placed on the need for ethical patterns and behavior. Relationships in the credit union and professionalism are examined. Three contact hours.
- FOS 1201 Sanitation and Safety (D) 3 cr.**  
The student will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. The student will identify causative agents of food-borne illnesses and demonstrate preventive techniques by adhering to sanitation standards. Emphasis is placed on methods of accident and fire prevention. Three contact hours.
- FRE 1100 Beginning French I (P) 3 cr.**  
This course consists of pronunciation, grammar, conversation, exercises, reading and composition. Visual and auditory aids are employed. Four contact hours: three class hours; one laboratory hour.
- FRE 1101 Beginning French II (P) 3 cr.**  
Prerequisite: FRE 1100. A continuation of FRE 1100. Four contact hours: three class hours; one laboratory hour.
- FRE 2200 Intermediate French I (P) 3 cr.**  
Prerequisite: FRE 1101. Reading from modern and classic French authors, grammar review, and conversation. Four contact hours: three class hours; one laboratory hour.
- FRE 2201 Intermediate French II (P) 3 cr.**  
Prerequisite: FRE 2200. A continuation of FRE 2200. Four contact hours: three class hours; one laboratory hour.
- FSS 1004 Orientation to Food Service Technology (D) 3 cr.**  
The student will explore employment opportunities in the food service industry, including job opportunities in hospitals, extended care facilities, restaurants, hotels, motels, fast food operations and private clubs. Emphasis is placed on the analysis and the acquisition of educational and personal competencies required for job success. Three contact hours.
- FSS 1100 Menu Design and Food Merchandising (D) 3 cr.**  
The student will acquire knowledge and demonstrate skills in menu planning, costing and pricing menu items, and designing menu format. Effective merchandising methods in food display, advertising, and interior decorating will be utilized. Positive public relations techniques will be emphasized. Three contact hours.
- FSS 1120 Food and Beverage Purchasing (D) 3 cr.**  
The student will acquire the fundamentals involved in purchasing food and beverages in quantity. Emphasis is placed on standardizing, grading, estimating, selecting, receiving, and storing foods and beverages. Practical application in writing specifications and in developing purchasing techniques is emphasized. Three contact hours.
- FSS 1201 Basic Food Preparation (D) 3 cr.**  
The student will acquire knowledge and skill in the preparation of food including basic principles and techniques of food preparation, management of resources, use of recipes, use and care of equipment, and evaluation of food products. Safety and sanitation practices are emphasized. Five contact hours: three lecture; two laboratory.
- FSS 1221 Quantity Food Production (D) 3 cr.**  
Prerequisite: FSS 1201. The student will acquire the principles of quantity food preparation and service for cafeterias, restaurants, and institutions. Major emphasis will be placed on equipment use and care, standardized recipes, portion control, work plans and schedules. Five contact hours: two lecture, three laboratory hours.
- FSS 1246 Baking (D) 3 cr.**  
The student will acquire knowledge of the composition and properties of baking ingredients. The proper equipment and tools will be utilized to prepare baked products. Using standardized recipes, yeast breads, quick breads, rolls, pastries, and cakes will be produced in the food service laboratory. The products prepared will be evaluated by established food service standards. Five contact hours: one lecture, four laboratory hours.
- FSS 1248 Garde-Manger I (D) 3 cr.**  
The student will acquire knowledge and demonstrate skills in the application of special garde-manger techniques used in ice and tallow sculpturing. Dexterity in the proper use of tools to produce dinner and ice sculptured showpieces will be demonstrated. Four contact hours: two lecture, two laboratory hours.
- FSS 1249 Garde-Manger II (D) 3 cr.**  
Prerequisite: FSS 1248. The student will acquire advanced skills and techniques in the creation of aspic-pates, chaud-froids, terrines, gallantines, and sauces for buffet table arrangements. Emphasis is placed on proper manipulation of tools to produce showpieces. Four contact hours: two lecture, two laboratory hours.
- FSS 1250 Food and Beverage Service (D) 3 cr.**  
The student will acquire knowledge of various types of service appropriate to coffee shops, dining rooms, luncheons, banquets and buffets. The relationship of menu, equipment, supplies, merchandising and personnel to create good patron acceptance is demonstrated. Three contact hours.
- FSS 1251 Restaurant Operation (O) 3 cr.**  
The basic principles of analysis of food management problems, job analysis methods, selection, control, and supervision of personnel, facilities layout, labor and food cost control, purchasing, legal problems, furniture and decor for clubs, restaurants and related institutions. Three contact hours.

- FSS 1304 Management Clinical Practice I (O) 3 cr.**  
A supervised field experience in which the student will work on the job nine hours per week and apply course theories and skills basic to quality control, including: principles of food preparation, personnel management, sanitation and safety. Ten contact hours.
- FSS 1306 Management Clinical Practice II (O) 3 cr.**  
A supervised field experience in which the student will work on the job nine hours per week to develop and test competencies in management, food production, cost control data processing, kitchen designs, delivery systems, and merchandising and promotion. Emphasis on report analysis, evaluation, and accounting systems for the food service industry. Ten contact hours.
- FSS 1410 Food Service Equipment/Facility Planning (D) 3 cr.**  
The student will evaluate the various types of food service equipment relative to cost, structure, function, and maintenance. A layout for a food service operation will be designed to include equipment specifications, energy conservation measures, diversity of function, cost control and consideration toward future adaptability. Three contact hours.
- FSS 1940 Food Service Practicum I (D) 3 cr.**  
Prerequisite: FSS 1201. Prerequisite or Corequisite: FSS 1221. The student will apply knowledge and skills in quantity food production including purchasing, preparing, merchandising and serving in an actual food service operation. The food will be prepared in the food service laboratory and merchandised to college personnel. The student will be evaluated on performance in various jobs which the student will fill on a rotation basis. Fifteen contact hours.
- FSS 1941 Food Service Practicum II (D) 3 cr.**  
Prerequisite: FSS 1940. The student will continue to apply knowledge and skill in the production of quantity food in the food service laboratory. The student will also exhibit knowledge in the area of management and supervision and will be evaluated on performance. Fifteen contact hours. (Laboratory).
- FSS 2300 Supervision and Personnel Management (D) 3 cr.**  
The student will develop and demonstrate skills necessary to the managerial procedures and functions of a food service operation. Emphasis will be placed on personnel selection, interviewing techniques, supervision, organization, and planning and evaluation. Three contact hours.
- FSS 2301 Food Service Delivery Systems (O) 3 cr.**  
The student will explore food service departments in the varied types of health care facilities and health care delivery systems operating in the United States, their purposes, organization, need in society, general functions and staffing. Facilities such as hospitals, nursing and rehabilitation centers, health maintenance organizations, private and public outpatient clinics and neighborhood health care centers are analyzed and discussed. Three contact hours.
- FSS 2302 Management Clinical Practice III (O) 4 cr.**  
A supervised field experience in which the student will work on the job 12 hours per week to develop and test competencies in employee selection, interviewing, training, evaluation, and budgeting. Thirteen contact hours.
- FSS 2501 Food and Beverage Control (D) 3 cr.**  
Presents the basic principles and procedures of effective food and beverage cost control. Includes food and beverage purchasing, receiving, and issuing; calculation of standards, production, planning special control. Three contact hours.
- FSS 2945 Food Service Internship (D) 9 cr.**  
The student will work on-the-job as an intern under the supervision of qualified personnel in food service establishments within the community. Course theories and skills will be applied in this work experience. The internship training program requires a minimum of twelve weeks for a total of 450 hours. A two-hour classroom seminar will be held bi-monthly on campus. Thirty-eight contact hours.
- GEA 1000 World Geography (P) 3 cr.**  
An introductory course dealing with humanity's relationship to the natural environment in the various climatic, regional, and economic areas of the world, their interrelationships and problems of conservation of natural resources. Three contact hours.
- GEB 1011 Introduction to Business (D) 3 cr.**  
An introduction to business organization and procedure, enabling the student to more intelligently pursue advanced business courses and to choose a business career. Three contact hours.
- GEO 2370 Conservation of Resources (P) 3 cr.**  
A survey of natural and human resources of the world. Special emphasis will be placed on the United States with an intensive study of the wise use and wasteful practices in the exploitation and utilization of these resources. Three contact hours.
- GER 1100 Beginning German I (P) 3 cr.**  
This course consists of pronunciation, elements of grammar, simple conversation, exercises, reading, and composition. Visual and auditory aids are employed. Four contact hours.
- GER 1101 Beginning German II (P) 3 cr.**  
Prerequisite: Ger 1100 or equivalent. A continuation of GER 1100. Four contact hours: three class, one laboratory.
- GLY 1000 Earth and Space Science (P) 3 cr.**  
Prerequisite: None. This course is designed to acquaint the student with the development of science, with the integrating principles and theories in the earth sciences, with the practice of the scientific method, and with a useful knowledge of selected areas of geology, astronomy, and meteorology. Presentation involves lectures, demonstrations, and films. The course is for general education and is not designed essentially as an introductory or preparatory course for any of the specific sciences. Three contact hours.
- GLY 1010 Physical Geology (P) 3 cr.**  
The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in this course. Physical Geology is the study of the earth. Topics covered are structure and land forms, modifying agents and processes, characteristic rocks and minerals and a brief study of the surrounding atmosphere and the earth as a planet. For majors and non-majors. Three contact hours.
- GLY 1100 Historical Geology (P) 3 cr.**  
Prerequisite: GLY 1010. A study of the geologic history of the earth dealing with the major physical events as recorded in rock formations and with the constantly evolving changes in animals and plants through time. Three contact hours.



**HES 1000 Personal and Community Health (P) 3 cr.**

A study of health problems which are of major importance to our society. Emphasis is placed on drugs, tobacco, alcohol, sex, and on general principles involved in our present understanding of health related areas. Three contact hours.

**HES 1400 Standard First Aid (P) 1 cr.**

This course prepares an individual to handle most common emergencies by stressing accident prevention, early medical care, common injuries and life-saving skills. The American National Red Cross Standard First Aid Certificate is earned upon successful completion of the course. One contact hour.

**HES 2144 Medical Terminology (O) 2 cr.**

Development of a medical vocabulary commonly used in physicians' offices. Emphasis is given to study of physiologic and anatomic terms referring to human tissues and organic systems and the use of medical dictionaries, manuals, and pharmaceutical references. Two contact hours.

**HES 2400 Standard First Aid & Personal Safety (P) 2 cr.**

This course is designed to meet the needs of individuals who have an opportunity to give first aid care frequently within their daily routine and/or special responsibilities. The American National Red Cross Standard First Aid & Personal Safety Certificate is earned upon successful completion of the course. Two contact hours.

**HFT 1000 Introduction to Hospitality Management (O) 3 cr.**

Introduction to the hospitality industry and management of hotels, motels, and restaurants. An orientation course designed to give the history, organization, problems and opportunities in the hotel, motel and restaurant industry. Three contact hours.

**HFT 1250 Hotel/Motel Operation (O) 3 cr.**

This course is designed to acquaint the student with the operation of a hotel or motel to include front office procedures in registering, accounting for and checking out guests, promotional and sales practices, housekeeping, interior decoration, purchase of furniture, carpeting, linens and supplies, maintenance and engineering of a practical nature, facilities specifications, purchasing and storage. Three contact hours.

**HFT 1270 Apartment Management (O) 3 cr.**

This course outlines the procedures to be followed in the day-to-day problems encountered in the management and operational effectiveness applied to apartment management. It is designed to cover all facets of apartment management including leases, termination, collection forms, maintenance, purchasing, insurance, accounting records, selection of personnel and agreements, public and human relations and recreational aspects. Three contact hours.

**HFT 1410 Front Office Management-Hotel/Motel (O) 3 cr.**

This course is designed to take the student in successive stages from an orientation in a hotel/motel front office through all of the skills needed to manage properly the front office to the end of having a knowledgeable manager capable of directing the activities and solving the complex problems of hotel/motel front office management. It will acquaint the student with the operation of all the departments as they apply to the student's primary responsibility of selling rooms and serving guests. Three contact hours.

**HFT 2221 Customer-Personnel Relations (O) 3 cr.**

This course explores the various successful techniques involved in establishing effective communications and functional relationships with the customer and personnel at all levels. Three contact hours.

**HFT 2700 Tourism (O) 3 cr.**

Prerequisite: HFT 1000. Tourism, which is travel, is defined as including the whole hospitality field — hotels, motels, resorts, restaurants, camping and all the supportive services for travelers and vacationers. This course is designed to develop an understanding of the travel modes and to make the student knowledgeable and responsive to the developments and the economic approaches that are necessary in order to become a travel manager. Three contact hours.

**HFT 2941 Internship (O) 3 cr.**

On-the-job work experience supplied by the hotel, motel and restaurant industries, job placement will be dependent upon the student's preference and availability of participating hospitality institutions. The course consists of 15 hours per week of on-the-job instructions accompanied by one seminar each week. Students employed in the industry will be paid the on-going rate for part-time help. Eight contact hours.

**HFT 2942 Internship (O) 3 cr.**

Prerequisite: HFT 2941. This course is an extension of HFT 2941. It consists of on-the-job work experience supplied by the hotel, motel, and restaurant industries. Job placement will be dependent upon the students' preference and availability of participating hospitality institutions. The course consists of 15 hours per week of on-the-job instruction accompanied with one seminar each week. Students employed in the industry will be paid the on-going rate for part-time help. Eight contact hours.

**HHD 1001 Art in Home and Dress (O) 3 cr.**

The course content includes an in-depth study of the elements and principles of design. The course is designed to demonstrate a proficiency in the knowledge and application of the elements — color, line, texture, ornament, shape, space — as well as the principles — scale and proportion, balance, rhythm, emphasis, and unity — in designing interior spaces. Employment opportunities will be explored. Four contact: two class, two laboratory.

**HHD 1232 Functions and Psychology of Space (O) 3 cr.**

Prerequisite: HHD 1001. Social, private and work spaces will be analyzed for psychological use of space, efficiency of traffic patterns, and effectiveness of design. The student will read, evaluate, modify, and execute a floor plan based upon the requirements for the space zones. Exploration of the multiples of background modifications for visual impact on the total design of an interior space will be addressed. Four contact hours: two class, two laboratory.

**HHD 1360 Construction of Window Treatments and Draperies (O) 3 cr.**

Instruction in this program course includes competency development relating to aspects; identification, use and care of tools and equipment; and construction of window treatments and valances. A special emphasis is placed on construction and installation techniques. Instruction and practice on all commercial drapery equipment is stressed during the course. Six contact hours: two class, four laboratory.

**HHD 1362 Window Treatment Design (O) 3 cr.**

This course includes a study of types of window and variety of treatments for each. Special emphasis is placed on energy savings related to window types, fabric selection and treatment choice. Course work incorporates information on the selection and installation of hardware and rods for each treatment. Three contact hours.

**HHD 1365 Home Accessories Construction (O) 3 cr.**

This course covers designing and executing home accessory projects and restoration of discarded accessories and use of alternative materials. Extensive course work is focused on preserving and restoring collectibles for the home, as well as construction of new items worthy of being called collectibles. Six contact hours: two class, four laboratory.

**HHD 1450 Fundamentals of Restoration and Preservation (O) 3 cr.**

The course content is directed towards making the individual better able to preserve existing features inside and outside of the home. Choices in what to restore vs what to preserve are explored in supervised experiences. Hands on practice in developing restoration and preservation skills is included. Six contact hours: two class, four laboratory.

**HHD 1452 Home Maintenance and Repair (O) 3 cr.**

The course content and instruction are directed toward making the home owner self-sufficient in handling minor care, repair, and maintenance problems. The content includes problems with electric power, plumbing emergencies, care and repair of floors and floor coverings, interior painting, wallpapering, furniture care and repairs, and miscellaneous repairs. Tools needed, work safety, and combatting pests and fungi will also be discussed. Opportunities for laboratory experiences in practical applications will be provided. Three contact hours.

**HHD 1500 Decorating With Slipcovers (O) 3 cr.**

The course work includes instruction for homemakers in fabric selection, techniques of handling various fabrics, making cord, fitting cord to corners, and inserting zippers. The care of slipcovers is also included. Six contact hours: two class, four laboratory.

**HHD 1510 Introduction To Upholstery (O) 3 cr.**

This course includes selection of tools, materials, and equipment; use of power equipment, dismantling of furniture; basic construction processes; fitting the muslin cover; planning and preparing the fabric platform cover; planning and preparing panels, outsides and trimmings; pleated skirts, dust ruffles and making cushions. An emphasis is placed upon experiencing all phases of upholstery construction useful in a variety of home furnishings projects. Six contact hours: two class, four laboratory.

**HHD 1511 Advanced Upholstery (O) 3 cr.**

This course is designed to enhance skills and to develop more productive work habits. This course includes channeling, tufting, making skirts, repairing, and spot touch-up of furniture, color and color schemes, and headboards. A special emphasis is placed upon authentic restoration of antiques and classic furniture styles. Six contact hours: two class, four laboratory.

**HHD 2234 Residential and Commercial Design (O) 3 cr.**

This laboratory course is designed to provide skill development in planning residential and commercial interiors from blue-prints to the final assembly of all furnishings. A study of commercial furnishings, fabrics, building codes and fire regulations is emphasized. Working drawings, specifications, and competency in budgeting will also be synthesized. Four contact hours: two lecture, two laboratory.

**HHD 2240 Why Preservation? (O) 3 cr.**

This course is designed to study the process of: a restorable home, planning interior and exterior renovations, estimating costs, choosing contractors, doing it yourself, getting involved in local preservation groups. A special emphasis is placed on the development of the community historically, socially and architecturally as well as the trends in zoning, crime, transportation and commercialization. Three contact hours.

**HHD 2323 Perspective Renderings - Housing (O) 3 cr.**

Emphasis is placed on planning and executing renderings, and the techniques of one and two point linear perspective as they apply to interior space and its furnishings. In this introductory course, the student will develop skills in graphically conveying his design concepts into visual illustrations. Four contact hours: two lecture; two laboratory.

**HHD 2324 Graphic Presentation Techniques (O) 3 cr.**

Professionalism of graphic illustration is the focus of this course. Various media for graphic interior design presentations will be explored, such as, pencil, pen and ink, and watercolor renderings. Student projects will also provide experience in assembling and presenting collages. Four contact hours.

**HHD 2600 Architectural Style: Exteriors and Interiors (O) 3 cr.**

This course includes a comparative analysis of home architectural interiors and exteriors based on elements of home design recognizable in home construction. A study of antique, reproduction and modern exteriors is also included. Emphasis will be placed on consequences of prior and future preservation of the structures studied. Three contact hours.

**HHD 2805 Professional Practices In Home Economics (O) 3 cr.**

This course includes a study of small business organizations and practices in interior design, home furnishings, and clothing related industries. A special emphasis is placed upon practical solutions to common problems found in these related trades. The process of selling fabric, etc., labor estimates, sub-contracting services, specialization of labor within the business, and customer relations will be explored extensively. Three contact hours.

**HHD 2810 Marketing Techniques For The Interior Designer (O) 3 cr.**

Utilization of marketing techniques in selling interior design materials is the focus of this course. Based on providing consumer information to the client, the student will plan and execute marketing strategies utilizing visual aids and display areas. Three contact hours.

**HHD 2943 Practicum In Economic Revitalization Of Homes And Business Dwellings (O) 6 cr.**

A minimum of 20 hours per week of practical work experience approved by the student's advisor. The student will acquire on-the-job experience in housing preservation, restoration or construction under the supervision of qualified personnel within the business community. Twenty contact hours.



**HME 1312 Home Equipment - Selection, Use, And Care (O) 3 cr.**

Instruction in this course includes all phases of equipment selection, use, and care. The student will have the opportunity to consider factors influenced by energy costs, space requirements, lifestyle, number of people using the dwelling, and budget limitations. A special emphasis is placed upon fuel choices and equipment types to better utilize existing systems in an older home. Three contact hours.

**HIS 1907 Honors Survey of History (P) 3 cr.**

Prerequisites: Outstanding performance in AMH 2010, 2020; EUH 1000, 1001. Recommendation by the Department. An independent survey in one or more selected fields of history which incorporates extensive research and in-depth readings. Designed to develop interest and skill in the preparation of historical analysis and presentation in anticipation of further studies at the senior college level in history or related fields. Three contact hours.

**HME 1200 Home Management (D) 3 cr.**

The student is introduced to problems in Home Management, including: values and goals in the management process; the efficient use of time, money and human resources; and earning and spending the family income. The student is given a decision-making orientation in order to sharpen problem solving skills in managing home and physical resources. Three contact hours.

**HOS 1010 Basic Applied Horticulture (P) 4 cr.**

A practical study of the principles of plant culture including greenhouse and garden experiences with both ornamental and food plants. Plants appropriate for and problems peculiar to North Florida horticulture are emphasized. Laboratory fee \$6.00. Six contact hours: three class hours; three laboratory hours.

**HSC 1000 Introduction to the Health Professions (O) 1 cr.**

An introduction to the Allied Health Professions. The course will provide the student with an overview of the Health Professions emphasizing differences and similarities in specialized health fields. It is intended that the course will afford the student more flexibility in selecting a health specialty as a chosen career. One contact hour.

**HSC 1002 Integrated Health Science (O) 3 cr.**

No pre- or corequisites. A course to provide basic manipulative and theoretical background skills that are necessary to successfully complete the required Science and Health courses within the Occupational Health Program. Five contact hours.

**HSC 1003 Health Science Lab (P) 1 cr.**

Corequisite: HSC 1002. To provide each student individualized, self-paced practice in specific areas of need as the student attempts to improve health science skills. Two contact hours.

**HSC 2602 Death Attitudes - Exploration and Change (O) 3 cr.**

An exploration of the psychological, philosophical, and sociological aspects of death and dying, especially in relationship to the negative view of death in our American Society. This course will encourage participants to analyze life's true meaning by coming to terms with death as a part of human development. The field experience in this course will require contact with the terminally ill patient. This course is limited to students enrolled in health related programs. Four contact hours.

**HUMA 1740 Overseas Study (P) 3 cr.**

The first half of a humanities course offering students a five-week study/travel program centered around the cities and countries of the tour. The course will include field experiences, lectures, discussions, and other experiences in the Humanities area. The student will visit great European cities where special attention will be given to forces contributing to the culture of these nations. The student will gain an understanding and appreciation of great and vital ideas through on-site study within the political, economic, and social historical framework in art, music, literature, architecture, philosophy, and religion in the cultural heritage of Western civilization. Eight contact hours.

**HUMB 1740 Overseas Study (P) 3 cr.**

The second half of a humanities course offering students a five-week study-travel program centered around the cities and countries of the tour. The course will include field experiences, lectures, discussions, and other experiences in the Humanities area. The student will visit great European cities where special attention will be given to forces contributing to the culture of these nations. The student will gain an understanding and appreciation of great and vital ideas through on-site study within the political, economic and social historical framework in art, music, literature, architecture, philosophy, and religion in the cultural heritage of Western civilization. Eight contact hours.

(Courses designated HUM need not be taken in any numerical order.)

**HUM 2211 Western Humanities I (P) 3 cr.**

Western culture and its creative expressions from their origins in prehistoric times through the middle ages as surveyed through the media of visual arts, music, literature, philosophy and social history. Three contact hours.

**HUM 2231 Western Humanities II (P) 3 cr.**

Western culture and its creative expressions from the Medieval Renaissance through the Napoleonic Era as surveyed through the media of visual arts, music, literature, philosophy and social history. Three contact hours.

**HUM 2250 Western Humanities III (P) 3 cr.**

Western culture and its creative expressions from the nineteenth-century Romantic Movement through the twentieth century as surveyed through the media of visual arts, music, literature, philosophy and social history. Three contact hours.

**HUM 2410 Asian Humanities (P) 3 cr.**

Asian cultures and their creative expressions as surveyed through the media of visual arts, music, literature, and philosophic thought. Three contact hours.

**HUM 2450 American Humanities (P) 3 cr.**

Life and creative expressions in the Americas as surveyed through the media of visual arts, music, literature, philosophy and social history. Three contact hours.

**HUM 2460 Latin American Humanities (P) 3 cr.**

Life in the Latin American countries surveyed from its beginning to the present. Creative expressions in the visual arts, music, literature and philosophic thought will be studied in the context of archaeology, anthropology, sociology, history, geography and religion. Three contact hours.

**HUM 2470 Intercultural Survey (P) 1 cr.**

This course is a survey, through the humanities, of human nature and society within a specified cultural setting as a means of understanding other cultures and their problems. Cultures will vary. This course may be repeated for credit four times when cultural setting is changed, but may not be taken within the same cultural setting as HUM 2472. One contact hour.

**HUM 2472 Intercultural Explorations (P) 3 cr.**

This course is a study of human nature, human society, and human rights in a specified cultural setting through the humanities, religion, drama, music, dance, the visual arts, myths and legends and their place in effecting social policies and a culture's vision of its future. Cultures will vary. This course may be repeated for credit three times when cultural setting is changed. Three contact hours.

**HUM 2477 Mediterranean Humanities (P) 3 cr.**

Life and creative expressions in the Mediterranean regions of Asia, Africa and Europe as surveyed through the media of visual arts, music, literature, philosophy, and social history. Three contact hours.

**HUM 2478 Northern European Humanities (P) 3 cr.**

Life and creative expressions in the non-Mediterranean regions of Europe as surveyed through the media of visual arts, music, literature, philosophy, and social history. Three contact hours.

**HUM 2710 Fine Arts Field Trip (P) 1 cr.**

This course involves a cultural enrichment tour of New York City or other localities and is designed as a supplement for students currently enrolled in one or more Fine Arts courses. The trip will include visits to art galleries, museums, and musical and dramatic productions. A paper based on a cultural aspect, or aspects, of the trip is required. Such paper will be due one month from the return date of the trip. Orientation material will be presented to the students well in advance of the trip, and topics for a paper will be discussed and arranged before leaving. One contact hour.

**→ HUN 1001 Principles of Nutrition (D) 3 cr.**

The student will acquire the basic principles of nutrition and develop skill in applying the recommended dietary allowances to all age groups. Emphasis is placed on key food nutrients, consumer information regarding food economy, quality food purchasing, and maximum nutrition for the life cycle. Three contact hours.

**HUS 1001 Introduction To Human Services (D) 3 cr.**

This course includes a discussion of the field of community and human services including gerontology, abuse care, mental health, recreation, rehabilitation, retardation, and social welfare. Emphasis is given to the diversity of the human services delivery system in the USA, communities as networks of service organizations, the variety of human service consumers, and the skills needed for effective human services. Three contact hours.

**HUS 1303 Techniques In Human Service Delivery (D) 3 cr.**

In this course, the student will have the opportunity to acquire background knowledge of human service agencies and to develop skills basic to individual and group therapy. Areas to be addressed will include the following: theories of counseling and personality, the interviewing process and interviewing skills, and issues and problems of daily life. Self-awareness and personal growth necessary to effectively practice helping relationship skills will be stressed. Class topics will also include issues concerning specific client populations, such as aging, mental health, retardation, social welfare, and abuse. Three contact hours.

**HUS 1600 Topics In Human Service Delivery (D) 3 cr.**

The focus of this course will be upon an in-depth study of community human service agencies and the human service delivery systems in which they operate. The relationships of these to government legislation, and resources, and resource allocation will be covered. Discussions of current issues and trends in the fields of mental health and human services will also be included. A portion of each student's time will be spent in a field experience at a community agency. Six contact hours.

**HUS 2825 Practicum In Human Services (D) 3 cr.**

Prerequisites: HUS 1010, HUS 1200. This course will involve both classroom and in-agency experience in the human services. It will provide an interface between classroom learning and practical training in human service agencies. Basic helping skills will be emphasized. One hour per week in the classroom plus eight or more in work experience will be required under on-going agency supervision. May be repeated. Nine contact hours.

**IDS 1935 Interdisciplinary Studies Seminar (P) 1 cr.**

The IDS seminar provides a structured opportunity for students and professors to participate in special programs, to work together in the development of IDS projects, and to interact in an interdisciplinary environment. May be repeated. Two contact hours.

**IEA 1305 Industrial Survival Procedures (O) 3 cr.**

A course designed to teach basic fundamentals of first aid, fire prevention and methods of containing fires until professional fire fighters or disaster personnel arrive. Topics to include: methods to be implemented with minor/major accidents or illness, evacuation procedures; property protection methods, fire/explosion handling procedures. Special emphasis will be placed on methods of orderly employee conduct and preventing panic. Three contact hours.

**IND 1010 Housing and Interior Design (O) 3 cr.**

This course includes a study of selection of housing and furnishings, housing values, needs, renting, buying a home, and characteristics of and plans for desirable housing. It emphasizes selection and arrangement of furnishings through the use of color principles and elements of design. Three contact hours.

**IND 1100 History of Interiors I (O) 3 cr.**

The student will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the time of our primitive beginnings through the Renaissance period. Three contact hours.

**IND 1130 History of Interiors II (O) 3 cr.**

Prerequisite: IND 1100. The student will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the Renaissance period through the twentieth century. Three contact hours.

**IND 1420 Materials and Sources (O) 3 cr.**

This course includes a study of the materials of interior design and sources of each. Topics include textiles, floor and wall coverings, furniture, window treatments and accessories. Special emphasis will be given to customer relations and providing product information to the consumer. Three contact hours.



- IND 2940 Interior Design Internship and Seminar (O) 6 cr.**  
Corequisite: IND 2305. The student will work on the job as an intern under the supervision of qualified personnel in interior design firms within the community. Course theories and skills will be applied in this work experience. The internship training program requires 15 weeks for a total of 300 hours. A two-hour classroom seminar will be held bimonthly on campus. Permission of program director is required for enrollment in this course. Twenty-one contact hours.
- INR 2002 International Relations (P) 3 cr.**  
A study of the nature of the international political system with emphasis on the concepts of national interest and power with respect to the relations of nation-states; examination of the function and role of international organizations. Three contact hours.
- ISC 1000 Unified Science (P) 3 cr.**  
This course is designed to allow students to study selected topics relating to processes of science, concepts of science, natural phenomena, and/or current problem areas. Selected topics will be studied in terms of their relationship and significance to the various science disciplines. This course is not designed essentially as an introductory or preparatory course for any specific physical science. Three contact hours.
- JOU 1001 Introduction to Journalism (P) 3 cr.**  
An introduction to Journalism and Mass Communications. This course will include the history and development of journalism with emphasis on newspaper, radio, television and magazines. Effective personal communications will also be taught as the basis of effective mass communications. Three contact hours.
- LAH 2000 History of the Americas (P) 3 cr.**  
A study of the nations of the Western Hemisphere, including Canada, from colonial times to the present with emphasis on Latin America. Three contact hours.
- LEA 1001 Introduction to Legal Technology (O) 3 cr.**  
This course provides overview of training and purpose of legal assistants. It will explain roles of lawyers and legal assistants along with ethical and professional standards applicable to each. The structure of federal and related court systems, the State of Florida court system, and various substantive fields of law will be covered. Three contact hours.
- LEA 1013 Legal Writing and Research I (O) 3 cr.**  
Prerequisite: LEA 1001, or consent of director. This course is designed to introduce the student to legal bibliography and basic legal research methods. Practice research problems will be a large part of this course. Students will also learn how to write legal memoranda and briefs for both trial and appellate work. Three contact hours.
- LEA 1014 Legal Writing and Research II (O) 3 cr.**  
Prerequisite: LEA 1013. This course is a continuation of LEA 1013. The course will continue into intermediate and advanced legal research with increased emphasis on the writing of legal memoranda and briefs. Three contact hours.
- LEA 1101 Litigation (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of director. This course focuses on the litigation process as it relates to the Florida court system. Attention is given to the function of law, the role of the attorney, basic substantive law, pleadings, discovery, trial, settlement, and appeal. The role of the legal assistant including client interviews, investigation, and compiling facts, drafting of pleadings, assembling of briefs, etc., will be studied. Three contact hours.
- LEA 1151 Torts (O) 3 cr.**  
Prerequisite: LEA 1001 or permission of director. A study of the basic law relating to civil wrong as applied to personal and property damage. Topics studied include intentional torts, negligence, strict liability, products liability, nuisance, liability of owners and occupiers of land, fraud, defamation, invasion of privacy, intentional interference with contractual relations, abuse of process, torts in the family, civil conspiracy and immunities. Three contact hours.
- LEA 1201 Real Property Law (O) 3 cr.**  
Prerequisite: LEA 1001, or consent of director. This course will involve the study of the law of real property and an in-depth survey of the more common types of real estate transactions and conveyances, such as deeds, contracts, leases, deeds of trust, etc.; drafting problems involving these various instruments; special research projects related to the subject matter; and a study of the system of recording and search of public documents. Three contact hours.
- LEA 1211 Wills, Trusts, and Probate (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of director. An overview of the law of wills, descent and distribution, probate administration and trusts together with practical application in the preparation of wills, trusts and the various pleadings used in the State of Florida. Three contact hours.
- LEA 1311 Corporate Law (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of the director. A study of the formation and operation of corporations, partnerships, limited partnerships, business trusts and other business vehicles, including a survey of the fundamental principles of law applicable to each; and special research projects related to the subject matter. Three contact hours.
- LEA 1401 Law Office Management (O) 3 cr.**  
Prerequisite: LEA 1001 or permission of director. This course will instruct the legal assistant in the fundamentals of law office organization, bookkeeping and accounting. Attention will be given to fees and billings, scheduling, personnel management, file preparation and organized procedures for specialized areas of the law. Three contact hours.
- LEA 1501 Laws of Domestic Relations (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of director. This course involves the study of such topics as divorce, separations, custody, legitimacy, adoption, name change, guardianship, support court procedures, separation agreements, etc. Three contact hours.
- LEA 1601 Criminal Law (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of director. This course covers the theory, history and purpose of criminal law; the role of the U.S. Supreme Court and the Constitution in law enforcement. The law and procedure from incident through arrest. This course also covers the structure, definitions and most frequently used sections of the Florida Statutes dealing with crimes against persons and property. Three contact hours.

- LEA 1721 State and Federal Tax Law (O) 3 cr.**  
Prerequisite: LEA 1001, or permission of the director. This course will give students a basic fundamental knowledge of income taxation and will demonstrate how these fundamentals apply to individuals, decedents, estates, trusts, partnerships and corporations. The student will also learn to assist the attorney with income tax returns, tax procedures, tax planning and resolution of tax controversies. Three contact hours.
- LEI 2330C Camp Counseling (P) 3 cr.**  
A course designed to develop leadership qualities for working with young people in a recreational situation and also to provide knowledge and skill necessary for living in, enjoying, and preserving the out-of-doors. Three contact hours and two overnight camping trips. The American Camping Association Advanced Campcraft certification is earned upon successful completion of the course.
- LIS 2001 Use of Books and Libraries (P) 1 cr.**  
Organization of the FJC Learning Resources. Introduction to the library's classification system, how to use the card catalog, periodical indexes and other basic indexes. Suggestions for notetaking. Emphasis will be placed upon developing an analytical and systematic approach to the use of reference sources. This course will be helpful to all students who wish to make better use of library facilities at FJC, universities and public libraries. Three contact hours.
- LIT 2000 Introduction to Literature (P) 3 cr.**  
Prerequisite: ENC 1102. Emphasis on reading selections for understanding and appreciation. Consideration is given to the major literary forms and their distinctive characteristics and conventions, principal literary themes, and different critical approaches. Designed both for increasing personal satisfaction in literature and as preparation for further literary study. Three contact hours.
- LIT 2110 Great Ideas in World Literature I (P) 3 cr.**  
Prerequisite: ENC 1102. A critical study of selections of ancient, medieval, and early Renaissance literature. Three contact hours.
- LIT 2120 Great Ideas in World Literature II (P) 3 cr.**  
Prerequisite: ENC 1102. A critical study of selections of literature from the middle Renaissance period through the twentieth century. Three contact hours.
- LIT 2330 Children's Literature (P) 3 cr.**  
Chronological survey of literature for children ages one to twelve, organized by format, subject, reading and interest levels. Reading, selection and evaluation of materials, sources of materials, and use of materials with children. Three contact hours.
- LIT 2370 The Bible as Literature (P) 3 cr.**  
A study of the development of the Bible in both its natural and its supernatural aspects, its influence on literature and humanity. Emphasis on the Bible's role in the modern world. Three contact hours.
- MAC 1104 College Algebra (P) 3 cr.**  
Prerequisite: MAT 1033 with a grade of C or better; or a satisfactory score on placement test. In this course techniques of algebra are studied with an emphasis on exact vocabulary. An analysis of the real number system is introduced and topics on linear and quadratic functions, systems of equations and inequalities, logarithms, theory of polynomials and matrices are included. This course is recommended for students who need more preparation for trigonometry and calculus. Four contact hours.
- MAC 1114 College Trigonometry (P) 3 cr.**  
Prerequisite: MAC 1104, with a grade of C or better. This course treats trigonometric functions of angles and vectors. It includes identities, inverse circular functions, solution of trigonometric equations, complex numbers, and solutions of triangles. Three contact hours.
- MAC 1311 Calculus with Analytic Geometry I (P) 4 cr.**  
Prerequisite: MAC 1114 or two years of high school algebra, one year of plane geometry, one-half year trigonometry. A course designed for the major in mathematics, science or engineering, having a good foundation in algebra and trigonometry but no analytic geometry. This is an integrated differential and integral calculus course with analytic geometry and places emphasis upon the theoretical approach to mathematical analysis. Covered in the course are an introduction to analytic geometry, differentiation of algebraic expressions with applications of the derivative and integration involving algebraic expressions with applications. Four contact hours.
- MAC 2312 Calculus with Analytic Geometry II (P) 4 cr.**  
Prerequisite: MAC 1311. A continuation of the calculus-analytic geometry sequence. The course includes differentiation and integration of transcendental functions, plane analytic geometry topics, methods of integration and the algebra calculus of vectors in the plane. Four contact hours.
- MAC 2313 Calculus with Analytic Geometry III (P) 4 cr.**  
Prerequisite: MAC 2312. A continuation of the calculus-analytic geometry sequences. Topics include indeterminate forms, improper integrals, polar coordinates, infinite series, solid geometry and its vectors, partial differentiation, and multiple integrals. Four contact hours.
- MAF 2200 Marriage and Family (P) 3 cr.**  
A study of mate selection, courtship, marriage and child rearing, with special attention to the contemporary American family. Three contact hours.
- MAN 2000 Principles of Management (D) 3 cr.**  
A detailed analysis of the management functions of planning, organizing, staffing, directing and controlling as related to business enterprise. The orderly presentation of fundamental knowledge in management provides the student with the framework for further study in the field, or the background for practical application of management principles in business and industry. Three contact hours.
- MAN 2050 Transportation Management and Theory (D) 3 cr.**  
This course is primarily designed for students advancing to the management stage in the transportation field. It covers financial management, business law, management's relation to government, marketing management, management theory and philosophy, and broad management perspective. Three contact hours.



**MAN 2300 Personnel Management (D) 3 cr.**

Problems, practices and policies in the management of people. Leadership, motivation and direction of employees towards management-employee-oriented goals. Employment practices. Three contact hours.

**MAN 2800 Small Business Management (D) 3 cr.**

This course is designed for the student who is primarily interested in the ownership and management of the small business enterprise. The managerial function of planning, organizing, staffing, direction and controlling as applied to the small business is examined and analyzed. Retailing, wholesaling, manufacturing, and service type business organizations are studied. Three contact hours.

**MAP 2302 Differential Equations (P) 3 cr.**

Prerequisite: MAC 2312. A study of the procedure and the theory of various methods of solving ordinary differential equations, which includes a development of Laplace Transforms and applications. Three contact hours.

**MAR 1011 Principles of Marketing (D) 3 cr.**

Prerequisite: GEB 1011. The study of matching products of markets. Discussion of basic marketing functions. Emphasis will be placed on those interacting determinates of demand which make up the marketing environment – the economic, psychological, sociological, and political factors. The legal restraints that make up the forces beyond management control, but are needed in the marketing decision-making process, are introduced. Three contact hours.

**MAR 1101 Salesmanship (D) 3 cr.**

An introduction to the art of effective salesmanship. An analysis of types and problems of psychology of sales situations. Buying motives, customer approach, and sales techniques are studied. Three contact hours.

**MAR 1151 Retail Merchandising (O) 4 cr.**

The functions of the merchandising department, inventory control systems, stock turnover, the buying function, and sales promotions are covered. Also covered are appliances, furniture, household accessories, and other display techniques. Three contact hours.

**MAR 1301 Sales Promotion (O) 4 cr.**

Designed for all types of sales personnel, covers basic methods and techniques used in sales promotion program developments, research advertising, merchandising, display, direct mail advertising, development of effective sales talks, and demonstrations. Three contact hours.

**MAR 2131 Principles of Purchasing I (O) 3 cr.**

A comprehensive course in modern procurement practices and policies used by practicing purchasing agents. Column analysis of the fundamental purchasing principles with analytical descriptions of the latest developments and techniques. Three contact hours.

**MAR 2132 Principles of Purchasing II (O) 3 cr.**

A continuation of MAR 2131 with emphasis on quality assurance, price analysis, planning and forecasting, and buying capital equipment. Three contact hours.

**MAR 2220 Wholesaling (O) 3 cr.**

Survey of the wholesaling structure, past and present. Analysis of the planning, operation and management of the various types of wholesaling institutions in our economy. Three contact hours.

**MAR 2221 Principles of Wholesale Distribution (O) 3 cr.**

This course is a general survey of the wholesaling functions for the student contemplating a career in the wholesale distribution industry. The place of wholesale distribution in relation to producers, retailers, institutional and industrial customers, and individual consumers is examined. Special attention will be given to the role of the wholesale distributor in the channels of distribution; the place of land, sea, and air carriers; and career opportunities at the state and national level. Three contact hours.

**MAR 2240 Principles of International Trade: Export-Import (D) 3 cr.**

This course is designed to provide training for entrance into the export-import business. It will cover three major areas: (1) the role of transportation, (2) international markets, and (3) preparation of forms for customs duties, taxes, and related documents. Three contact hours.

**MAR 2401 Sales Management (O) 3 cr.**

Prerequisite: MAR 1011. Principles and concepts underlying the organization, operation, and control of a sales force. Topics such as the selection of personnel, recruiting, compensation plans supervision, evaluation, and stimulation of sales programs are covered. Three contact hours.

**MAT 1002 Basic Mathematics (P) 3 cr.**

A course in basic mathematics including operations with whole numbers, fractions, decimals and percentages. This course does not meet the General Education Mathematics Requirement. Three contact hours.

**MAT 1003 General Mathematics (P) 3 cr.**

This is a course in mathematical computation skills including fractions, decimals and percents, the metric system, formulas and practical mathematical applications. Students who enroll in the developmental program are required to do laboratory work in conjunction with the course. This course does not meet the General Education Mathematics Requirement. Three contact hours.

**MAT 1003L Developmental Arithmetic Lab (P) 1 cr.**

Corequisite: MAT 1003. To provide each student individualized, self-paced practice in specific areas of need as the student attempts to improve mathematics skills. Two contact hours.

**MAT 1024 Elementary Algebra (P) 3 cr.**

Prerequisite: Satisfactory score on placement test. The emphasis of this course is on fundamental concepts and structures with manipulation as a tool for reinforcement. The content includes topics on sets, basic operations with real numbers, basic operations with polynomials, solving linear equations, and factoring polynomials. This course does not meet the General Education Mathematics Requirement. Three contact hours.

- MAT 1033 Intermediate Algebra (P) 3 cr.**  
Prerequisite: MAT 1024, or a satisfactory score on placement test. This course is designed for students who need to take either MAC 1104 or MGF 1113. Topics include an introduction to the mathematics of sets, operations with polynomials, rational exponents and radicals, solutions of linear and quadratic equations and their applications, solutions, solutions of linear inequalities, introduction to relations and functions, and systems of equation and inequalities. Three contact hours.
- MCB 2013C Microbiology (P) 4 cr.**  
Prerequisites: CHM 1020, 1040C, or 1045C. High School chemistry. In addition, the student will benefit by taking APB 1150 or BSC 1011C prior to enrolling in MCB 2013C. A study of the protista, viruses, rickettsias, and schizomycetes of medical and economic importance. Laboratory exercises introduce bacteriologic techniques and aseptic procedures using nonpathogenic organisms. Six contact hours: three class hours; three laboratory hours.
- MET 1001 Meteorology (P) 3 cr.**  
A course designed to meet the general education requirements in the Natural Science area. Includes the phenomena of weather and climate and the use of atmospheric data to predict the weather. Three contact hours.
- MGF 1113 College Mathematics (P) 3 cr.**  
Prerequisite: MAT 1033 or a satisfactory score on placement test. This is a survey course which includes topics in mathematical logic, set symbolism and terminology, probability and statistics, computer literacy, geometry, and measurements. Three contact hours.
- MIS 1000 Introduction to the Army as a Profession (P) 1 cr.**  
This course introduces students to military science and the organizational approach to leadership. Military topics will include first aid, communication, and introductory map reading. The leadership portion will include the leader's responsibilities, the problem-solving process, basic traits of a leader and counseling techniques. The first aid portion will cover the four lifesaving steps, mouth-to-mouth resuscitation, treatment of an open and closed fracture, stopping arterial bleeding, and treatment for shock. Introductory map reading will include the use of a map, the grid system, and identification of major terrain features. One contact hour.
- MIS 1020 Organization of the Army and ROTC (P) 1 cr.**  
This introductory course outlines the organization and mission of the Army, Army Reserve, National Guard and Reserve Officer Training Corps. Special emphasis is placed on the different branches of the Army, the Officer Personnel Management System and the benefits of a commission in the active Army, Army Reserve or National Guard. Discussions include the role of the Army Officer, the non-commissioned officer, and the relationship between these two positions. The course also examines the customs and traditions of the service with emphasis on basic military courtesy. One contact hour.
- MIS 2601 Map Reading and Land Navigation (P) 1 cr.**  
Prerequisite: MIS 1000. This course is an in-depth study of map reading, which includes use of the grid system, identification of terrain features, elevation and relief, use of the grid-magnetic angle, measuring distance both on the ground and map sheet, use of a back azimuth, polar coordinates, intersection, resection and modified resection. Students also will receive practical work with the Lensatic compass, including techniques for both day and night use. One contact hour.
- MIS 2610 Military Training Management (P) 1 cr.**  
This course is designed to develop an understanding of the fundamental concepts involved with methods of instruction, training management, and curriculum development in the military. Basic concepts will be covered in the use of a lecture, conducting a conference and presenting a demonstration. Case studies from US military history and basic first aid will be used for student prepared classes. Students will become familiar with and be required to prepare a lesson plan for all presentations. One contact hour.
- MKA 1303 Retail Practicum (O) 4 cr.**  
Occupational experiences are provided with cooperating businesses. Twenty contact hours per week.
- MKA 1313 Retail Practicum (O) 4 cr.**  
A continuation of MKA 1303. Twenty contact hours per week.
- MKA 1402 Fashion Merchandising I (O) 3 cr.**  
An introduction to the clothing and textiles industry which includes the exploration of career opportunities, consumer behaviors, the historical development of fashion, the environmental influences on fashion demand, and the marketers of fashion. Three contact hours.
- MKA 1403 Fashion Merchandising II (O) 3 cr.**  
Prerequisite: MKA 1402. An in-depth study of retail operation which includes an analysis of store organization, buying functions and techniques, and sales promotion as related to the clothing and textiles industry. Three contact hours.
- MKA 2364 Fashion Merchandising Practicum/Seminar I (O) 4 cr.**  
Corequisite: MKA 1402. A minimum of 20 hours per week of practical work experience approved by the student's advisor. The students will acquire knowledge of the merchandise with which they are working and an understanding of on-the-job problem solving as related to selling. A seminar designed to assist the students with developing merchandising skills, selling techniques, and methods of problem solving as related to work experiences will meet one hour per week on campus. Twenty-one contact hours.
- MKA 2366 Fashion Merchandising Practicum/Seminar II (O) 4 cr.**  
Prerequisites: MKA 1402, MKA 2364. Co-requisite MKA 1403. A minimum of 20 hours per week of practical work experience approved by the student's advisor. Students will make practical application of knowledge in solving on-the-job problems as related to selling and analyze their store's organization and operation. A seminar designed to assist students in exploring store organization, operation, and planning, and additional problem solving related to work experiences will meet one hour per week on campus. Twenty-one contact hours.



**MKA 2367 Fashion Merchandising Practicum/Seminar III (O) 4 cr.**

Prerequisites: MKA 1402, MKA 1403; MKA 2364, 2366. A minimum of 20 hours per week of practical work experience approved by the student's advisor. The student will demonstrate the ability to handle advanced selling techniques and evaluate job responsibilities for retail supervision. A seminar designed to assist students in exploring supervisory problem solving techniques and analyzing managerial responsibilities related to work experiences will meet for one hour per week on campus. Twenty-one contact hours.

**MLS 1010C Hematology (D) 6 cr.**

Given instruction in the theories and techniques of hematology, the student will develop accuracy and precision in hematologic technique. The learner will identify and count the formed elements of the blood, assay blood for coagulation factors, state normal values for hematologic techniques, classify and categorize blood diseases, and recognize and recall the application of hematologic procedures to clinical diagnoses. Eight contact hours.

**MLS 1022C Introduction to Health Technology (D) 3 cr.**

The course is designed to enable the student to master basic mathematical concepts, medical laboratory ethics, and basic medical laboratory techniques. Given instruction in integrated health sciences and their application to medical science, the student will practice the manipulative skills of medical laboratory technology. Four contact hours.

**MLS 1400C Medical Microbiology (D) 6 cr.**

Given instruction in the theories, taxonomy and techniques of medical bacteriology, parasitology and mycology, the learner will perform step-by-step microbiological techniques precisely and accurately. The student will isolate and identify micro-organisms from clinical specimens, will classify the organisms associated with disease in man, perform sensitivity tests and correlate this information for its application to clinical diagnoses. Eight contact hours.

**MLS 2530 Serology and Blood Banking (D) 6 cr.**

Prerequisite: MLS 1010C. Presented basic principles, theories and related serologic methods, the student will perform techniques precisely and accurately, will state the principle and normal values of each and relate test results to clinical diagnoses. Presented the concepts of immunohematology, the student will practice the technical methods and procedures of blood banking and recognize their application to patient care and blood transfusion. Eight contact hours.

**MLS 2600C Principles of Clinical Instrumentation (D) 5 cr.**

Corequisite: MLS 2802L. Given instruction in the principles of analytic methodology and the principles of clinical instrumentation, the learner will apply this information to the procedures of medical laboratory technology in the clinical phase of the student's education. Five contact hours.

**MLS 2610C Clinical Chemistry (D) 6 cr.**

Presented the basic concepts and techniques of clinical chemistry, the student will develop the technical competencies required to analyze body fluids accurately and precisely. The learner will relate the results of chemical measurements to the assessment of the body's metabolic state. Eight contact hours.

**MLS 2802L Clinical Practicum I (D) 12 cr.**

Corequisite: MLS 2600C. Having been assigned to a clinical laboratory for directed experience, the learner will develop accuracy and precision in performing medical laboratory techniques. The Program Director coordinates the student's clinical experiences, including supervision, scheduling and evaluation. Thirty-five contact hours.

**MLS 2803 Clinical Diagnosis (D) 5 cr.**

Prerequisites: MLS 2600C and MLS 2802L. Corequisite: MLS 2804. Presented the clinical aspects of disease and the normal values of the constituents of body fluids, the learner will recognize abnormal values as these relate to disease and will judge the reliability of test results by applying quality control techniques. Five contact hours.

**MLS 2804 Clinical Practicum II (D) 12 cr.**

Prerequisites: MLS 2600C and MLS 2802L. Corequisite: MLS 2803. Continuing in a clinical laboratory for directed experience, the learner will develop accuracy and precision in performing medical laboratory techniques. The Program Director coordinates the student's clinical experiences, including supervision, scheduling and evaluation. Thirty-five contact hours.

**MMC 2100 Writing for Mass Communications (P) 3 cr.**

Prerequisite: ENC 1101. A communications course designed to provide fundamental instruction and practice in developing basic written and oral communications skills with emphasis on straight news reporting, interpretive news reporting, editorial writing, feature writing and developing copy for radio and television. Three contact hours.

**MTB 1321 Technical Math I (D) 3 cr.**

Prerequisite: Two years of high school algebra. Applied mathematics involving the principles and laws of basic algebra, solution of linear equations, and basic analytical geometry. In each presentation, the work is supplemented with solutions to problems of technical nature. Three contact hours.

**MTB 1322 Technical Math II (D) 3 cr.**

Prerequisite: MAC 1104 or the equivalent. A course designed to cover the laws and principles of trigonometry, vector analysis, complex numbers and geometric consideration of trig functions. Practical work in solution of engineering problems is emphasized. Three contact hours.

**MTB 2323 Technical Math III (D) 3 cr.**

Prerequisite: MTB 1322 or MAC 1114. A course designed to give the student an introduction into elementary differential and integral calculus with emphasis on their application to engineering problems. Analytical geometry will be introduced where needed to clarify the calculus. Three contact hours.

**MTE 2141 Navigational Aids and Interior Communications Circuits (O) 4 cr.**

A course of study covering the various alarm circuits, signal circuit communication circuits, the gyrocompass and associated equipment. This course is intended to provide a general knowledge and understanding of these systems and equipment as applied to shipboard applications. This course should generate an awareness of the challenge and the need for trained technicians to install, maintain, operate and repair these systems and equipment. Eight contact hours.

**MTE 2211 The Theory and Technology of Marine Field Sampling (D) 3 cr.**

Prerequisite: OCE 2005 or OCB 2602C or ZOO 2450. A practical introductory course dealing with biological, physical and chemical field sampling techniques of estuarine and marine environments. This course includes basic biostatistical methods such as (1) measures of central tendency and variability, (2) probability and chi-square, (3) correlation and linear regression, (4) single classification analysis of variance and (5) experimental design and interpretation of results. Also each student must take an active part regarding the proper operation and field maintenance of hydrometers, optical refractometers, salinometers, dissolved oxygen analyzers, ph meters and bathythermographs. Six contact hours.

**MTE 2233 Marine Instrumentation (D) 3 cr.**

The student will benefit by taking OCE 2005, high school physical science and mathematics prior to enrolling in OMT 2223. In this course students will be instructed in the basic skills for the proper operation of hydrometers, refractometers, salinometers, barometers, sling psychrometers, dissolved oxygen analyzers, ph meters, spectrophotometers, autoclaves, centrifuges, photomicrographic equipment, marine filtering systems, anemometers, benthic collecting apparatus, drying ovens, Mettler balances, multi-parameter recording devices, strip-chart recorders and various types of probes. Six contact hours.

**MTE 2400 Shipboard Electrical Systems I (O) 3 cr.**

This course is a study of electrical equipment and systems representative of that found in the marine field. The course is intended to provide a general knowledge and understanding of electrical equipment and systems studied previously as applied to shipboard applications. This course should generate an awareness of the challenge and the need for trained technicians to install, maintain and repair marine electrical equipment and systems such as marine cables and accessories, shipboard lighting, batteries, protective devices, motors, generators, and auxiliaries. Six contact hours.

**MTE 2402 Shipboard Electrical Systems II (O) 3 cr.**

This course is a study of electrical equipment and systems representative of that found in the marine field. This course is intended to provide a general knowledge and understanding of electrical equipment and systems studied previously as applied to shipboard applications to generate an awareness of the challenge and need for trained technicians to install, maintain and repair marine electrical equipment and systems such as voltage and frequency regulating equipment, electrical power distribution systems, saturable reactors, electric propulsion systems, ships control, order and indicating systems and ships metering and indicating systems. Six contact hours.

**MTR 1001 Blueprint Reading for Welders (O) 3 cr.**

Corequisite: MTR 1120. A course designed to provide the student with a basic understanding of the function of blueprints as they relate to welding and fitting structural assemblies; includes topics on welding symbols, orthographic projection, shop mathematics, measurement, scale, tolerance, set-up tools, and their application. Three contact hours.

**MTR 1002 Production Blueprint Reading (O) 3 cr.**

This course is designed to teach blueprint reading in a competency based program of 37 prints. These prints include assembly drawings of precise machine parts which require a number of machining operations. They provide practice in blueprint reading and illustrate the various elements of blueprints. Special emphasis is given to shop safety. Three contact hours.

**MTR 1004 Machine Bench Work (O) 4 cr.**

This course is designed to teach the manipulation of materials, tools, drawing, and equipment. Special emphasis is given to shop safety procedures on the methods to use materials, tools, and equipment. Eight contact hours.

**MTR 1100 Welding For Related Trades (O) 4 cr.**

A course for students not enrolled in a welding program. This course is designed to provide the student with a basic introduction to those welding skills used in related trades. It is designed to provide the student with a practical understanding of welding safety, arc welding fundamentals, oxyacetylene welding fundamentals, oxyacetylene cutting skills, brazing, and silver soldering. In-class practice is stressed to develop the skills necessary to produce quality welds in the flat position on mild carbon steel. Eight contact hours.

**MTR 1120 Basic Shielded Metal-Arc Welding (O) 4 cr.**

Corequisite: MTR 1001. A course designed to provide the student with a practical understanding of arc welding fundamentals, welding safety, arc welding power sources, arc welding electrode classifications and selection. Special emphasis, through instructor demonstrations as well as student in-class practice, is placed on developing the manual arc welding and oxyacetylene cutting skills necessary to produce high quality welds in all welding positions on mild carbon steel from 16 gauge to 1/4" plate. Eight contact hours.

**MTR 1121 Advanced Shielded Metal-Arc Welding (O) 4 cr.**

Prerequisite: MTR 1120 or demonstrate ability to satisfactorily complete the terminal objectives of MTR 1120. A course designed to provide the student with a thorough technical understanding of arc welding fundamentals, safety procedure and operation qualification, destructive and non-destructive testing, as well as metals identification. Welding related information is included on air-arc cutting and gauging as well as procedures for welding cast iron and surfacing of steel. Special emphasis through instructor demonstrations as well as student in-class practice, is placed on developing the manual skill necessary to make high quality shielded metal arc welds in all positions on low carbon steel, 3/8" plate, multiple pass, butt welds and 1" plate lap joints. Joint designs and welding techniques used are those that will provide a foundation for pipe shielded arc welding training. Eight contact hours.

**MTR 1122 Basic Gas Metal-Arc Welding (O) 4 cr.**

Prerequisite: MTR 1120 or demonstrated ability to satisfactorily complete the terminal objectives of MTR 1120. A course designed to provide the student with a practical understanding of welding safety, gas metal arc welding fundamentals, gas metal arc equipment adjustments, metal transfer and shielding gases. Special emphasis, through instructor demonstrations as well as student in-class practice, is placed on developing the manual skills necessary to produce high quality gas metal-arc welds in all positions on mild steel from 3/16" plate to 3/8" plate single pass and multiple pass, using short circuit transfer. Eight contact hours.

**MTR 1171 Introduction to Non-Destructive Testing for Welders (O) 3 cr.**

This is a course designed to provide the Welding Technology students with a basic understanding of the principles and applications of the visual, magnetic particle, liquid penetrant and radiographic methods used in the non-destructive testing of welds. Special emphasis will be given to safety precautions and hands-on use of non-destructive testing equipment. Three contact hours.



**MTR 1301 Introduction to Sheet Metal Practices (O) 3 cr.**

A course designed to teach the shop rules and safety procedures to be followed in an industrial sheet metal shop. Identification, maintenance, and basic use of sheet metal hand tools and equipment will also be emphasized. Three contact hours.

**MTR 1311 Basic Pattern Development and Fabrication (O) 4 cr.**

Prerequisite: MTR 1301. A course designed to teach the correct procedure for pattern development and transference of patterns to metals for fabrication. Included in this course is proper development of common seams. Eight contact hours.

**MTR 1313 Intermediate Pattern Development and Fabrication I (O) 4 cr.**

Prerequisite: MTR 1311. This course is designed to teach parallel line development used in the layout of round pipe. Eight contact hours.

**MTR 1314 Intermediate Pattern Development and Fabrication II (O) 4 cr.**

Prerequisite: MTR 1313. This course is an introduction to the triangulation method of pattern development. It teaches the terminology and theory of triangulation and how dimensions of offsets are determined. Eight contact hours.

**MTR 1472 Machine Lathe Work (O) 4 cr.**

This machinist course is designed to teach theory-machining concepts and calculating setups and operational processing in the lathe trade (English and Metric). The lathe concepts cover safety, center drilling and their uses, alignment of lathe centers, mounting work between centers, facing, turning an accurate diameter, turning a shoulder, filing and polishing, burling, taper turning, thread cutting (internal and external), resetting a threading tool, mounting and removing a chuck, the three jaw chuck, drilling and reaming, cutting off and grooving, setting work in a four jaw chuck, and grinding work in a lathe. Special emphasis is given to shop safety procedures. Eight contact hours.

**MTR 1474 Surface Grinder-Methods and Procedures (Theory and Laboratory) (O) 4 cr.**

This course is designed to teach the proper methods and procedures of surface grinding. Special emphasis is given to shop safety procedures for mounting and removing grinding wheels, truing and dressing a grinding wheel, grinding of a flat surface, grinding the edges of a workpiece square and parallel, and grinding an angular surface. Eight contact hours.

**MTR 1511 Engine Head Repair (O) 4 cr.**

Prerequisites: MTR 1501 and MTR 1571. This course provides comprehensive theory and practice in repairing automotive engine heads. Special emphasis is placed upon the use of the head wet grinder and the automotive head machining center. Eight contact hours.

**MTR 2123 Advanced Gas Metal Arc Welding (O) 4 cr.**

Prerequisite: MTR 1122. A course designed to provide the student with a practical understanding of the safety, welding fundamentals, and procedures for the all-position gas metal arc welding of aluminum as well as all-position gas metal arc welding of steel using gas shielded and self shielded flux core welding wire. Special emphasis, through instructor demonstrations in addition to student in-class practice is placed in developing the manual skills necessary to produce high quality gas metal arc fillet and groove welds using saled aluminum and flux core steel welding wire. Eight contact hours.

**MTR 2126 Gas Tungsten Arc Welding Tubing and Pipe (T.I.G.) (O) 4 cr.**

Prerequisite: MTR 1120 or demonstrated ability to satisfactorily complete the terminal objective of the MTR 1120. A course designed to provide the student with a practical understanding of gas tungsten-arc welding fundamentals, welding safety, arc characteristics, and equipment adjustment. Related information is presented on the weld properties and qualities of mild carbon steel, stainless steel, and aluminum as well as information on pulsed current in preparation for more detailed applications used in gas tungsten-arc welding of pipe. Special emphasis, through professor's demonstration as well as student in-class practice, is placed on developing the manual skills necessary to make high quality welds in all positions on 16 and 11 gauge mild steel, 16 gauge stainless steel and 11 gauge aluminum. Eight contact hours.

**MTR 2142 Shielded Metal Arc Welding of Pipe (O) 4 cr.**

Prerequisites: MTR 1120 and MTR 1121. A course designed to provide the student with practical understanding of the techniques and procedures for shielded metal arc welding of pipe in accordance with the American Society of Mechanical Engineers (A.S.M.E.) and American Petroleum Institute (A.P.I.) codes. Special emphasis through instructor demonstrations as well as student in-class practice is placed in developing the skills necessary to pass the 180° guided bend qualification tests for the fixed horizontal (5G), fixed vertical (2G) and fixed 45° (6G) pipe positions. Eight contact hours.

**MTR 2146 Gas Metal Arc Pipe Welding (M.I.G.) (O) 4 cr.**

Prerequisite: MTR 1122 or demonstrated ability to satisfactorily complete the terminal objective of MTR 1122. A course designed to provide the student with a practical understanding of gas metal-arc welding of pipe. Special emphasis is placed on developing the welding skills necessary to satisfactorily pass the American Society of Mechanical Engineers (A.S.M.E.) or American Petroleum Institute pressure vessel (pipe), M.I.G. process test in the fixed 45° angle (6g) position. Eight contact hours.

**MTR 2147 Basic Gas Tungsten Arc Welding (T.I.G.) Pipe and Tubing (O) 4 cr.**

Prerequisite: MTR 2126 or demonstrated ability to satisfactorily complete the terminal objectives of MTR 2126. A course designed to provide the student with a practical understanding of T.I.G. welding of pipe and tubing. Special emphasis through professor's demonstrations as well as student in-class practice is placed in developing the welding skills necessary to satisfactorily pass the American Society of Mechanical Engineers (A.S.M.E.) pressure vessel (pipe), T.I.G. process test in the fixed 45° (6g) position. Eight contact hours.

**MTR 2316 Advanced Pattern Development and Fabrication I (O) 4 cr.**

Prerequisite: MTR 1314. This course is designed to teach advanced triangulation method of pattern development. The less common fittings and more technical or specialized patterns are emphasized. Eight contact hours.

**MTR 2317 Advanced Pattern Development and Fabrication II (O) 4 cr.**

Prerequisite: MTR 2316. This course is designed as an introduction to radial line development and the most common fittings which are laid out by the radial line process. Eight contact hours.

**MTR 2345 Practicum in Sheet Metal (O) 3 cr.**

Prerequisite: MTR 2317. This course is designed to provide the experience of working on actual job related projects. Six contact hours.

**MTR 2481 Vertical Milling Methods and Procedures (O) 4 cr.**

This course is designed to teach the proper methods and procedures of machining in a vertical milling machine. Special emphasis is given to shop safety methods and procedures of cutters and end mills that can be used in a vertical milling machine for performing various operations. Covered are the mounting of various cutters, alignment of head and vise in order to mill a flat surface, square and parallel surface, and machine an angular surface. Eight contact hours.

**MTR 2482 Horizontal Milling Methods and Procedures (Theory) (O) 4 cr.**

This course is designed to teach the methods and procedures of correctly setting up to perform various horizontal milling operations. Covered are the proper methods and procedures in changing cutters and arbors, alignment of the vise in order to mill a flat surface, vertical surface and an angular surface, as well as using safety precautions in setting up and operating. Eight contact hours.

**MTR 2483 Machine Shaper (O) 4 cr.**

This course is designed to teach the theory machining concepts and calculating setups, and operational processing in the shaper trade. (English-Metric). The shaper concepts cover safety, setting work in the vise, setting of the length and position of the shaper stroke, machining of a flat surface, machining work square and parallel, the alignment of work in a vise, the alignment of the toolhead, shaping a vertical surface, and machining an angular surface. Special emphasis is given to shop safety precautions. Eight contact hours.

**MTR 2484 Machine Measurement (O) 3 cr.**

Prerequisite: MAT 1024. This course is designed to teach principles and manipulate the English metric system of measurement. Special emphasis is given to shop safety procedures, methods and use of the scale, inside and outside micrometers (English and Metric), inside and outside calipers, telescope gauges, combination set, and thread micrometers. Six contact hours.

**MTR 2561 Basic Vehicle Machinist (O) 4 cr.**

This course is designed to teach the principles and procedures of vehicle machine shop. Topics include: Visual identification of worn or failed parts or assemblies, function and use of measuring tools, technical and manufacturer's specification publications, and types of ferrous and non-ferrous metals used in gasoline/diesel engines, brake drums/discs, and flywheels and clutches. Emphasis will be placed on crack identification, descaling, glass bead cleaning, methods of lubrication and cooling, measuring blocks, frames, liners, pistons crank and cam shafts. Special emphasis will be placed on safety and quality control. Eight contact hours. (2 class, 6 lab).

**MTR 2562 Advanced Vehicle Machinist (O) 4 cr.**

Prerequisite: MTR 2561. This course is designed to teach the procedures of vehicle machine shop operation. Topics included are: connecting rod alignment, line boring, crankshaft grinding, cylinder head servicing, total engine clutch, and flywheel remanufacture. Emphasis will be placed on valve seat and guide replacement and/or refinishing, cylinder head resurfacing, drilling and rethreading, fitting bearings, shafts, gears and gaskets. Special emphasis will be placed on equipment use and safety and methods of quality control. Eight contact hours.

**Music Courses****MUC 1301 Introduction to Electronic Music (P) 2 cr.**

Prerequisite: Approval of professor. A beginning course in the history and practice of electronic music including laboratory work with tape recorders and synthesizers. Three contact hours.

**MUE 1440 String Techniques (P) 1 cr.**

Teaches basic performance skills on violin, viola, violin-cello, or double bass. Open to music majors. Two laboratory hours.

**MUE 1450 Woodwind Techniques (P) 1 cr.**

Teaches basic performance skills on clarinet or flute. Open to music majors. Two laboratory hours.

**MUE 1460 Brass Techniques (P) 1 cr.**

Teaches basic performance skills on trumpet or trombone. Open to music majors. Two laboratory hours.

**MUE 1470 Percussion Techniques (P) 1 cr.**

Teaches basic performance skills on percussion instruments with emphasis on rudimental snare drumming. Open to music majors. Two laboratory hours.

**MUG 1201 Basic Conducting (Choral) (P) 2 cr.**

Prerequisite: MUT 1121 and/or consent of professor. Provides the student with an introduction to basic techniques used in directing choral rehearsals and performances. Three contact hours.

**MUH 2211 Survey of Music History (P) 3 cr.**

A study of the development of music from the early Medieval period to the present day with an emphasis upon the stylistic trends of each period. This course is recommended for music majors only. Three contact hours.

**MUL 1011 Music Appreciation (P) 3 cr.**

A course designed for students with little or no musical training. Combines a limited amount of training in music terminology with extensive listening. Three contact hours.

**MUM 1600 Basic Recording Techniques (P) 3 cr.**

This course is open to all students. It offers the beginner basic information in the art of recording vocal and instrumental sound with emphasis on understanding the functions of recording equipment, placement of microphones, making initial recordings of various groups or soloists, and the ability to mix down the initial recordings. Three contact hours.

**MUN 1130 Symphonic Band (P) 1 cr.**

Open to all students of the College with the permission of the professor. All students who have had previous band experience are urged to participate. Traditional and contemporary band literature are included in the repertoire. Required of all woodwind, brass, and percussion majors. May be elected for credit each semester, with up to four credits counting toward AA degree. Six rehearsal periods, five contact hours.



**MUN 1280 Community Orchestra (P) 1 cr.**

The Community Orchestra provides instrumentalists in the College and community an opportunity to perform works representative of a broad spectrum of orchestral literature, to refine techniques of ensemble playing, and present concerts each term. Membership by permission of the director and/or audition; participation by string majors is required. May be elected for credit each semester, with up to four credits counting toward AA degree. May also be taken as a non-college credit Adult Education course. Two-hour rehearsal period.

**MUNA 1310 College Chorus (P) 1 cr.**

Choral organization open to all college students. Many styles of choral music are included in the repertoires. Can be selected for credit each semester, with up to four credits counting toward AA degree. Three rehearsal periods.

**MUNB 1310 College Chorale (P) 1 cr.**

Prerequisite: permission of director. Before entering course: Previous choral experience and/or audition with professor. The repertoire of the College Chorale includes the more difficult sacred and secular compositions, accompanied and unaccompanied. May be elected for credit each semester, with up to four credits counting toward AA degree. Five rehearsal periods. Five contact hours.

**MUN 1380 Community Chorus, Jacksonville Concert Chorale (P) 1 cr.**

Evening chorale organization open by audition to members of the community. Repertoire includes secular and sacred major works for chorus and orchestra, as well as shorter compositions. May be elected each semester for credit, with up to four credits counting toward AA degree, or non-college credit under Adult Education. Two-hour rehearsal period.

**MUN 1410 String Ensemble (P) 1 cr.**

Prerequisite: permission of the professor. All students who have experience as players of bowed string instruments are urged to audition. The standard literature for string ensembles will be performed both independently and in conjunction with other music performing organizations. Can be elected for credit each semester, with up to four credits counting toward AA degree. Three contact hours.

**MUN 1450 Piano Ensemble and Accompanying (P) 1 cr.**

This course is open to all piano majors and principals. It provides the student with an introduction to multiple piano skills, chamber music skills, and the art of piano accompanying - choral and instrumental. May be repeated for credit. Approval of the professor is required for piano minors and non-music majors. Three rehearsal periods.

**MUN 1710 Jazz-Rock Ensemble (P) 1 cr.**

Prerequisite: permission of the director. The repertoire includes various styles from jazz and popular literature. May be selected for credit each semester, with up to four credits counting toward AA degree. Three rehearsal periods. Three contact hours.

**MUO 1001 Music Theatre Workshop (P) 1 cr.**

Open by audition to persons interested in theatre and music in the areas of performance and technical operation. May be elected for credit each semester, with up to four credits counting toward AA degree. One major production each term. Three rehearsal hours. Three contact hours.

**MUS 1000 Student Recital (P) 1 cr.**

Required for all music majors. In conjunction with the one class meeting each week, the student is also required to attend an announced number of FJC related concerts. Each music major enrolled for two hours of applied music is required to perform in student recital at least once during the academic year. Meeting hour may be changed to coincide with special performance time. One contact hour.

**MUT 1001 Introduction to Music Theory (P) 3 cr.**

A course designed for students whose background and Theory Placement Test scores indicate further preparation is needed for MUT 1121. Includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing, dictation, and keyboard skills. Three contact hours.

**MUT 1121 Music Theory I (P) 4 cr.**

An elementary course in music theory and the principles underlying all music. A basic course including music terminology, notation, harmony, melody, and rhythm. Sight singing and ear training are included. Five contact hours: three class hours; two laboratory hours.

**MUT 1122 Music Theory II (P) 4 cr.**

Prerequisite: MUT 1121. A continuation of MUT 1121. A basic course including music terminology, notation, harmony, melody, rhythm, and form. Sight singing and ear training are included. Five contact hours: three class hours; two laboratory hours.

**MUT 2126 Music Theory III (P) 4 cr.**

Prerequisite: MUT 1122. Techniques of analysis and part writing in vocal, keyboard and instrumental styles. Advanced tertian harmony, modulation, sequence, and phrase, and part forms. Sight singing and ear training included. Five contact hours: three class hours; two laboratory hours.

**MUT 2127 Music Theory IV (P) 4 cr.**

Prerequisite: MUT 2126. Altered and chromatic chords, extension of tonality, 20th century harmonic, melodic, and rhythmic styles. Advanced sight singing and ear training included. Five contact hours: three class hours; two laboratory hours.

**MUT 2231 Keyboard Harmony (P) 1 cr.**

Prerequisite: MUT 2127. Development of skills at the piano. Emphasis upon harmonization of melodies, modulation, transposition, and improvisation. Required of all music majors. Two laboratory hours.

**MUT 2232 Keyboard Harmony (P) 1 cr.**

Prerequisite: MUT 2231. A continuation of MUT 2231. Two laboratory hours.

**MVKA 1111 Class Piano I (P) 1 cr.**

For beginning piano students meeting in groups. Emphasis placed on music reading and elementary techniques. Required of all music majors unless exempted. Two contact hours (laboratory).

**MVKB 1111 Class Piano II (P) 1 cr.**

Prerequisite: MVKA 1111. A continuation of MVKA 1111. Required of all music majors. Two contact hours.

**MVKA 2121 Class Piano III (P) 1 cr.**

Prerequisite: MVKB 1111. A continuation of MVKB 1111. Two contact hours (laboratory).

- MVKB 2121 Class Piano IV (P)** 1 cr.  
Prerequisite: MVKA 2121. A continuation of MVKA 2121. Two contact hours (laboratory).
- MVKA 2621 Basic Piano Pedagogy I (P)** 2 cr.  
A class designed to prepare students for private and class piano teaching at the levels of beginner, intermediate and advanced. Three contact hours.
- MVKB 2621 Basic Piano Pedagogy II (P)** 2 cr.  
A class in which students will teach piano under supervision. Students will teach piano pupils who are in the beginning, intermediate and early advanced level. Three contact hours.
- MVSA 1116 Class Guitar I (P)** 1 cr.  
A basic course designed for students who are interested in studying Classic Guitar. Includes a study of the development of the instrument, past and present guitar masters, and the music literature for the guitar and technique. Two contact hours (laboratory).
- MVSB 1116 Class Guitar II (P)** 1 cr.  
Prerequisite: MVSA 1116. A continuation of MVSA 1116, Class Guitar I, perfecting and advancing skills learned therein. Two contact hours (laboratory).
- MVSA 2126 Class Guitar III (P)** 1 cr.  
Prerequisite: MVSB 1116. A continuation of MVSB 1116, perfecting and advancing skills learned therein. Two contact hours (laboratory).
- MVSB 2126 Class Guitar IV (P)** 1 cr.  
Prerequisite: MVSA 2126. A continuation of MVSA 2126, perfecting and advancing skills learned therein. Two contact hours (laboratory).
- MVVA 1111 Class Voice I (P)** 1 cr.  
For singers wishing to further their vocal skills and instrumentalists wishing a fundamental vocal knowledge. Emphasis on correct diction and tone production. Individual aid given. Two contact hours (laboratory).
- MVVB 1111 Class Voice II (P)** 1 cr.  
Prerequisite: MVVA 1111. A continuation of MVVA 1111. Two contact hours (laboratory).
- MVVA 2121 Class Voice III (P)** 1 cr.  
Prerequisite: MVVB 1111. For singers wishing to develop vocal skills beyond elementary level of correct diction and tone production. Open also to instrumentalists wishing more than a basic vocal knowledge and competency level. Meets as a class, although individual attention is emphasized. Two contact hours.
- MVVB 2121 Class Voice IV (P)** 1 cr.  
Prerequisite: MVVA 2121. A continuation of MVVA 2121. Two contact hours.
- MVBB 1014 Applied Preparatory Baritone II (P)** 2 cr.  
Prerequisite: MVBA 1014. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.
- MVBA 1314 Applied Principal Baritone I (P)** 2 cr.  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.
- MVBB 1314 Applied Principal Baritone II (P)** 2 cr.  
Prerequisite: MVBA 1314. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.
- MVBA 2324 Applied Principal Baritone III (P)** 2 cr.  
Prerequisite: MVBB 1314. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.
- MVBB 2324 Applied Principal Baritone IV (P)** 2 cr.  
Prerequisite: MVBA 2324. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.
- MVBA 1214 Applied Secondary Baritone I (P)** 1 cr.  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.
- MVBB 1214 Applied Secondary Baritone II (P)** 1 cr.  
Prerequisite: MVBA 1214. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.
- MVBA 2224 Applied Secondary Baritone III (P)** 1 cr.  
Prerequisite: MVBB 1214. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.
- MVBB 2224 Applied Secondary Baritone IV (P)** 1 cr.  
Prerequisite: MVBA 2224. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.
- MVBA 1414 Applied Major Baritone I (P)** 3 cr.  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Applied Music Courses

### Baritone

- MVBA 1014 Applied Preparatory Baritone I (P)** 2 cr.  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.
- MVBB 1414 Applied Major Baritone II (P)** 3 cr.  
Prerequisite: MVBA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.
- MVBA 2424 Applied Major Baritone III (P)** 3 cr.  
Prerequisite: MVBB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.



**MVBB 2424 Applied Major Baritone IV (P) 3 cr.**  
Prerequisite: MVBA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Bassoon

**MVWA 1014 Applied Preparatory Bassoon I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1014 Applied Preparatory Bassoon II (P) 2 cr.**  
Prerequisite: MVWA 1014. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVWA 1314 Applied Principal Bassoon I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 1314 Applied Principal Bassoon II (P) 2 cr.**  
Prerequisite: MVWA 1314. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 2324 Applied Principal Bassoon III (P) 2 cr.**  
Prerequisite: MVWB 1314. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 2324 Applied Principal Bassoon IV (P) 2 cr.**  
Prerequisite: MVWA 2324. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1214 Applied Secondary Bassoon I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 1214 Applied Secondary Bassoon II (P) 1 cr.**  
Prerequisite: MVWA 1214. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2224 Applied Secondary Bassoon III (P) 1 cr.**  
Prerequisite: MVWB 1214. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 2224 Applied Secondary Bassoon IV (P) 1 cr.**  
Prerequisite: MVWA 2224. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1414 Applied Major Bassoon I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1414 Applied Major Bassoon II (P) 3 cr.**  
Prerequisite: MVWA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWA 2424 Applied Major Bassoon III (P) 3 cr.**  
Prerequisite: MVWB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 2424 Applied Major Bassoon IV (P) 3 cr.**  
Prerequisite: MVWA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Cello

**MVSA 1013 Applied Preparatory Cello I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1013 Applied Preparatory Cello II (P) 2 cr.**  
Prerequisite: MVSA 1013. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVSA 1313 Applied Principal Cello I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 1313 Applied Principal Cello II (P) 2 cr.**  
Prerequisite: MVSA 1313. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 2323 Applied Principal Cello III (P) 2 cr.**  
Prerequisite: MVSB 1313. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 2323 Applied Principal Cello IV (P)A 2 cr.**  
Prerequisite: MVSA 2323. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1213 Applied Secondary Cello I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 1213 Applied Secondary Cello II (P) 1 cr.**  
Prerequisite: MVSA 1213. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSA 2223 Applied Secondary Cello III (P) 1 cr.**  
Prerequisite: MVSB 1213. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 2223 Applied Secondary Cello IV (P) 1 cr.**  
Prerequisite: MVSA 2223. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1413 Applied Major Cello I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 1413 Applied Major Cello II (P) 3 cr.**  
Prerequisite: MVSA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSA 2423 Applied Major Cello III (P) 3 cr.**  
Prerequisite: MVSB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 2423 Applied Major Cello IV (P) 3 cr.**  
Prerequisite: MVSA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Clarinet

**MVWA 1013 Applied Preparatory Clarinet I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1013 Applied Preparatory Clarinet II (P) 2 cr.**  
Prerequisite: MVWA 1013. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVWA 1313 Applied Principal Clarinet I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 1313 Applied Principal Clarinet II (P) 2 cr.**  
Prerequisite: MVWA 1313. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 2323 Applied Principal Clarinet III (P) 2 cr.**  
Prerequisite: MVWB 1313. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 2323 Applied Principal Clarinet IV (P) 2 cr.**  
Prerequisite: MVWA 2323. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1213 Applied Secondary Clarinet I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 1213 Applied Secondary Clarinet II (P) 1 cr.**  
Prerequisite: MVWA 1213. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2223 Applied Secondary Clarinet III (P) 1 cr.**  
Prerequisite: MVWB 1213. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 2223 Applied Secondary Clarinet IV (P) 1 cr.**  
Prerequisite: MVWA 2223. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1413 Applied Major Clarinet I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1413 Applied Major Clarinet II (P) 3 cr.**  
Prerequisite: MVWA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWA 2423 Applied Major Clarinet III (P) 3 cr.**  
Prerequisite: MVWB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 2423 Applied Major Clarinet IV (P) 3 cr.**  
Prerequisite: MVWA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Flute

**MVWA 1011 Applied Preparatory Flute I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1011 Applied Preparatory Flute II (P) 2 cr.**  
Prerequisite: MVWA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVWA 1311 Applied Principal Flute I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 1311 Applied Principal Flute II (P) 2 cr.**  
Prerequisite: MVWA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 2321 Applied Principal Flute III (P) 2 cr.**  
Prerequisite: MVWB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.



**MVWB 2321 Applied Principal Flute IV (P) 2 cr.**  
Prerequisite: MVWA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1211 Applied Secondary Flute I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 1211 Applied Secondary Flute II (P) 1 cr.**  
Prerequisite: MVWA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2221 Applied Secondary Flute III (P) 1 cr.**  
Prerequisite: MVWB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 2221 Applied Secondary Flute IV (P) 1 cr.**  
Prerequisite: MVWA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1411 Applied Major Flute I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1411 Applied Major Flute II (P) 3 cr.**  
Prerequisite: MVWA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWA 2421 Applied Major Flute III (P) 3 cr.**  
Prerequisite: MVWB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 2421 Applied Major Flute IV (P) 3 cr.**  
Prerequisite: MVWA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## French Horn

**MVBA 1012 Applied Preparatory French Horn I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1012 Applied Preparatory French Horn II (P) 2 cr.**  
Prerequisite: MVBA 1012. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVBA 1312 Applied Principal French Horn I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 1312 Applied Principal French Horn II (P) 2 cr.**  
Prerequisite: MVBA 1312. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 2322 Applied Principal French Horn III (P) 2 cr.**  
Prerequisite: MVBB 1312. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVBB 2322 Applied Principal French Horn IV (P) 2 cr.**  
Prerequisite: MVBA 2322. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1212 Applied Secondary French Horn I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1212 Applied Secondary French Horn II (P) 1 cr.**  
Prerequisite: MVBA 1212. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBA 2222 Applied Secondary French Horn III (P) 1 cr.**  
Prerequisite: MVBB 1212. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 2222 Applied Secondary French Horn IV (P) 1 cr.**  
Prerequisite: MVBA 2222. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1412 Applied Major French Horn I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 1412 Applied Major French Horn II (P) 3 cr.**  
Prerequisite: MVBA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 2422 Applied Major French Horn III (P) 3 cr.**  
Prerequisite: MVBB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBA 2422 Applied Major French Horn IV (P) 3 cr.**  
Prerequisite: MVBA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**Guitar**

**MVSA 1016 Applied Preparatory Guitar I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1016 Applied Preparatory Guitar II (P) 2 cr.**  
Prerequisite: MVSA 1016. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVSA 1316 Applied Principal Guitar I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 1316 Applied Principal Guitar II (P) 2 cr.**  
Prerequisite: MVSA 1316. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 2326 Applied Principal Guitar III (P) 2 cr.**  
Prerequisite: MVSB 1316. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVSB 2326 Applied Principal Guitar IV (P) 2 cr.**  
Prerequisite: MVSA 2326. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1216 Applied Secondary Guitar I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 1216 Applied Secondary Guitar II (P) 1 cr.**  
Prerequisite: MVSA 1216. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSA 2226 Applied Secondary Guitar III (P) 1 cr.**  
Prerequisite: MVSB 1216. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 2226 Applied Secondary Guitar IV (P) 1 cr.**  
Prerequisite: MVSA 2226. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1416 Applied Major Guitar I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 1416 Applied Major Guitar II (P) 3 cr.**  
Prerequisite: MVSA 1416. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSA 2426 Applied Major Guitar III 3 cr.**  
Prerequisite: MVSB 1416. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 2426 Applied Major Guitar IV (P) 3 cr.**  
Prerequisite: MVSA 2426. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**Oboe**

**MVWA 1012 Applied Preparatory Oboe I (P) 2 cr.**  
Prerequisite: Placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1012 Applied Preparatory Oboe II (P) 2 cr.**  
Prerequisite: MVWA 1012. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVWA 1312 Applied Principal Oboe I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 1312 Applied Principal Oboe II (P) 2 cr.**  
Prerequisite: MVWA 1312. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 2322 Applied Principal Oboe III (P) 2 cr.**  
Prerequisite: MVWB 1312. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 2322 Applied Principal Oboe IV (P) 2 cr.**  
Prerequisite: MVWA 2322. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1212 Applied Secondary Oboe I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 1212 Applied Secondary Oboe II (P) 1 cr.**  
Prerequisite: MVWA 1212. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2222 Applied Secondary Oboe III (P) 1 cr.**  
Prerequisite: MVWB 1212. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.



**MVSA 2222 Applied Secondary Oboe IV (P) 1 cr.**  
Prerequisite: MVWA 2222. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 1412 Applied Major Oboe I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1412 Applied Major Oboe II (P) 3 cr.**  
Prerequisite: MVWA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWA 2422 Applied Major Oboe III (P) 3 cr.**  
Prerequisite: MVWB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 2422 Applied Major Oboe IV (P) 3 cr.**  
Prerequisite: MVWA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Organ

**MVKA 1013 Applied Preparatory Organ I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVKB 1013 Applied Preparatory Organ II (P) 2 cr.**  
Prerequisite: MVKA 1013. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVKA 1313 Applied Principal Organ I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKB 1313 Applied Principal Organ II (P) 2 cr.**  
Prerequisite: MVKA 1313. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVKA 2323 Applied Principal Organ III (P) 2 cr.**  
Prerequisite: MVKB 1313. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVKB 2323 Applied Principal Organ IV (P) 2 cr.**  
Prerequisite: MVKA 2323. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKA 1213 Applied Secondary Organ I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKB 1213 Applied Secondary Organ II (P) 1 cr.**  
Prerequisite: MVKA 1213. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKA 2223 Applied Secondary Organ III (P) 1 cr.**  
Prerequisite: MVKB 1213. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKB 2223 Applied Secondary Organ IV (P) 1 cr.**  
Prerequisite: MVKA 2223. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKA 1413 Applied Major Organ I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKB 1413 Applied Major Organ II (P) 3 cr.**  
Prerequisite: MVKA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKA 2423 Applied Major Organ III (P) 3 cr.**  
Prerequisite: MVKB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKB 2423 Applied Major Organ IV (P) 3 cr.**  
Prerequisite: MVKA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Other

**MVOA 1010 Applied Preparatory Other I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVOB 1010 Applied Preparatory Other II (P) 2 cr.**  
Prerequisite: MVOA 1010. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVOA 1310 Applied Principal Other I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVOB 1310 Applied Principal Other II (P) 2 cr.**  
Prerequisite: MVOA 1310. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVOA 2320 Applied Principal Other III (P) 2 cr.**  
Prerequisite: MVOB 1310. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVOB 2320 Applied Principal Other IV (P) 2 cr.**  
Prerequisite: MVOA 2320. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.) Two half-hour lessons a week.

**MVOA 1210 Applied Secondary Other I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVOB 1210 Applied Secondary Other II (P) 1 cr.**  
Prerequisite: MVOA 1210. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVOA 2220 Applied Secondary Other III (P) 1 cr.**  
Prerequisite: MVOB 1210. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVOB 2220 Applied Secondary Other IV (P) 1 cr.**  
Prerequisite: MVOA 2220. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVOA 1410 Applied Major Other I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVOB 1410 Applied Major Other II (P) 3 cr.**  
Prerequisite: MVOA 1410. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVOA 2420 Applied Major Other III (P) 3 cr.**  
Prerequisite: MVOB 1401. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVOB 2420 Applied Major Other IV (P) 3 cr.**  
Prerequisite: MVOA 2420. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Percussion

**MVPA 1011 Applied Preparatory Percussion I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVPB 1011 Applied Preparatory Percussion II (P) 2 cr.**  
Prerequisite: MVPA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVPA 1311 Applied Principal Percussion I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVPB 1311 Applied Principal Percussion II (P) 2 cr.**  
Prerequisite: MVPA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVPA 2321 Applied Principal Percussion III (P) 2 cr.**  
Prerequisite: MVPB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons per week.

**MVPB 2321 Applied Principal Percussion IV (P) 2 cr.**  
Prerequisite: MVPA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVPA 1211 Applied Secondary Percussion I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVPB 1211 Applied Secondary Percussion II (P) 1 cr.**  
Prerequisite: MVPA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVPA 2221 Applied Secondary Percussion III (P) 1 cr.**  
Prerequisite: MVPB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVPB 2221 Applied Secondary Percussion IV (P) 1 cr.**  
Prerequisite: MVPA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVPA 1411 Applied Major Percussion I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVPB 1411 Applied Major Percussion II (P) 3 cr.**  
Prerequisite: MVPA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVPA 2421 Applied Major Percussion III (P) 3 cr.**  
Prerequisite: MVPB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVPB 2421 Applied Major Percussion IV (P) 3 cr.**  
Prerequisite: MVPA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.



**Piano**

**MVKA 1011 Applied Preparatory Piano I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVKB 1011 Applied Preparatory Piano II (P) 2 cr.**  
Prerequisite: MVKA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVKA 1311 Applied Principal Piano I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKB 1311 Applied Principal Piano II (P) 2 cr.**  
Prerequisite: MVKA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKA 2321 Applied Principal Piano III (P) 2 cr.**  
Prerequisite: MVKB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKB 2321 Applied Principal Piano IV (P) 2 cr.**  
Prerequisite: MVKA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKH 1211 Applied Secondary Piano I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKB 1211 Applied Secondary Piano II (P) 1 cr.**  
Prerequisite: MVKA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKA 2221 Applied Secondary Piano III (P) 1 cr.**  
Prerequisite: MVKB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVKB 2221 Applied Secondary Piano IV (P) 1 cr.**  
Prerequisite: MVKA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVKA 1411 Applied Major Piano I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKB 1411 Applied Major Piano II (P) 3 cr.**  
Prerequisite: MVKA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKA 2421 Applied Major Piano III (P) 3 cr.**  
Prerequisite: MVKB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVKB 2421 Applied Major Piano IV (P) 3 cr.**  
Prerequisite: MVKA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**Saxophone**

**MVWA 1015 Applied Preparatory Saxophone I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1015 Applied Preparatory Saxophone II (P) 2 cr.**  
Prerequisite: MVWA 1015. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVWA 1315 Applied Principal Saxophone I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWB 1315 Applied Principal Saxophone II (P) 2 cr.**  
Prerequisite: MVWA 1315. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVWA 2325 Applied Principal Saxophone III (P) 2 cr.**  
Prerequisite: MVWB 1315. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons per week.

**MVWB 2325 Applied Principal Saxophone IV (P) 2 cr.**  
Prerequisite: MVWA 2325. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1215 Applied Secondary Saxophone I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 1215 Applied Secondary Saxophone II (P) 1 cr.**  
Prerequisite: MVWA 1215. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2225 Applied Secondary Saxophone III (P)** 1 cr.  
Prerequisite: MVWB 1215. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 2225 Applied Secondary Saxophone IV (P)** 1 cr.  
Prerequisite: MVWA 2225. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1415 Applied Major Saxophone I (P)** 3 cr.  
Prerequisite: placement by audition before the entire full-time faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1415 Applied Major Saxophone II (P)** 3 cr.  
Prerequisite: MVWA 1415. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWA 2425 Applied Major Saxophone III (P)** 3 cr.  
Prerequisite: MVWB 1415. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 2425 Applied Major Saxophone IV (P)** 3 cr.  
Prerequisite: MVWA 2425. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### String Bass

**MVSA 1014 Applied Preparatory String Bass I (P)** 2 cr.  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1014 Applied Preparatory String Bass II (P)** 2 cr.  
Prerequisite: MVSA 1014. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVSA 1314 Applied Principal String Bass I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 1314 Applied Principal String Bass II (P) 2 cr.**  
Prerequisite: MVSA 1314. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 2324 Applied Principal String Bass III (P) 2 cr.**  
Prerequisite: MVSB 1314. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 2324 Applied Principal String Bass IV (P) 2 cr.**  
Prerequisite: MVSA 2324. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 1214 Applied Secondary String Bass I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 1214 Applied Secondary String Bass II (P)** 1 cr.  
Prerequisite: MVSA 1214. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSA 2224 Applied Secondary String Bass III (P)** 1 cr.  
Prerequisite: MVSB 1214. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 2224 Applied Secondary String Bass IV (P)** 1 cr.  
Prerequisite: MVSA 2224. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1414 Applied Major String Bass I (P)** 3 cr.  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 1414 Applied Major String Bass II (P)** 3 cr.  
Prerequisite: MVSA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSA 2424 Applied Major String Bass III (P)** 3 cr.  
Prerequisite: MVSB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 2424 Applied Major String Bass IV (P)** 3 cr.  
Prerequisite: MVSA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Trombone

**MVBA 1013 Applied Preparatory Trombone I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1013 Applied Preparatory Trombone II (P)** 2 cr.  
Prerequisite: MVBA 1013. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.



**MVBA 1313 Applied Principal Trombone I (P) 2 cr.**

Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music therapy etc.). Two half-hour lessons a week.

**MVBB 1313 Applied Principal Trombone II (P) 2 cr.**

Prerequisite: MVBA 1313. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 2323 Applied Principal Trombone III (P) 2 cr.**

Prerequisite: MVBB 1313. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 2323 Applied Principal Trombone IV (P) 2 cr.**

Prerequisite: MVBA 2323. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1213 Applied Secondary Trombone I (P) 1 cr.**

Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1213 Applied Secondary Trombone II (P) 1 cr.**

Prerequisite: MVBA 1213. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBA 2223 Applied Secondary Trombone III (P) 1 cr.**

Prerequisite: MVBB 1213. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 2223 Applied Secondary Trombone IV (P) 1 cr.**

Prerequisite: MVBA 2223. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1413 Applied Major Trombone I (P) 3 cr.**

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 1413 Applied Major Trombone II (P) 3 cr.**

Prerequisite: MVBA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBA 2423 Applied Major Trombone III (P) 3 cr.**

Prerequisite: MVBB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 2423 Applied Major Trombone IV (P) 3 cr.**

Prerequisite: MVBA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**Trumpet****MVBA 1011 Applied Preparatory Trumpet I (P) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1011 Applied Preparatory Trumpet II (P) 2 cr.**

Prerequisite: MVBA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVBA 1311 Applied Principal Trumpet I (P) 2 cr.**

Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 1311 Applied Principal Trumpet II (P) 2 cr.**

Prerequisite: MVBA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 2321 Applied Principal Trumpet III (P) 2 cr.**

Prerequisite: MVBB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 2321 Applied Principal Trumpet IV (P) 2 cr.**

Prerequisite: MVBA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1211 Applied Secondary Trumpet I (P) 1 cr.**

Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1211 Applied Secondary Trumpet II (P) 1 cr.**

Prerequisite: MVBA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBA 2221 Applied Secondary Trumpet III (P) 1 cr.**

Prerequisite: MVBB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 2221 Applied Secondary Trumpet IV (P) 1 cr.**

Prerequisite: MVBA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1411 Applied Major Trumpet I (P) 3 cr.**

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 1411 Applied Major Trumpet II (P) 3 cr.**

Prerequisite: MVBA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBA 2421 Applied Major Trumpet III (P) 3 cr.**  
Prerequisite: MVBB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 2421 Applied Major Trumpet IV (P) 3 cr.**  
Prerequisite: MVBA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Tuba

**MVBA 1015 Applied Preparatory Tuba I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1015 Applied Preparatory Tuba II (P) 2 cr.**  
Prerequisite: MVBA 1015. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVBA 1315 Applied Principal Tuba I (P) 2 cr.**  
Prerequisite: Placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 1315 Applied Principal Tuba II (P) 2 cr.**  
Prerequisite: MVBA 1315. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 2325 Applied Principal Tuba III (P) 2 cr.**  
Prerequisite: MVBB 1315. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBB 2325 Applied Principal Tuba IV (P) 2 cr.**  
Prerequisite: MVBA 2325. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1215 Applied Secondary Tuba I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1215 Applied Secondary Tuba II (P) 1 cr.**  
Prerequisite: MVBA 1215. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBA 2225 Applied Secondary Tuba III (P) 1 cr.**  
Prerequisite: MVBA 1215. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 2225 Applied Secondary Tuba IV (P) 1 cr.**  
Prerequisite: MVBA 2225. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1415 Applied Major Tuba I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 1415 Applied Major Tuba II (P) 3 cr.**  
Prerequisite: MVBA 1415. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBA 2425 Applied Major Tuba III (P) 3 cr.**  
Prerequisite: MVBB 1415. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVBB 2425 Applied Major Tuba IV (P) 3 cr.**  
Prerequisite: MVBA 2425. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

### Viola

**MVSA 1012 Applied Preparatory Viola I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1012 Applied Preparatory Viola II (P) 2 cr.**  
Prerequisite: MVSA 1012. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVSA 1312 Applied Principal Viola I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 1312 Applied Principal Viola II (P) 2 cr.**  
Prerequisite: MVSA 1312. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 2322 Applied Principal Viola III (P) 2 cr.**  
Prerequisite: MVSB 1312. Third semester of private lessons designed for the student majoring in any area of music except performance. (e.g. music education, music therapy etc.) Two half-hour lessons a week.

**MVSB 2322 Applied Principal Viola IV (P) 2 cr.**  
Prerequisite: MVSA 2322. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1212 Applied Secondary Viola I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 1212 Applied Secondary Viola II (P) 1 cr.**  
Prerequisite: MVSA 1212. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.



**MVSA 2222 Applied Secondary Viola III (P) 1 cr.**  
Prerequisite: MVSB 1212. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 2222 Applied Secondary Viola IV (P) 1 cr.**  
Prerequisite: MVSA 2222. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1412 Applied Major Viola I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 1412 Applied Major Viola II (P) 3 cr.**  
Prerequisite: MVSA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSA 2422 Applied Major Viola III (P) 3 cr.**  
Prerequisite: MVSB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 2422 Applied Major Viola IV (P) 3 cr.**  
Prerequisite: MVSA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Violin

**MVSA 1011 Applied Preparatory Violin I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1011 Applied Preparatory Violin II (P) 2 cr.**  
Prerequisite: MVSA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVSA 1311 Applied Principal Violin I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 1311 Applied Principal Violin II (P) 2 cr.**  
Prerequisite: MVSA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 2321 Applied Principal Violin III (P) 2 cr.**  
Prerequisite: MVSB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSB 2321 Applied Principal Violin IV (P) 2 cr.**  
Prerequisite: MVSA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1211 Applied Secondary Violin I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 1211 Applied Secondary Violin II (P) 1 cr.**  
Prerequisite: MVSA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSA 2221 Applied Secondary Violin III (P) 1 cr.**  
Prerequisite: MVSB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVSB 2221 Applied Secondary Violin IV (P) 1 cr.**  
Prerequisite: MVSA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVSA 1411 Applied Major Violin I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 1411 Applied Major Violin II (P) 3 cr.**  
Prerequisite: MVSA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSA 2421 Applied Major Violin III (P) 3 cr.**  
Prerequisite: MVSB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVSB 2421 Applied Major Violin IV (P) 3 cr.**  
Prerequisite: MVSA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

## Voice

**MVVA 1011 Applied Preparatory Voice I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVVB 1011 Applied Preparatory Voice II (P) 2 cr.**  
Prerequisite: MVVA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

**MVVA 1311 Applied Principal Voice I (P) 2 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVVB 1311 Applied Principal Voice II (P) 2 cr.**  
Prerequisite: MVVA 1311. Second semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVVA 2321 Applied Principal Voice III (P) 2 cr.**  
Prerequisite: MVVB 1311. Third semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVVB 2321 Applied Principal Voice IV (P) 2 cr.**  
Prerequisite: MVVA 2321. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVVA 1211 Applied Secondary Voice I (P) 1 cr.**  
Prerequisite: placement by audition before the music faculty. First semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1211 Applied Secondary Voice II (P) 1 cr.**  
Prerequisite: MVVA 1211. Second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVVA 2221 Applied Secondary Voice III (P) 1 cr.**  
Prerequisite: MVVB 1211. Third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVVB 2221 Applied Secondary Voice IV (P) 1 cr.**  
Prerequisite: MVVA 2221. Fourth semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVVA 1411 Applied Major Voice I (P) 3 cr.**  
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVVB 1411 Applied Major Voice II (P) 3 cr.**  
Prerequisite: MVVA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVVA 2421 Applied Major Voice III (P) 3 cr.**  
Prerequisite: MVVB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

→ **NUR 1040C Nursing Process I –  
Fundamentals of Nursing (O) 10 cr.**

Prerequisites: APB 2190C, 2191C. Nursing I is a study of the principles and techniques that form the foundation for nursing care. The nursing process—assessing, planning, implementing and evaluating serves as the framework for the application of content. Emphasis is placed on nursing intervention and adaptations for specific age groups to meet the basic need of man in health maintenance. Content and experience focus on observations, communications, the interpersonal process, recording, hygienic practices, administration of drugs, asepsis, nutrition, elimination, fluid balance and oxygen. Current trends and legal implications of nursing are introduced. Fifteen contact hours: five class periods; ten hours of laboratory experience on campus, in community hospitals and other health agencies.

→ **NUR 1200C Nursing Process II –  
Medical Surgical Nursing (O) 10 cr.**

Prerequisite: NUR 1040C; Corequisite: DEP 2004. With Nursing I as a foundation, this course moves from the basic patient needs in health maintenance to health problems which require new knowledge and adaptation and includes study of the physical and psychological needs of patients. Emphasis is placed on the essential knowledge, understanding and skills necessary to the nursing care of patients with medical and surgical conditions, and upon the interpersonal process. The four steps of the nursing process will be continued and a higher level of performance will be expected of students. Sixteen contact hours; Four class hours; 12 hours of laboratory experience for 16 weeks on campus, in community hospitals and other health agencies.

**NUR 2120C Nursing Process IIIB-Nursing Care  
of Children (O) 6 cr.**

Prerequisites: NUR 1040C, NUR 1200C. Corequisites: MCB 2013C, NUR 2133C. With Nursing I and II as a basis, Nursing IIIB encompasses the study of physical and psychological problems of children from infancy through adolescence. The family-centered approach is used in learning the skills needed to care for sick children. The study of pediatric nursing is based on the belief that children, by nature of their growth and development, physical and emotional immaturity, have needs in health and illness different from those of adults. This course is further designed to assist the student to apply knowledge of pediatric nursing in the solving of the common recurring health problem associated with the child through the utilization of the nursing process and the interpersonal process. Nineteen contact hours: five class hours, 14 hours of laboratory experience for eight weeks on campus, in community hospitals, and other health agencies.

**NUR 2133C Nursing Process IIIA-Nursing Care of  
The Childbearing Family (O) 6 cr.**

Prerequisites: NUR 1040C, NUR 1200C, APB 2190C, APB 2191C; Corequisites: MCB 2013C, NUR 2120C. With Nursing I and II as a basis, Nursing IIIA encompasses the Childbearing cycle as an adaptation of the state of wellness and continues through the neonatal stage of development. Nursing Care of the Childbearing Family focuses on nursing intervention with families who are experiencing the stresses of the childbearing period. The study of the childbearing family is based on the belief that special needs and problems occurring at designated points in the growth cycle are outgrowths of the developmental level attained by the individual. Emphasis is placed on utilizing nursing and interpersonal processes to identify and meet the physiological and psychological needs of the childbearing family. Both the uncomplicated and the complicated pregnancy are studied, the focus being on the common, recurring problems of this period. Nineteen contact hours: five class hours, 14 hours of laboratory experience for eight weeks on campus, in community hospitals and other health agencies.

**NUR 2220C Nursing Process IVA-  
Medical-Surgical Nursing Care  
of the Adult Patient (O) 9 cr.**

Prerequisites: NUR 1040C, NUR 1200C, NUR 2133C, NUR 2120C; Corequisite: NUR 2310C. This course is a continuation of the study of commonly recurring health problems of patients from the young adult years through senescence with focus on the illness side of the continuum. The nursing process will serve as the basis for nursing care. The student will give nursing care to patients with medical-surgical deviations. Learning experiences will provide opportunities to utilize previously acquired knowledge and skills in giving nursing care and functioning as a team member. Recognizing the special status and needs of the beginning Technical Nurse practitioner, a transitional experience is included in this unit of study. Twenty contact hours: four class hours, 16 hours of laboratory experience (twelve weeks).



**NUR 2310C Nursing Process IVB – Psychiatric Nursing (O) 3 cr.**

Prerequisites: NUR 1040C, NUR 1200C, NUR 2133C, NUR 2120C; Corequisite: NUR 2220C. This course will build on the mental health concepts presented in each of the previous nursing courses. In varied clinical settings, emphasis will be placed on use of the nursing process in the care of adolescent and adult clients with deviant patterns of behavior. Nineteen contact hours: five class hours, fourteen hours of laboratory experience. (Four weeks.)

**OCB 2602C Marine Biology (P) 4 cr.**

The student will benefit by taking BSC 1011C or High School Chemistry or Physics, or CHM 1040C prior to enrolling in this course. A comprehensive survey of marine ecosystems with emphasis on the local flora and fauna. Laboratory includes collection and identification of marine organisms. Six contact hours: three class hours; three laboratory hours.

**OCE 2005 Introductory Oceanography (D) 4 cr.**

Prerequisite: MAT 1033. Corequisite: MAC 1104. In addition, the student will benefit by taking High School Chemistry and/or Physics prior to enrolling in this course. An introductory, comprehensive treatment of physical, chemical and geological aspects of our oceans. Six contact hours.

**ORI 2000 Oral Interpretation (P) 3 cr.**

The course consists of critical analysis and appreciation of literature from both the emotional and the intellectual viewpoints; involves the discussion and application of the techniques of oral reading of poetry, prose, and drama; and is designed to enhance the student's appreciation of words, ideas, and beauty in all forms of literature. Three contact hours.

**PCB 2030 The Ecological Crisis (P) 3 cr.**

An interdisciplinary analysis of our biological and social environment revealing the interaction and interrelationships among living organisms and human groups in the biosphere, their needs, values, and their institutions. Three contact hours.

**PEL 1041L Recreational Games (P) 1 cr.**

A course designed to introduce the student to the basic skills, rules, and strategy of a variety of recreational games, such as table tennis, deck tennis, horseshoes, paddle tennis and croquet, etc. Two contact hours.

**PEL 1111L Beginning Bowling (P) 1 cr.**

A course designed to teach the fundamental skills, techniques, and the knowledge necessary for bowling enjoyment. It will prepare the student for recreational and league bowling. Two contact hours.

**PEL 1121L Beginning Golf (P) 1 cr.**

A beginning course designed to teach the basic golf swing and its application to several clubs. History, rules, golfing etiquette, and simple strategy will be taught. Two contact hours.

**PEL 1141L Archery (P) 1 cr.**

The introduction of the basic skills and fundamental techniques with tournament practice. Two contact hours.

**PEL 1211L Softball (P) 1 cr.**

A course designed for students who wish to broaden their knowledge of softball and improve their game skills. The course will emphasize the history of the game, rules, fundamentals, game skills and strategies. Two contact hours.

**PEL 1321L Volleyball (P) 1 cr.**

A course designed to teach the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours.

**PEL 1341L Beginning Tennis (P) 1 cr.**

An introductory course covering the history, scoring, game strategy, and basic skills which include footwork, forehand and backhand drives, serve, volley and lob. Two contact hours.

**PEL 1342L Intermediate Tennis (P) 1 cr.**

The student will benefit by taking PEL 1341 prior to enrolling in PEL 1342. Designed for students who have acquired the basic skills and strategy of tennis and desire to improve their tennis game. Two contact hours.

**PEL 1346L Beginning Badminton (P) 1 cr.**

Course work is designed to cover history, scoring, basic skills, game strategy and appropriate class tournaments. Two contact hours.

**PEL 1421L Handball (P) 1 cr.**

A course designed to teach the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours.

**PEL 1441L Paddle-Racquet Ball (P) 1 cr.**

A course designed to teach the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours.

**PEL 1511L Soccer (P) 1 cr.**

This course is designed to introduce the student to the basic skills, techniques, rules, game play and knowledge of soccer. Two contact hours.

**PEL 1624L Advanced Basketball (P) 1 cr.**

A course designed to teach skills in basketball. This includes offensive and defensive fundamentals, strategy, rules of basketball, and application of fundamentals, strategy and rules in game situations. Two contact hours.

**PEL 2322L Advanced Volleyball (P) 1 cr.**

Power volleyball techniques, tactics, and strategy will be introduced to the student interested in either the competitive or recreational aspects of the game. Two contact hours.

**PEM 1101L Physical Conditioning for Women (P) 1 cr.**

This course is designed to assist women in becoming stronger, more flexible, better coordinated and more graceful. Included will be a program of planned activities such as selected exercises, use of the Universal Gym set, running, dumbbell drills, rope jumping, and wand drills. Two contact hours.

**PEM 1109L Circuit Training (P) 1 cr.**

A planned fitness training program to increase muscular strength and endurance through a planned series of exercises. Two contact hours.

**PEM 1301L Track and Field Events (P) 1 cr.**

The course will include an introduction to the basic skills and knowledge involved in sprinting, distance running, relays, and hurdling. Two contact hours.

**PEM 1441L Karate and Self-Defense (P) 1 cr.**

An introduction to the basic skills of the Taekwondo style of Karate. Includes kicks, punches, knife hand techniques, basic Taekwondo style forms, one-step and free sparring techniques. Two contact hours.

- PEM 2442L Intermediate Karate & Self-Defense (P)** 1 cr.  
Prerequisite: PEM 1441L or yellow belt in Karate. A course designed for those students who have received the rank of yellow belt or those students who have successfully completed the "Beginning Karate & Self-Defense" Class – PEM 1441L. The course will cover more advanced Taekwondo Style kicks, punches, knife hand techniques: Intermediate Taekwondo Style forms, one-step and free sparring techniques. Two contact hours.
- PEN 1113L Life Saving (P)** 1 cr.  
A course designed to provide the student with the knowledge and skills to save the student's own life or the life of another in the event of an emergency. Prerequisite: (1) standing front dive in good form, (2) surface dive of six feet and swim two body lengths under water, (3) swim 440 yards, continuously in good form, (4) tread water for one minute, float motionless for one minute. Two contact hours.
- PEN 1121L Beginning Swimming (P)** 1 cr.  
A course designed for the beginning or non-swimmer in which the basic skills of breath holding, floating, gliding, bobbing, and elementary rescues will be emphasized. The crawl, elementary back, and side strokes will be introduced. Two contact hours.
- PEN 1122L Intermediate Swimming (P)** 1 cr.  
Course work is designed for the student able to swim continuously for 25 yards in good form. Emphasis is placed on endurance and good form in the crawl, side, back and breast strokes. Course content includes diving, elementary water rescues and drownproofing. Two contact hours.
- PEN 1136C Underwater Diving Skills (SCUBA) (D)** 3 cr.  
The student will benefit by taking MAT 1024 prior to enrolling in PEN 1136C. The scientific study of underwater judgment, attitude, discipline and fitness leading to a Professional Association of Diving Instructors (PADI) certification. This course will stress the latest underwater diving techniques which will be used for making physical and biological collections in the field. The course will include all classroom and pool instruction necessary to qualify students for a national diving certification and open water checkout. Six contact hours.
- PEN 1206C Navigation and Small Boat Handling (D)** 3 cr.  
The student will benefit by taking MAT 1033 and High School Trigonometry prior to enrolling in PEN 1206. This is a practical field and lecture course which will emphasize traditional navigation skills, techniques of small boat handling, and radio communications skills. It will also acclimate the student to all types of shipboard weather conditions. Four contact hours.
- PEO 1040C Supervision of Elementary Children At Play (P)** 3 cr.  
Classroom instruction and field experience in childhood play supervision for students interested in becoming teachers and teacher aides. It will also benefit students who are now or soon will be parents. Students will get their field experience by working with recreational supervisors in a nearby elementary school. Four contact hours.
- PEO 2003C Sports Officiating (P)** 3 cr.  
This course is designed to acquaint the student with the techniques of officiating team, individual, and dual sports. Some of the sports covered are baseball, basketball, track and field, volleyball, tennis, and handball. Three contact hours.
- PET 2000 Introduction to Physical Education (P)** 3 cr.  
Designed for students interested in physical education as a profession. The course examines the place, function, and contribution of physical education within the total educational program. It also includes consideration of the history, philosophy, and problems of physical education. Three contact hours.
- PHI 2010 Introduction to Philosophy (P)** 3 cr.  
An introduction to philosophical issues organized, for the most part, on an historical basis. The student encounters some of the perennial problems of philosophy and the types of answers that have been suggested by studying the thought of selected philosophers. Three contact hours.
- PHI 2100 Introduction to Logic (P)** 3 cr.  
The course provides a general introduction to logic that combines an approximately equal emphasis on the uses and misuses of language, deductive reasoning, and inductive reasoning. Some primary objectives are to provide the student with an appreciation of the extent and limitations of human knowledge, and with tools for valid reasoning and critical thinking. Three contact hours.
- PHI 2600 Introduction to Moral and Political Philosophy (P)** 3 cr.  
A survey of the efforts made by philosophers to comprehend that portion of experience that is concerned with human values and obligations. The course consists, primarily, of the analysis of selected writings in which philosophers attempt to do such things as characterize the most satisfactory life, specify the basis of moral responsibility, determine the testability of moral judgments, and assess the proper relation between the individual and the state. Three contact hours.
- PHY 1020 Physics for Liberal Arts (P)** 3 cr.  
The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in PHY 1020. This course is designed as a general education course for the non-science student and not for one who is planning to major in physics or other sciences. It is a survey of the physical environment as applied to mechanics, electricity and magnetism and modern physics. Three contact hours.
- PHY 2048C Physics I with Calculus (P)** 4 cr.  
Prerequisite: MAC 1132. Corequisite: MAC 1311. Subject matter includes mechanics, heat, thermodynamics, and sound. Laboratory work will illustrate important principles and develop techniques. This course uses the Calculus in the subject matter presentations and in the development of problem-solving abilities. It is designed for students majoring in physics, chemistry, and engineering with above-average mathematical background. Six contact hours: three class hours; one three-hour laboratory.
- PHY 2049C Physics II with Calculus (P)** 4 cr.  
Prerequisite: PHY 2048C. This course is a continuation of PHY 2048C. Subject matter includes electricity, magnetism, light and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in PHY 2048C. Six contact hours: three class hours; one three-hour laboratory.
- PHY 2053C General Physics I (P)** 4 cr.  
Prerequisite: MAC 1104, College Algebra. Corequisite: MAC 1114, Trigonometry. Subject matter includes mechanics, heat, thermodynamics, and sound. Laboratory work will illustrate important principles and develop techniques. This course will stress problem-solving abilities. It is designed for those students who are majoring in pre-med, pre-dental, pre-veterinary, biological sciences, and geology. Six contact hours: three class hours; one three-hour laboratory.



**PHY 2054C General Physics II (P) 4 cr.**

Prerequisite: PHY 2053C. A continuation of PHY 2053C. Subject matter includes electricity, magnetism, light, and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in PHY 2053C. Six contact hours: three class hours; one three-hour laboratory.

**POS 2041 American Federal Government (P) 3 cr.**

A study of the theory, organization, principles, and functioning of the Federal Government, emphasizing relationship of the individual to the government. Three contact hours.

**POS 2112 State and Local Government (P) 3 cr.**

A study of state and local forms of government in the United States. The government of Florida is used as an example of activities and patterns of state government. Responsibilities of local government at county and city levels are explored. Three contact hours.

**PSC 1341 Physical Science (P) 3 cr.**

The student will benefit by taking High School Algebra or MAT 1024 prior to enrolling in PSC 1341. This course is designed to acquaint the individual with the development of the physical sciences, with the integrating principles and theories in the physical sciences, with the practice of the scientific method, and with a useful knowledge of selected areas in mechanics, electricity and magnetism, periodicity and atomic structure, and nuclear phenomena. Presentation involves lectures, demonstrations, and films. The course is not designed essentially as an introductory or preparatory course for any specific physical sciences. Three contact hours.

**PSY 1012 General Psychology (P) 3 cr.**

An analysis of human behavior by the study of the adaptation of the individual to the physical and social environment. Three contact hours.

**QMB 1001 Business Mathematics (D) 3 cr.**

A mathematical treatment of financial problems arising in modern living. The principal purpose of this course is to develop skill in the handling of business transactions. It covers such topics as percentage, inventories and turnover, simple interest and present value, depreciation, and payroll. Three contact hours.

**REA 1005 Basic Reading Skills (P) 1 cr.**

This is the first course of a series of three reading courses. It is a needs-oriented course designed to develop and perfect reading skills by individualizing difficulty of material and rate of progression. Placement in this course will be based on the student's reading ability. Reading laboratory sessions will be required based on student need. If a student completes REA 1005 and REA 1305, only the credits earned in REA 1305 will be applied towards an Associate in Arts degree. Two contact hours.

**REA 1006 Intermediate Reading Skills (P) 1 cr.**

Prerequisite: REA 1005, if needed. This is the second course of a series of three reading courses, designed to develop and perfect skills by individualizing instruction. The materials will meet the specific needs of students who require additional instruction. Placement in this course will be based on the student's reading ability. Reading laboratory sessions will be required based on student need. If a student completes REA 1006 and REA 1305, only the credits earned in REA 1305 will be applied towards an Associate in Arts degree. Two contact hours.

**REA 1007 Progressive Reading Skills (P) 1 cr.**

Prerequisite: REA 1006, if needed. This is the third course of a series of three reading courses. A diagnostic/prescriptive course designed to aid students to acquire the vocabulary and comprehension skills necessary for essential reading in college courses. Individual and group instructions along with a variety of audio-visual equipment and materials will be available. Placement in this course will be based on the student's reading ability. Reading laboratory sessions will be required based on student need. If a student completes REA 1007 and REA 1305, only the credits earned in REA 1305 will be applied towards an Associate in Arts degree. Two contact hours.

**REA 1305 Developmental Reading (P) 3 cr.**

A reading laboratory course open to all students and designed to develop each student's reading skills. The mechanics of reading and the need for selecting a reading method that fits the purpose for reading will undergird an emphasis upon specific individual needs in vocabulary, comprehension, critical reading and rate development. Students who enroll in the Developmental Program are required to do laboratory work in conjunction with this course. If a student completes REA 1005 and/or REA 1006 and/or REA 1007 in addition to REA 1305, only the credits earned in REA 1305 will be applied toward an Associate in Arts degree. Three contact hours.

**REA 1315 Reading Lab (P) 1 cr.**

Corequisite: REA 1305. To provide each student individualized, self-paced practice in specific areas of need as the student attempts to improve reading skills. Two contact hours.

**REA 1605 Study Skill Development (P) 1 cr.**

A course designed for college students who wish to find an effective way to study. Study skills will be taught and practiced through an individualized approach to each student's need and in conjunction with the student's own course of study. Attention will be given to general principles of learning, study attitudes, scheduling of time, a study formula technique and its application, learning resources and research techniques. Two contact hours.

**REE 1000 Real Estate Principles and Practices (D) 3 cr.**

The basic purpose of this course is to provide the student with a broad background of the real estate field and to expose the student to the wide ranging nature of the field. Successful completion of this course and REE 1400 with grades of C (or better) fulfills the educational preclicensing requirements established by the Florida Real Estate Commission to sit for the state examination for a licensed real estate salesperson. Three contact hours.

**REE 1100 Real Estate Appraisal (O) 3 cr.**

This is an intensive course that has been developed to impart a broad understanding of real property appraisal concepts and to teach technical skills employed in their applications to residential properties. It is designed to give the experienced real estate person a basic knowledge of appraisal fundamentals. Three contact hours.

**REE 1400 Real Estate License Law (D) 3 cr.**

This course covers a detailed explanation of Florida Real Estate Law as contained in the Florida Real Estate Handbook. Operation, requirements and procedures of the real estate office are discussed. Successful completion of this course and REE 1000 with grades of C (or better) fulfills the educational preclicensing requirements established by the Florida Real Estate Commission to sit for the state examination for a licensed real estate salesperson. Three contact hours.

- REE 1810 Real Estate Sales (O) 3 cr.**  
Modern technique of successful real estate selling, including how to obtain prospects from advertising, showing properties to buyers, obtaining the offer, closing the seller, how to build a personal referral business, financing your real estate sales, and expanding real estate opportunities. Three contact hours.
- REE 2200 Real Estate Finance (O) 3 cr.**  
Prerequisite: REE 1000 or Real Estate Salespersons Registration Certificate. Concepts, principles, and practices pertaining to real property finance. Detailed information covering legal aspects of mortgages, brokerage regulations and ethics, all major sources of funds for real estate financing, relevant governmental agencies, and ownership forms. Three contact hours.
- REE 2220 Home Mortgage Lending (O) 3 cr.**  
This course approaches the subject from the viewpoint of the mortgage loan officer who seeks to develop a sound mortgage portfolio. A picture of the mortgage market is presented first, then the acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing, and finally the obligations of the mortgage loan officer in overall portfolio management. Three contact hours.
- REE 2270 Mortgage Broker in Mortgage Lending (D) 3 cr.**  
This course offers an exposure to the principles and techniques of mortgage financing and brokerage operations and a background study of the Florida Mortgage Brokerage Act. The course prepares the student for the Florida State examination to be a licensed Mortgage Broker. A detailed study of mortgage lending practices is incorporated into the course. Three contact hours.
- REE 2300 Real Estate Investment (O) 3 cr.**  
The student will benefit by taking REE 1000 prior to enrolling in REE 2300. This course is designed to familiarize the student with real estate investment fundamentals, depreciation, capital gain and loss and installment sales, non-taxable exchange, ownership forms, commercial leasehold financing, creative financing, financing analysis and projection, land investments, industrial property, shopping centers, office buildings, residential property, mobile home parks, Tax Reform Act of 1976, apartment complexes, and warehouse properties. Three contact hours.
- REE 2430 Real Estate Law (D) 3 cr.**  
This course offers specific suggestions as to types of real estate documents, their form and contents, and the mechanics of their use, and contains a full legal, detailed exposition of every aspect of modern real estate transactions. Three contact hours.
- REE 2500 Real Estate Management (O) 3 cr.**  
Prerequisite: REE 1000 or Real Estate Salesperson's or Broker's Registration Certificate. Comprehensive coverage of property management, with emphasis placed on basic management concepts which can be applied to apartments, commercial buildings, shopping centers, and urban renewal programs, and also on creative management techniques for solving problems. Successful completion of course accepted as equivalency for Institute of Real Estate Management's course REM 201 as one of the requirements toward Certified Property Manager. Three contact hours.
- REL 2130 Religion and Contemporary Culture (P) 3 cr.**  
This course analyzes the religious scene in the United States since the Second World War with special emphasis on the 1960's and 1970's. The course will cover the character and changes in American religion since World War II, the rise of sectarian movements, the relation of religion and contemporary social problems, religion and the human potential movement, religion and science, as well as religion and contemporary music and literature. The scope of this course will attempt to put religious trends in the context of the humanities and social science fields. Three contact hours.
- REL 2210 Religious Thought in the Old Testament (P) 3 cr.**  
A study of religious thought and instruction in the Old Testament. Attention is given to the problems of authorship, date, historical setting, and textual criticism. Three contact hours.
- REL 2243 Religious Thought in the New Testament (P) 3 cr.**  
A study of the life and teachings of Jesus, and of the beginning of church life and thought as reflected in the New Testament. Three contact hours.
- REL 2300 World Religions (P) 3 cr.**  
A comparative study of world religions, including Hinduism, Buddhism, Taoism, Confucianism, Shinto, Islam, Judaism, and Christianity. Three contact hours.
- RET 1024 Fundamentals of Respiratory Therapy (D) 3 cr.**  
An introductory course covering basic respiratory therapy equipment, medical gases, gas therapy, and the respiratory therapy department. Four contact hours.
- RET 1244 Emergencies and the Respiratory Therapist (D) 3 cr.**  
Prerequisite: APB or instructor approval. This course is designed to provide didactic and clinical training in the techniques of first aid, cardiopulmonary resuscitation and emergency respiratory care with primary emphasis on areas pertinent to the respiratory therapist. Four contact hours.
- RET 1276 Respiratory Clinical Skills For the Therapist (D) 4 cr.**  
Corequisite: RET 1024. This course is designed to introduce the student to and train the student in the nursing and rehabilitative skills necessary to provide quality respiratory care. Four contact hours.
- RET 1824L Orientation to the Hospital Environment (D) 3 cr.**  
Prerequisite: permission of the professor. This course provides the student with an introduction to the hospital environment, function of the Respiratory Therapy Department, and the role and responsibilities of the respiratory therapist. Six contact hours (clinical).



**RET 2264 Ventilatory Management (D) 4 cr.**

Prerequisite: APB 1260 or permission of professor. This course introduces the student to artificial mechanical ventilation; classification of ventilators; analysis, operation, and maintenance of mechanical ventilators; indications, contra-indications, and side effects of mechanical ventilators and modes of ventilation. Four contact hours.

**RET 2272 Respiratory Therapy Clinical Applications (D) 6 cr.**

Prerequisite: APB 1260 or permission of professor. This course will allow the respiratory therapy student to be introduced into the hospital departments and situations in which the student may be expected to perform the procedures applicable to this point in the student's education. The performance of these procedures will be closely supervised. Twelve contact hours (clinical).

**RET 2273C Clinical Seminar in Intensive Respiratory Care I (D) 1 cr.**

Prerequisite: APB 1260; Corequisite: RET 2274L. This course is a weekly clinical symposium dealing with the current practices in intensive respiratory care, relevant medical literature, and patient case studies. Two contact hours (clinical).

**RET 2274L Respiratory Intensive Care Practicum I (D) 12 cr.**

Prerequisite: RET 1264. This course is designed to provide the student with the essential clinical skills necessary to function as a competent respiratory therapist in the critical care areas. Twenty-four contact hours (clinical).

**RET 2284C Clinical Seminar In Intensive Respiratory Care II (D) 1 cr.**

Prerequisites: APB 1260 and RET 1264. Corequisite: RET 2285. This course is a continuation of the evaluation of current practices in intensive respiratory care, relevant medical literature, and patient case studies. Two contact hours (clinical).

**RET 2285L Respiratory Intensive Care Practicum II (D) 12 cr.**

Prerequisite: RET 1264. In continuation, this course is designed to provide the student with the essential clinic skills necessary to function as a competent respiratory therapist in the critical care areas. Twenty-four contact hours (clinical).

**RET 2414 Pulmonary Function Studies (D) 2 cr.**

Prerequisite: APB 1260 or permission of the professor. This course is designed to introduce the student to pulmonary function techniques and the clinical significance of the diagnostic data gained from this form of testing. Two contact hours.

**RET 2434 Arterial Blood Gases and Critical Care Monitoring (D) 2 cr.**

Prerequisite: APB 1260 or permission of the professor. This course is designed to introduce the student to arterial blood gas analysis and various techniques of monitoring the critically ill patient. Also covered is the interpretation and clinical significance of the data gained from these monitoring techniques. Two contact hours.

**RET 2543 Pulmonary Rehabilitation (D) 2 cr.**

Prerequisite: APB 1260 or permission of the professor. This course is physiological concepts and therapeutic techniques and procedures involved in the rehabilitation of the pulmonary diseased patient. It is an introduction to an overview of techniques of evaluations utilized in the selection of rehabilitation candidates. Also included are the utilization of techniques and procedures used in chest physiotherapy, associated oxygen therapy, breathing retraining, graded exercise programs, proper aerosol therapy, and IPPB therapy. Two contact hours.

**RET 2714 Neonatal and Pediatric Respiratory Care (D) 2 cr.**

Prerequisite: APB 1260 or permission of the professor. This course investigates fetal, neonatal, and pediatric differences in cardiopulmonary anatomy and physiology; pediatric ventilatory management and ventilatory equipment; neonatal and pediatric cardiopulmonary pathologies; and adaptations of respiratory care techniques to pediatric patients. Three contact hours.

**RMI 1030 Principles of Insurance (D) 3 cr.**

This course will seek to develop principles that can be used in understanding insurance companies, contracts, and practices. The approach will be essentially functional. Emphasis will be on the presentation principles and explanations of practices. Methods of comparing the relative cost will be presented. Three contact hours. (This course as taught on the Fred H. Kent Campus prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).

**RMI 1110 Principles of Life Insurance I (D) 3 cr.**

This course is an introduction to the principles of life insurance, the basic life insurance plans, and the more common types of individual life insurance contracts. It also includes a survey of industrial life insurance, health insurance and group life insurance, and it constitutes a general survey of the major kinds of personal insurance coverages available. Three contact hours.

**RMI 1120 Principles of Health Insurance (O) 3 cr.**

Introduction to health insurance; covers health losses and protection, expense and income coverage, and health insurance, its growth, and many areas of coverage offered by government, commercial, and Blue Cross-Blue Shield organizations. Three contact hours.

**RMI 1160 Marketing Principles of Life and Health Insurance (O) 3 cr.**

A new approach toward the life and health insurance industry, its products, the market potential, and the industry as a selling career. Three contact hours.

**RMI 1200 Principles of Casualty Insurance and Surety Bonding (D) 3 cr.**

Prerequisite: RMI 1030. This course is an introduction to the eight areas of automobile liability and physical damage insurance, workmen's compensation and employers' liability insurance, business, professional and personal liability insurance; fidelity and surety bonds, theft coverages, multiple-line trends and coverages, health insurance, and miscellaneous casualty coverages. Three contact hours. (This course as taught on the Fred H. Kent Campus prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).

- RMI 1210 Principles of Fire and Allied Lines (D) 3 cr.**  
Prerequisite: RMI 1030. This course is an introduction to the four areas of fire, ocean marine and inland marine insurance and multiple-line coverage. For each of these four areas, specimen contracts are examined. Each area is discussed with regard to the perils, property, losses, persons, locations, time and hazards which are covered. Three contact hours. (This course as taught on the Fred H. Kent Campus prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).
- RMI 1260 Principles of Insurance and Liability Claim Adjusting (O) 3 cr.**  
Corresponds to Part II of the Insurance Institute of America course in Adjusting. Examines the principles and practices of adjusting liability claims. Three contact hours.
- RMI 1280 Principles of Property Insurance Adjusting I (O) 3 cr.**  
This course is an introduction to the general principles of insurance and property loss adjusting. The following areas are covered: risk and insurance, suretyship, risk management, principles of law and the insurance transaction, the insurance contract-limitations on coverage and limitation on amount of loss, the procedure, investigation, and reports of adjustment of property losses, and estimating business losses. Three contact hours.
- RMI 1430 Legal Aspects of Life Insurance (O) 3 cr.**  
Corresponds to Part III of the Life Office Management Association (LOMA) Insurance Education Program. An up-to-date presentation of the law of life insurance contracts for the person whose principal interest is life insurance rather than law. Three contact hours.
- RMI 1432 Life Company Operations (O) 3 cr.**  
Corresponds to Part II of the Life Office Management Association (LOMA) Insurance Education Program. Covers life insurance home office organization, regulation, taxation, and mathematical aspects, as well as the marketing and investment functions. Three contact hours.
- RMI 2270 Liability Insurance Adjusting (O) 3 cr.**  
Covers the concepts of legal duty, breach of legal duty, and concepts of damages. Introduction to medical knowledge needed by adjusters, study of adjuster-lawyer and adjuster-physician relationships, and settlement of workmen's compensation claims. Presumes a knowledge of the subject matter of RMI 1200 and RMI 1260. Three contact hours.
- RMI 2281 Property Insurance Adjusting (O) 3 cr.**  
Covers in more depth than previous courses in the program the subject of apportionment, insurable interest, limitation on insurer's liability, and estimating. Special consideration is given to adjustment of building, merchandise and fixture losses, and business interruption insurance losses. Presumes a knowledge of the subject matter of RMI 1280 and RMI 1260. Three contact hours.
- RMI 2750 Life Insurance Accounting (O) 3 cr.**  
Corresponds to Part IV of the Life Office Management Association (LOMA) Insurance Education Program. Covers the principles of bookkeeping and accounting as an aid in understanding the life insurance accounting practices. Three contact hours.
- RTE 2202 Radiologic Management and Education (O) 3 cr.**  
Prerequisite: proof of current registration with the American Registry of Radiologic Technology. This course is designed to familiarize the radiologic technologist with the latest advances in the health care field in general, with specific emphasis on the areas of management and education that relate to the profession of radiologic technology. Three contact hours.
- RTE 2587 Advanced Developments in Radiologic Technology (O) 3 cr.**  
Prerequisite: proof of current registration with the American Registry of Radiologic Technology. This course is designed to familiarize the radiologic technologist with the latest advances in Radiologic Technology. Such topics as radiation protection, image intensification, heart cath-erizations, three-phase circuitry, ultra-sound, cross-section anatomy, computerized tomography, special procedures, radiation therapy and contrast medias will be explored. Four contact hours.
- RTV 2001 Introduction to Broadcasting (P) 3 cr.**  
An introduction to the historical, cultural, social, legal, business and career aspects of radio and television broadcasting plus an introduction to the types and sub-types of broadcast media. Five contact hours.
- RTV 2200 An Introduction to Television Production (D) 3 cr.**  
The course provides an opportunity for students to become familiar with the basic operation of a television studio. The course will help students prepare for an entry-level position in a local TV station or production facility, as well as for continuation in a communications or journalism course of study. Four contact hours.
- RTV 2206 Broadcast Direction (D) 3 cr.**  
Prerequisite: RTV 2200, or professor's approval. This course is a continuation of RTV 2200. It is intended for broadcast majors. Major topic is the direction of TV programs. Four contact hours.
- RUS 1100 Beginning Russian I (P) 3 cr.**  
This course consists of pronunciation, elements of grammar, simple conversation, exercises, reading, and composition. Visual and auditory aids are employed. Four contact hours.
- SCE 2416 Science Institute for Elementary Teachers (P) 3 cr.**  
A lab-oriented course designed to acquaint students with the process approach to elementary school science. Attention is given to use of equipment and materials, development of scientific processes, and review and extension of scientific knowledge (limited enrollment). Three contact hours.
- SES 1100 Beginning Typewriting I (D) 3 cr.**  
A course designed for the student who has little or no typewriting experience. The major objectives of the course are to learn the keyboard and to develop correct typewriting techniques. Tabulations, vertical and horizontal centering, and personal letters are introduced. Three contact hours.
- SES 1101 Beginning Typewriting II (D) 3 cr.**  
Prerequisite: SES 1100 or consent of the professor. A study of the touch system of typewriting and the application of the basic skills to business letters, reports, and tabulated problems. (Students who have satisfactorily completed one year of high school typewriting should enroll in SES 1110, Intermediate Typewriting.) Three contact hours.



- SES 1110 Intermediate Typewriting (D) 3 cr.**  
Prerequisite: SES 1101 or one year of high school typewriting. Emphasizes speed building, improvement of basic techniques, production typing of letters, tabulation, reports, manuscripts, and office problems. Three contact hours.
- SES 1150 Introduction to Word Processing (O) 3 cr.**  
Prerequisites: SES 1110, Intermediate Typewriting or demonstrate a typewriting speed proficiency of 40 words per minute for five minutes on straight copy and SES 1171 Machine Transcription or six months work experience with an office record dictation system. Word Processing is the application of modern technology and systems management techniques to create a system for the production of typewritten documents in the modern office. This course provides the student with an overview of the system, which includes personnel, procedures, and equipment. Three contact hours.
- SES 1171 Machine Transcription (O) 3 cr.**  
Prerequisite or co-requisite: SES 1330, SES 1110 or ability to type 35 words a minute for five minutes on straight copy. This course provides intensive practice in machine transcription techniques including language and vocabulary skills and production typewriting. The development of facility in using appropriate office reference manuals is also emphasized. Three contact hours.
- SES 1210 Beginning Shorthand (D) 3 cr.**  
A beginning course in the principles of Gregg shorthand with some dictation and transcription practice. Students with no typewriting skill should take SES 1100 concurrently with SES 1210. (Students who have satisfactorily completed one year of high school shorthand should enroll in SES 1211.) Three contact hours.
- SES 1211 Intermediate Shorthand (D) 3 cr.**  
Prerequisite or corequisite: STE 1101, SES 1330 or ability to type 25 words a minute for three minutes on straight copy. Prerequisite: SES 1210 or ability to take dictation at 50 words a minute for two minutes. A continuation of Gregg shorthand with increased practice in dictation and transcription. (Students who have satisfactorily completed two years of high school shorthand should enroll in SES 2212, Advanced Shorthand.) Three contact hours.
- SES 1221 Machine Shorthand I (O) 3 cr.**  
Prerequisite: SES 1101 or ability to type 35 words per minute for five minutes on straight copy. This course includes a study of the basic theory of machine shorthand with an emphasis on memorization of abbreviations and derivatives, rapid reading of shorthand plates, phrase building, proper stroking methods, and beginning dictation and transcription. Three contact hours.
- SES 1324 Calculating Machines (D) 3 cr.**  
This course emphasizes financial situations arising in offices, with the principal purpose of handling business transactions skillfully; such transactions as adding, subtracting, multiplying, dividing, percentages, constants, simple interest, common decimal fractions, mixed numbers, increases and decreases, chain discounts, payroll, simple income tax returns, invoicing, and accounts receivable and payable, system calculations. Development of the touch operation skill using ten-key electronic calculators with memories (display and tape), involving the above mathematical problems by using a textbook and practice set. Three contact hours.
- SES 1330 Business English (O) 3 cr.**  
Prerequisite or corequisite: ENC 1101. Course content includes the study of grammar, punctuation, spelling, and vocabulary applications and rules as applied to business writing. In addition, rules pertaining to number usage, word division and choice, and possessives will be taught for the practical application of business English. Proofreading and editing written business copy, listening and reading skill development, and using business reference manuals are incorporated in this course. Three contact hours.
- SES 1401 General Office Procedures (D) 3 cr.**  
Prerequisite: SES 1101 or ability to type 35 words per minute for five minutes on straight copy. A course designed to prepare the student for office functions such as communication skills (routine mail procedures, telephone techniques, and receptionist skills), office mathematics, records management, duplicating, human relations, and other general clerical skills. Three contact hours.
- SES 2120 Advanced Typewriting-Executive (D) 3 cr.**  
Prerequisite: SES 1110 or ability to type 45 words a minute for five minutes on straight copy. This course is a continuation of basic skills in speed and accuracy with emphasis on production typing, including the various business forms, tabulation, reports, manuscripts, and office problems. Three contact hours.
- SES 2131 Advanced Typewriting-Legal (O) 3 cr.**  
Prerequisite: SES 1110 or ability to type 45 words a minute for five minutes on straight copy. This is a course designed to give secretarial science students background in the field of legal typing as well as sharpen and refresh the skills of the legal secretary with emphasis on real estate, litigation, wills, estates, and guardianships, and partnerships and corporations. Three contact hours.
- SES 2132 Advanced Typewriting-Medical (O) 3 cr.**  
Prerequisite: SES 1110 or ability to type 45 words a minute for five minutes on straight copy. This is an advanced typewriting course designed to give secretarial science students background and practice in medical terminology, papers and forms that students need to know for employment as a medical secretary, assistant, or typist. Three contact hours.
- SES 2133 Advanced Typewriting-Technical (O) 3 cr.**  
Prerequisite: SES 1110 or ability to type 45 words a minute for five minutes on straight copy. This course includes intensive practice in the typing of technical and scientific material which includes equations, chemical structures, tables, and illustrations. The techniques of technical typing and the format of technical report typing are included. Three contact hours.
- SES 2151 Word Processing-Magnetic Typewriting (O) 3 cr.**  
Prerequisite: SES 1110, Intermediate Typewriting or demonstrate a typewriting speed proficiency of 40 words per minute for five minutes on straight copy. This is a basic course in operating magnetic text-editing typewriters. Primary emphasis on machine operation, applications, and problem-solving. Three contact hours.
- SES 2212 Advanced Shorthand (D) 3 cr.**  
Prerequisite: SES 1211 or ability to take dictation at 60 words a minute for three minutes. This course reviews Gregg shorthand theory and develops the ability to take dictation and transcribe rapidly and accurately. Consent of professor is required for students who have studied other shorthand systems. Three contact hours.

- SES 2213 Dictation and Transcription (D) 3 cr.**  
Prerequisite: SES 2212 or ability to take dictation at 80 words a minute for three minutes. Accelerated dictation and transcription of Gregg shorthand. Finished products are emphasized. Consent of professor is required for students who have studied other shorthand systems. Three contact hours.
- SES 2222 Machine Shorthand II (O) 3 cr.**  
Prerequisite: Machine Shorthand I-SES 1221. Corequisite: SES 1101 or ability to type 35 words per minute for five minutes on straight copy. This course is a continuation of Machine Shorthand I, SES 1221, with emphasis on new theory, abbreviations, phrases, and skill building in dictation and transcription of machine notes. Three contact hours.
- SES 2223 Machine Shorthand III (O) 3 cr.**  
Prerequisite: Machine Shorthand II, SES 2222. This course is a continuation of Machine Shorthand I and II with emphasis on advanced speed building and transcription with improved accuracy. Three contact hours.
- SES 2250 Legal Shorthand (D) 3 cr.**  
Prerequisite: SES 1211. Shorthand theory and dictation of legal nature are included, with legal vocabulary and spelling emphasized. Routine work of legal offices is examined. Three contact hours.
- SES 2335 Business Communications (D) 3 cr.**  
Prerequisite: ENC 1101 or consent of professor, and the ability to typewrite. A study of effective business communications and a brief review of grammar, punctuation, and vocabulary. Extensive practice will be given in business letter writing. Three contact hours.
- SES 2402 Secretarial Practices (O) 3 cr.**  
Prerequisites: SES 1401 and SES 1171. Prerequisite or Corequisite: SES 2335. A finishing course designed for secretarial science students emphasizing the development of competencies in administrative office skills such as writing business letters, preparing business reports, refining dictation and transcription skills, planning meetings and conferences, scheduling appointments, making travel arrangements, supervisory skills, and the coordination of the flow of office tasks. Three contact hours.
- SOC 2000 Introductory Sociology (P) 3 cr.**  
A study of sociological concepts, theories, and methods; social groups, processes, and change. Three contact hours.
- SOC 2020 Social Problems (P) 3 cr.**  
Prerequisite: SOC 2000. A consideration of major social problems which affect individuals and groups in industrial societies, with attention to American society. Three contact hours.
- SOP 1002 Human Relations (P) 3 cr.**  
Drawing from several areas of behavioral science, the course is designed for students in business and technical fields. Also suitable for general education and personal enrichment; not recommended for the student who plans to major in psychology. Includes group dynamics, leadership, ethics, motivation and morale, social systems, formal and informal organizations; and other selected topics. Three contact hours.
- SOP 1502 Dynamics of Behavior (P) 3 cr.**  
Theory and practice in solving problems of inter-personal relations and self-development through group and individual experiences. Three contact hours.
- SPA 1336 Manual Communications I (D) 3 cr.**  
This course will provide the student with the vocabulary to communicate with hearing-impaired individuals. Upon conclusion of this course, the student will have acquired the ability to use the Manual Alphabet and approximately 1,200 signs. Expressive skills will be emphasized. Methodology will be basically laboratory in nature; most classroom work will be devoted to practice in and reinforcement of correct hand configurations and position. Three contact hours.
- SPA 1337 Manual Communications II (D) 3 cr.**  
This course will present American Sign Language (Ameslan), which is the idiomatic and "dialectic" language used by the hearing-impaired. The specialized sentence structure, grammar, and usage of this language will be learned. Guest hearing-impaired speakers and hearing-impaired students on campus will be invited for dialogue. Practice for receptive skills will be emphasized. Three contact hours.
- SPA 1360 Psycho-Social Aspects of Deafness (D) 3 cr.**  
This course considers effects of prelingual and postlingual deafness or hearing impairment on the psychological and emotional development and adaption of the individual to deafness. Covered are cognitive and linguistic development, personality, interpersonal behavior and social reactions and possible compensatory processes in other sensory systems of the body. Three contact hours.
- SPC 1010 Fundamentals of Speech Communication (P) 3 cr.**  
Prerequisite: satisfactory score on placement test. This essential course in speaking and listening skills is designed to instruct in the principles and procedures that promote effective communication. This study includes message composition involving idea and information acquisition, determination of purpose, and analysis of audience. Also included are message transmittal involving vocal variations, articulation and appropriate levels of language usage, and listening for both literal and critical comprehension. Three contact hours.
- SPC 2420 Discussion (P) 3 cr.**  
Emphasis will be on the development of discussion skills in four areas: (1) the formats of discussion; (2) the means of discussion, reasoning, evidence and cooperative idea development; (3) both leadership and participation conduct; (4) audience analysis and listening techniques. Three contact hours.
- SPC 2511 Argumentation and Debate (P) 3 cr.**  
This course will emphasize the development of debate skills in four areas: (1) the format of debate, including a full brief and cases, (2) the means of argumentation: reasoning evidence and motive appeals; (3) audience analysis and listening techniques, (4) delivery skills. Three contact hours.
- SPC 2594 Intercollegiate Debate (P) 1 cr.**  
Prerequisite: consent of professor. Analysis of proposition of fact, policy and definition; library research methods, formal debate structure and participation in intercollegiate debate. Three contact hours.
- SPN 1100 Beginning Spanish I (P) 3 cr.**  
A beginning course. The fundamentals of Spanish speech and grammar will be taught by integrating the basic communication skills of hearing and understanding, speaking, reading, and writing. Four contact hours: Three class hours; one laboratory hour.
- SPN 1101 Beginning Spanish II (P) 3 cr.**  
Prerequisite: SPN 1100 or equivalent. A continuation of SPN 1100. Four contact hours: Three class hours; and one laboratory hour.



**SPN 2200 Intermediate Spanish I (P) 3 cr.**

Prerequisite: SPN 1101. A thorough review of the principles of grammar will be integrated with compositions and conversations planned to develop a basic active vocabulary and facility in communicating in written and spoken Spanish. Readings in Spanish will be concerned with a survey of the history and culture of Spain and Hispanic America. Four contact hours: three class hours; one laboratory hour.

**SPN 2201 Intermediate Spanish II (P) 3 cr.**

Prerequisite: SPN 2200. A continuation of SPN 2200. Four contact hours: three class hours; one laboratory hour.

**SSI 1110 Origins of American Society (P) 3 cr.**

An examination of the mainsprings of the civilization of the United States. The course is designed to relate America's values, institutions, and ideals to both her domestic situation and to her leadership in the world through the historical approach. Emphasis is on the concept of culture, the genesis of American society, and primary institutions. Three contact hours.

**SSI 1120 Origins of American Society (P) 3 cr.**

A continuation of SSI 1110 with emphasis on American political institutions, American economic institutions, and America's leadership in the world. A study of the United States Constitution is included in this course. Three contact hours.

**STA 1014 Elementary Statistics (P) 3 cr.**

Prerequisite: MAC 1104, with a grade of C or better. This is an introductory course which includes the following topics: probability, random variables and probability distributions, binomial and normal distribution, statistical inference, linear regression and correlation, variance, and inference from small samples. Also included is a module on logic and computer literacy which must be covered by the student independently of class time to meet the college-level skills requirement. Three contact hours.

**STD 1120 Stress in Today's Society (P) 3 cr.**

This course is designed to acquaint the student with the nature and scope of stress in today's society. The causes and methods of prevention will be examined from a lay perspective. General environmental and social stressors which affect all people to some degree will be discussed. A laboratory experience utilizing various relaxation techniques which may aid the student in coping with everyday stress will be offered. Four contact hours: two lecture and two laboratory.

**STD 1150 Career Planning (P) 1 cr.**

This course assumes that career choice is a continuous process involving the understanding of self and one's environment. The student will utilize decision making techniques to select a tentative career path which is compatible with the student's individual aptitudes, abilities, values, and attitudes. Self-assessment instruments as well as small group discussions may be used. One contact hour.

**SUR 1101C Surveying (D) 3 cr.**

Prerequisites: MTB 1322, ETD 1100C. A study of the fundamentals of basic surveying together with related field work in the use of instruments and tables. Investigation and calculations regarding land area, traverses, standard deviations and errors will be emphasized. Four contact hours: two class hours; two laboratory hours.

**THE 1000 Introduction to Theatre (P) 3 cr.**

An introductory course in the study of dramatic art as presented upon the stage. The course includes theatre organization, stage techniques, fundamental dramaturgy, and a survey of theatre architecture in Western Civilization. Three contact hours.

**THE 2925 Drama Practicum (P) 1 cr.**

Planning and execution of production functions; scene construction and painting, props, costuming, lighting and other full technical responsibilities. Three contact hours.

**TRA 1010 Principles of Transportation (D) 3 cr.**

An introduction to Transportation. A study of the characteristics, development, economic aspects, regulations, services, and problems relating to rail, motor, air, pipeline, and water transportation. Three contact hours.

**TRA 1032 Transportation and Traffic Management I (D) 3 cr.**

Developments leading to national legislation and federal regulation; division of territories, official descriptions, etc.; scope of authority of territorial associations; factors controlling traffic flows, basis governing classification rules, principles of freight rates and tariffs and elements of rate making, shipping documents and their application, outline of special freight services, and freight claims. Three contact hours.

**TRA 1033 Carrier Liability and Claims (D) 3 cr.**

Analysis of carrier's liability for goods. Rights and liabilities of carriers, consignees, and consignors; claim procedures, claim prevention and government regulation. Three contact hours.

**TRA 1100 Transportation and Traffic Management II (D) 3 cr.**

Application of tariff circulars; construction and filing of tariffs (tariff compilation); freight rates and tariffs, special freight services, i.e., switching, terminal facilities, demurrage and storage, average agreement, reconsignment and diversion, various transit privileges; embargoes; warehousing and distribution; and materials handling. Three contact hours.

**TRA 1121 Rate Clerk (D) 3 cr.**

Basic course of tariffs and rate structures. Included are descriptions of rate territories, how various freight is classified by each mode of transportation, and how to apply applicable tariffs. Course is designed to instruct new rate clerks in selection of lowest costs that will provide required shipping service. Also included are rules of tariffs, rate making procedures, and use of shipping documents. Three contact hours.

**TRA 1230 Material Handling (D) 3 cr.**

An introduction to the field of material handling, including an analysis of jobs and career opportunities, general description of qualifications for entry-level positions, shipping and receiving procedures, warehousing problems and inventory control. The course is designed to present the entire field of material handling, from the producer-manufacturer to the ultimate user-consumer. Three contact hours.

**TRA 1420 Commercial Motor Transportation (D) 3 cr.**

General introduction to commercial motor operations, highway and highway financing, equipment, types of operations, financing motor carriers, labor relations, terminal operation, claims, insurance, classification, rates, regulations of motor carriers, commission policy, intercity passenger operations, urban mass transit, and economics of commercial motor transportation. Three contact hours.

- TRA 1422 Truck Design and Federal/State Regulations (O) 3 cr.**  
This is a course designed to teach the basic fundamentals of commercial vehicle transportation to provide emphasis to the role of truck/diesel technicians. Topics to include: Commodity transportation costs, load limits, state bridge laws, vehicle illumination laws, noise abatement laws; cost and financial loss due to down time, quality control, and interstate commerce procedures. Special emphasis will be placed on highway vehicle safety statistics. Three contact hours.
- TRA 1905 Independent Study of Transportation (D) 3 cr.**  
This course is designed to introduce the student to the ever broadening area of transportation literature and to cause the student to report the student's findings after a careful study and research into an area of personal interest. Acceptable thesis procedures must be used. The course has no prerequisites. Three contact hours.
- TRA 2020 Economics of Transportation (D) 3 cr.**  
This course covers developments in the transportation industry; decisions of the courts and regulatory bodies, new technological developments, railroad management policies, adjustment of rates, public policy questions, and major problem regulation. Completion of this course partially covers requirements for certification by the American Society of Transportation and Traffic. Three contact hours.
- TRA 2110 Transportation and Traffic Management III (D) 3 cr.**  
This course covers through routes and through rates, application of arbitrations and differentials, advanced milling in transit, import and export traffic, technical tariff and rate interpretation, advanced claim adjustments, and rate and classification committee procedure. Three contact hours.
- TRA 2120 Transportation and Traffic Management IV (D) 3 cr.**  
A general discussion of the construction and application of the Interstate Commerce Act and practice before the Interstate Commerce Commission. Three contact hours.
- TRA 2300 Interstate Commerce Act I (D) 3 cr.**  
The history and development of transportation in the United States. Problems which led to the regulation of commerce through legislative action, underlying principles of the Act, interpretation and application of the Interstate Commerce Act. Three contact hours.
- TRA 2310 Interstate Commerce Act II (D) 3 cr.**  
A continuation of Interstate Commerce Act-I. This course provides an in-depth study of the Act, to include: Areas of jurisdiction, meanings and interpretations of the Act, methods used to enforce the Act, contracts and agreements among carriers-shippers, carriers tariff, liability, statute of limitations, rate classification, and regulations. Three contact hours.
- TRA 2311 Interstate Commerce Law and Practice (D) 3 cr.**  
This course considers all aspects of interstate commerce law and practice. Topics include review of Interstate Commerce Act, general rules and practice, Interstate Commerce Commission, and Supreme Court cases. Three contact hours.
- TRA 2312 Interstate Commerce Act III (D) 3 cr.**  
A continuation of Interstate Commerce Act-I & II. Topics include: formal and informal complaints, general conduct of hearings, developing facts of case, compulsory testimony, immunity of witnesses, briefs, oral arguments, and report of the commission. Three contact hours.
- TRA 2313 Interstate Commerce Act IV (D) 3 cr.**  
Continuation of Interstate Commerce Act-III. Topics include: review of previous material, measure of damages, statutory authority, evidence to prove damage, discrimination, and issuance and preparation of the student's personal application to take the Practitioner Examination. Three contact hours.
- ZOO 1010C General Zoology (P) 4 cr.**  
The student will benefit by taking APB 1150 or BSC 1011C or High School Biology prior to enrolling in ZOO 1010C. This is a survey of the animal kingdom with emphasis on taxonomy, life cycles, evolution, organ systems, and phylogenetic relationships. A representative of each of the major groups will be discussed and investigated. Six contact hours: three class hours, three laboratory hours.
- ZOO 2450 Ichthyology and Commercial Fishing (D) 4 cr.**  
Prerequisite: BSC 1011C. In addition, the student will benefit by taking OCB 2602C and OMT 2211 prior to enrolling in ZOO 2450. This is an introductory course in the taxonomy, systematics, anatomy, physiology, ethology and ecology of fishes with emphasis on the estuarine and marine fishes of northeastern Florida. It also includes (1) the methodology of the various types of commercial fishing, (2) the present status of U.S. fisheries, (3) world dependence on fishery resources (4) the effects of technology on fisheries and (5) the future of American fisheries. Six contact hours.
- ZOO 2713C Comparative Anatomy (P) 4 cr.**  
Prerequisite: ZOO 1010C. A comprehensive survey of the anatomy of chordates with emphasis on the functional morphology of vertebrates. Students are required to dissect and study preserved specimens of lamprey, dogfish, yellow perch, mud-puppy, pigeon and cat. Six contact hours.





# NON-COLLEGE CREDIT GENERAL INFORMATION ADMISSIONS

All persons registering at Florida Junior College at Jacksonville must have a social security number and will be required to present the social security card at each registration. Persons not having a social security number should contact the local Social Security Office for an application to obtain a number.

An individual desiring to enroll in non-college credit programs should contact the administrator of the center or the campus offering the desired subjects and may be admitted if the following eligibility requirements are met:

1. Be an adult — by Florida School Law, at least 16 years of age.
2. Present Social Security card.
3. Furnish proof of age, if asked.
4. Complete the admission and registration forms requested.

Non-resident aliens may enroll in non-college credit classes; however, Florida Junior College at Jacksonville will not issue immigration papers based on this enrollment.

Students wishing enrollment certification for educational benefits must be admitted to and be enrolled full-time in the diploma-seeking high school program or vocational program.

## Registration Periods

Non-college credit registration periods for any term shall begin and end on dates specified by the President. Non-college credit registration dates will vary by program category and campus and may be continuous throughout any term. The terms for non-college credit classes will be Fall, Winter, and Spring/Summer (I, II, III).

## Schedule Changes

Schedule Changes, commonly known as Add-Drop, will be allowed for high school and vocational courses only in accordance with the schedule established by the Registrar each term. Schedule changes will not be allowed for all other non-college credit courses.

## Transcript Requests

Upon request of the student, the College will provide to the student, or to a person or institution designated by the student, an official transcript of the student's academic record. Transcript requests may be made in person or in writing to the Campus Student Records and Admissions Office. No transcript request will be accepted by telephone.

NO TRANSCRIPT REQUEST WILL BE  
PROCESSED UNTIL ALL  
FINANCIAL OBLIGATIONS  
TO THE COLLEGE ARE CLEAR

Students are advised to make requests approximately two weeks before the transcript is needed.

## Awards for Program/ Course Completion

Three types of certificates are awarded to students in recognition of completion of program and/or course competency requirements.

### Certificate of Applied Science

The Certificate of Applied Science is awarded to students who have enrolled in and satisfactorily completed the requirements for a one-year vocational competency-based program of study in preparation for employment. The area or areas of competencies completed by the student are indicated on the certificate.

### Certificate of Training

The Certificate of Training is awarded to students who have enrolled in and satisfactorily completed competencies in a vocational program of study of one term (semester) or less in preparation for employment. The program completed by the student is indicated on the certificate.

### Certificate of Attendance

This is a general purpose type of certificate used to verify the attendance of an individual in a course, seminar, or workshop-type activity. Attainments of an individual in these instructional activities may be indicated on the certificate as prescribed by the requirements of the activity.



**Continuing Education Units (CEU)**

Many courses award Continuing Education Units. The CEU system provides for one unit to be awarded for every 10 clock hours of instruction. A record of courses taken and CEUs earned will be main-

tained by the College. A student may obtain a copy of the record or have a copy mailed to a person of the student's choice by requesting such in writing in the Campus Student Records and Admissions Office.



# FINANCIAL INFORMATION

## Student Fees and Tuition Occupational Education

### Non-College Credit Registration Fees

<b>Business Education</b>	<b>Per Course</b>
Accounting Related	
AAC 0030, 0120, 0125, 0130B .....	\$ 10.00
AAC 0130C, 0132, 0140, 0142, 0444, 0146 .....	\$ 20.00
Computer Related	
BDP 0070, 0075 .....	\$ 10.00
BDP 0010C, 0011 .....	\$ 20.00
BDP 0010P .....	\$ 40.00
Business Related	
PTR 0020 .....	\$ 5.00
APC 0011; APM 0011; FMC 0311, 0312, 0324B; MAM 0010; SAM 0010, STS 0020, 0110, 0112, 0113, 0125C, 0116B, 0132, 0135, 0140; TYG 0112, 0120B, 0124B .....	\$ 10.00
TYG 0110 .....	\$ 15.00
APC 0012, 0014, 0016; FMC 0320, 0322, 0324C, 0326; SAM 0003, 0005; STS 0116C, 0117, 0118, 0119, 0142; TYG 0120C, 0122, 0124C, 0126 .....	\$ 20.00
STS 0130N .....	\$110.00
STS 0130R .....	\$215.00
<b>Distributive Education</b>	
Banking Related	
FCR 0410, 0411, 0412, 0413, 0420, 0421, 0423, 0424, 0426, 0427, 0430, 0431, 0432, 0433, 0436, 0440 .....	\$ 10.00
FRC 0415 .....	\$ 30.00
Insurance Related	
INS 0210, 0216, 0220, 0222, 0226, 0228, 0229, 0230, 0231, 0232, 0233, 0234, 0235, 0236, 0237, 0241, 0242, 0244, 0245, 0255, 0260, 0262, 0265, 0267 .....	\$ 10.00
INS 0224, 0225C, 0240 .....	\$ 15.00
Management Related	
MAM 0012, 0016; PUR 0010 .....	\$ 10.00
MAM 0020A, 0020B .....	\$ 25.00
Management Seminars	
MAM 0014A .....	\$ 10.00
MAM 0014B .....	\$ 15.00
MAM 0014E .....	\$ 20.00
MAM 0014H .....	\$ 30.00
MAM 0014J .....	\$ 45.00
MAM 0014K .....	\$ 60.00
MAM 0014L .....	\$ 75.00
MAM 0014M .....	\$ 85.00
MAM 0014N .....	\$100.00
MAM 0014P .....	\$115.00
MAM 0014W .....	\$130.00
MAM 0014X .....	\$145.00
MAM 0014Y .....	\$180.00



Real Estate Related	
RES 0211 .....	\$ 15.00
Sales Related	
FOD 0012, FTR 0010 .....	\$ 10.00
GMR 0310C .....	\$ 30.00
<b>Health Education</b>	
EME 0018; MLS 0500; NUR 0512A .....	\$ 5.00
EME 0011, 0014G, 0020, 0022, 0024 .....	\$ 10.00
DEA 0912; DEH 0912; EME 0012; RTE 0010 .....	\$ 15.00
EME 0010 .....	\$ 30.00
NUR 0512 .....	\$ 40.00
NUA 0310R .....	\$ 55.00
MEA 0310R; STO 0310 .....	\$240.00
PRN 0310 .....	\$295.00
<b>Home Economics Education</b>	
CHD 0020; FAR 0010, 0012; CSM 0525 .....	\$ 5.00
SEM 0010A, 0010B; CGC 0015, 0020, 0025;	
CLT 0014, 0312A, 0313B; CMP 0510C, 0512,	
0513, 0514, 0517; FON 0002, 0104; FSM 0517,	
0518, 0519; HEE 0110; HEF 0102, 0104, 0105,	
HOM 0001; INM 0010; FAR 0008 .....	\$ 10.00
CLT 0310; FON 0007, 0008, 0109, 0110; FSM 0317,	
0320, 0322, 0510; HOF 0001 .....	\$ 15.00
CLT 0312B, 0313C; CMP 0510D, 0515,	
0516, 0520; FON 0003; FSM 0312,	
0315, 0511, 0512, 0513, 0514; HEF 0101,	
0103, HOF 0002 .....	\$ 20.00
CHD 0100; CGC 0011; CLT 0311, 0314;	
CMP 0506, 0507, 0508, 0509, 0519 .....	\$ 25.00
HEF 0310; HOF 0005 .....	\$ 30.00
FSM 0520, 0521, 0522, 0318 .....	\$ 40.00
HEF 0312, 0313 .....	\$ 45.00
INM 0020 .....	\$ 55.00
FSM 0314 .....	\$ 75.00

**Trade-Industrial Education**

Students are required to furnish their personal hand tools for the Trade-Industrial courses for which they are enrolled.

Auto Body Repair	
ABF 0109N, 0110N, 0111N .....	\$ 55.00
ABF 0109R, 0110R, 0111R .....	\$110.00
Air Conditioning and Appliance Repair	
ACT 0309N, 0310N, 0311N .....	\$ 55.00
ACT 0309R, 0310R, 0311R .....	\$110.00
Automotive Mechanics	
AUM 0309N, 0310N, 0311N .....	\$ 55.00
AUM 0309R, 0310R, 0311R .....	\$110.00
Carpentry	
CAP 0309N, 0310N, 0311N .....	\$ 55.00
CAP 0309R, 0310R, 0311R .....	\$110.00
Cosmetology	
COY 0309R, 0310R, 0311R .....	\$ 55.00
COY 0309N, 0310N, 0311N .....	\$110.00
Truck & Diesel Mechanics	
DIM 0313N, 0314N, 0315N .....	\$ 55.00
DIM 0313R, 0314R, 0315R .....	\$110.00
Industrial Electronics	
ELS 0309N, 0310N, 0311N .....	\$ 55.00
ELS 0309R, 0310R, 0311R .....	\$110.00

Marine Electricity	
ELS 0313N, 0314N, 0315N .....	\$ 55.00
ELS 0313R, 0314R, 0315R .....	\$110.00
Gasoline Engine Mechanics	
ENR 0309N, 0310N, 0311N .....	\$ 55.00
ENR 0309R, 0310R, 0311R .....	\$110.00
Printing	
GRA 0310 .....	\$ 55.00
Construction Electricity	
IEL 0309N, 0310N, 0311N .....	\$ 55.00
IEL 0309R, 0310R, 0311R .....	\$110.00
Brick and Block Laying	
MAY 0309N, 0310N, 0311N .....	\$ 55.00
MAY 0309R, 0310R, 0311R .....	\$110.00
Marine Shipfitting	
MEW 0320N, 0321N, 0322N .....	\$ 55.00
MEW 0320R, 0321R, 0322R .....	\$110.00
Machine Shop Works	
MSH 0309N, 0310N, 0311N .....	\$ 55.00
MSH 0309R, 0310R, 0311R .....	\$110.00
Automotive Machine Shop	
MSH 0318N, 0319N, 0320N .....	\$ 55.00
MSH 0318R, 0319R, 0320R .....	\$110.00
Marine Outside Machinist I	
MSH 0321N, 0322N, 0323N .....	\$ 55.00
MSH 0321R, 0322R, 0323R .....	\$110.00
Plumbing and Pipefitting	
PPF 0309N, 0310N, 0311N .....	\$ 55.00
PPF 0309R, 0310R, 0311R .....	\$110.00
Marine Pipefitting	
PPF 0320N, 0321N, 0322N .....	\$ 55.00
PPF 0320R, 0321R, 0322N .....	\$110.00
Electronics, Radio & TV	
RTV 0309N, 0310N, 0311N .....	\$ 55.00
RTV 0309R, 0310R, 0311R .....	\$110.00
Sheet Metal	
SHM 0309N, 0310N, 0311N .....	\$ 55.00
SHM 0309R, 0310R, 0311R .....	\$110.00
Welding	
WEL 0309N, 0310N, 0311N .....	\$ 55.00
WEL 0309R, 0310R, 0311R .....	\$110.00
Marine Welding	
WEL 0320N, 0321N, 0322N .....	\$ 55.00
WEL 0320R, 0321R, 0322R .....	\$110.00
<b>Employers' Courses</b>	
AIO 0020, 0024 .....	\$ 10.00
AIO 0022; DTG 0312; ELS 0112, 0119, 0120; PTY 0312 .....	\$ 20.00
AIC 0003, 0390; AUM 0003, 0390, 0395; BLR 0312, 0390; CAP 0395; DIM 0109, 0395; ELS 0390, 0410; ENR 0003, 0010; ERE 0010; FMD 0010, 0390, 0395; IEL 0316, 0390; MAO 0390; MAY 0312; MEY 0390; MSH 0003, 0390; MTY 0390, 0395; PCL 0390; PAF 0390, 0395; RTV 0390; SHM 0390 .....	\$ 25.00
AIM 0010, 0012, 0014 .....	\$ 30.00
DIM 0390 .....	\$ 35.00
AIC 0315; WEL 0390 .....	\$ 45.00
BCN 0315; CAP 0315; CEQ 0115; IEL 0315, 0317; MAY 0315; PDE 0315; ROO 0317; SHM 0315; PPF 0315 .....	\$ 50.00



**Public Service Courses**

APC 0221 .....	\$ 30.00
COR 0418 .....	\$ 80.00
FIF 0422 .....	\$ 75.00
LAE 0310 .....	\$130.00
SEO 0210* .....	\$ 15.00
APM 0221; APS 0222; LAE 0411, 0417; SAN 0015; APS 0224 .....	\$ 25.00
COR 0425, 0426; FIF 0411, 0415, 0420; LAE 0410, 0412, 0413, 0414, 0415, 0416, 0422; LAE 0525, 0526, 0527; SOW 0010; FIF 0420 .....	\$ 15.00
FIF 0310, 0311, 0312, 0313, 0314, 0315, 0316, 0413, 0417, 0418, 0419, 0424 .....	\$ 10.00

**Agriculture**

AGG 0310 .....	\$155.00
ORH 0010 .....	\$ 10.00

\*Plus \$15.00 Materials Fee.

## Professional Malpractice and Liability Insurance Risk Coverage Fees

Non-College Credit Courses	Per Course
Cosmetology COY 0309, 0310, 0311 .....	\$ 5.00
Medical Assisting MEA 0310 .....	\$ 7.00
Nurse Assistant NUA 0310 .....	\$ 4.00
Practical Nurse PRN 0310 .....	\$14.00
Post Graduate Dental Hygiene Clinic DEH 0912 .....	\$ 7.00
Surgical Technician STO 0310 .....	\$ 7.00
Fire Fighter Min. Std. Course FIF 0422 .....	\$ 4.00

The Risk Coverage Fee is non-refundable, if the student withdraws after the official close of the drop/add period for the term.

## Student Fees and Tuition Adult Continuing Education

Students, who register for Adult Continuing Education courses, seminars or workshops (includes 1.3200, and 1.4200), shall be charged the fee authorized.

### Registration Fees

All Avocational, Recreational and Enrichment Courses \$1.00 per contact hour per course,

**EXCEPT:**

Applied Music I	MUS 0816A .....	\$ 60.00
Applied Music I, SP	MUS 0816B .....	\$ 36.00
Applied Music II	MUS 0817A .....	\$ 90.00
Applied Music II, SP	MUS 0817B .....	\$ 54.00
Applied Music III	MUS 0819A .....	\$120.00
Applied Music III, SP	MUS 0819B .....	\$ 70.00
Creative Art for Children	ART 0818 .....	\$ 30.00
Fine Arts Enrichment Center Summer Program	LEI 0810 .....	\$100.00
Fundamentals of Dance	PEA 0835 .....	\$ 30.00
Group Music Instruction	MUS 0821 .....	\$ 24.00
Introduction to Theatre for Children	DRA 0812 .....	\$ 30.00

Microwave Cooking	FON 0103C .....	\$ 25.00
Music Readiness I	MUS 0814 .....	\$ 23.00
Music Readiness II	MUS 0815 .....	\$ 10.00
Musicianship Class	MUS 0820 .....	\$ 2.00
Avocational and Recreational Seminar	SEM 0800.....	Fees are established by the Executive Vice-President

ALL COURSES NOT IDENTIFIED HEREIN .....\$ 4.00

## Duplicate Registration Receipts

### HIGH SCHOOL COMPLETION, VOCATIONAL, NON-COLLEGE CREDIT OCCUPATIONAL EDUCATION AND ADULT CONTINUING EDUCATION

#### Each duplicate of Registration Receipt:

For courses costing less than \$5.00 .....	\$ 4.00
For courses costing \$5.00 or more .....	\$ 5.00

## Test and Examination Fees

General Education Development Test (GED)  
(High School Equivalency)

One test .....\$ 3.00

Total battery .....\$ 14.50

(Fees established by the State Department of Education.)

Validation of GED scores from out of state, United States Armed Forces

Institute (USAF) or DANTEs (includes diploma, if entitled) .....\$ 5.00

High School Credit-by-Examination (HSCBE) .....\$ 4.00

Fee waived for students enrolled in a high school course for credit, if student wishes to take the test for that particular course.

Test fees are to be paid at time of making application for the test.

## Fees for Ceremonies Conducted for Special Programs

The President or official designee shall determine the items to be purchased by the College which will permit the conducting of ceremonies in accordance with established traditions for special programs, primarily in the Health Related Education area. The charge to the student shall not exceed the cost of the items purchased for each student.

## Waiver of Tuition and Fees

Individuals enrolled in the following courses and/or programs are eligible for waiver of tuition and fees:

### Adult Basic Education (ABE) Courses and Programs (Non-College Credit)-

individuals below high school level and 16 years of age or older who are enrolled in Adult Basic Education. The Provost or official designee shall certify eligibility for waiver or prescribed document, which may be the fee statement.

### Community Instructional Services (Non-College Credit)-

individuals and/or groups of persons enrolled in Community Instructional Services Courses. The Provost or official designee shall certify eligibility for waiver on prescribed document, which may be the fee statement.

### Community Preparedness (Non-College Credit)-

individuals and/or groups of persons enrolled in Community Emergency Preparation course(s). The Provost or official designee shall certify eligibility for waiver on prescribed document, which may be the fee statement.



**Criminal Justice Education (Non-College Credit)—**

individuals must be full time or active auxiliary members of area criminal justice agencies. The Provost or official designee shall certify eligibility for waiver on the prescribed document, which may be the fee statement.

**Dental Assisting Seminar (Non-College/Credit)—**

individuals and/or groups of persons, who are dental assistants, dental hygienists, or dentists. The Provost or official designee shall certify eligibility for waiver on prescribed document, which may be the fee statement.

**Dependent Child of "Special Risk Members"—**

any dependent child of a "Special Risk Member", as defined in section 121.021 (15), Florida Statutes, shall be entitled to a full waiver of tuition and fees if the special risk member was killed in the line of duty. Special members are defined as employees whose retirement application is approved as special risk by the Division of Retirement. Special risk members are usually law enforcement officers, policemen, correctional agency employees in contact with inmates and other employees in the field of law enforcement and fire protection. This waiver shall apply until the child's 25th birthday. Students applying for this waiver must meet regular admission requirements and provide proof of age. The College will obtain documentation from the Division of Retirement certifying eligibility for the special risk member tuition and fee waiver.

**ORI 0001 The World of Work (Non-College Credit)—**

A course that offers intensive instruction on employment and training opportunities available, resume writing, techniques for successful job interviews and more. Offered at Downtown Campus only.

**Incarcerated Persons, Probationers and Parolees (Non-College Credit)—**

individuals who are certified by the Duval County Sheriff, Nassau County Sheriff or official designee, as incarcerated person(s), probationer(s) or parolee(s). The Provost or official designee shall submit official certification with fee statement.

**Fire Science and Prevention Courses and Emergency Medical Technology Courses (Non-College Credit)—**

individuals must be full time or active auxiliary members of area fire or emergency medical service departments. The Provost or official designee shall certify eligibility for waiver on the prescribed document, which may be the fee statement.

**Programs for Severely Handicapped Persons (Non-College Credit)—**

individuals who are enrolled in courses offered by telephone or television. The Provost or official designee shall certify eligibility for waiver on prescribed documents, which may be the fee statement.

**Senior Adults (Non-College Credit)—**

individuals who are 60 years of age or older are eligible for fee waivers when enrolling in courses offered by the Center for the Continuing Education of Senior Adults. The individual must present proof of age at time of registration, which may be a driver's license or Jacksonville Transportation Authority pass. The individual will also certify age and eligibility on the prescribed document, which may be the fee statement. Residents of retirement and nursing homes (without regard to age) are eligible for a fee waiver in non-college credit courses offered in these facilities by the Center for the Continuing Education of Senior Adults. The director of the retirement home or nursing home is to provide certification of residents who are eligible for waivers to the Provost or official designee.

**Former Prisoners of War – Vietnam (Non-College Credit)—**

individuals who were Prisoners of War – Vietnam. Copy of discharge is to be attached to fee statement.

**FJC Diploma Seeking Students in High School Credit Completion Program—**

individuals who are 18 years of age or older; persons, age 16 and 17 who have officially withdrawn from public or private high school at least six calendar months before desiring entry; or persons who are recommended in writing by the Superintendent of Schools or official designee or by the principal of a private high school. Official registration is required in High School Credit Completion Program to seek a diploma by course work and/or High School Credit by Examination. Official completion of registration in the High School Credit Program which may include

registration in MAT 0011 and/or ENG 0014, will substantiate proof of eligibility for waiver of fees for the high school credit courses and/or ENG 0014 and/or MAT 0011.

**Full-time and Part-time FJC Employees Registered in Professional Trends Programs (Non-College Credit)—**

full-time and part-time FJC employees who register in non-college credit courses which are part of the Professional Trends Program and limited to employee professional development activities, sponsored by the office of Staff and Program Development. A representative from the office of Staff and Program Development will verify eligibility at time of registration.

**Basic Life Support Course (Non-College Credit)—**

individuals who are eligible to enroll in the supplemental course, EME 0018, based on State Department of Education approved categories. The individual shall certify eligibility for waiver of fee on the prescribed document, which may be the fee statement.

**Employee Reimbursement**

FJC full-time regular employees and their dependents may be reimbursed for courses taken at FJC. The employee or dependent must pay his or her own fees at registration. However, upon proof of satisfactory completion of course work, employees will be reimbursed 100 per cent of registration fees and dependent 90 per cent. For purposes of this fee waiver, dependents are defined as a dependent spouse or dependent child who is under the age of 22, living at home and enrolled as a full-time student.

**Talent Grants**

Talent Grants covering all or partial tuition are available to students who demonstrate talent in the following areas: athletics, to include baseball, basketball, cross country, golf, men's and women's track and tennis and women's volleyball; forensics and drama; and music, both instrumental and vocal.

## Schedule for Payment of Fees

**All Non-College Credit Classes**

In order for registration to be complete, fees must be paid at the time of registration.

**Seminars and Workshops**

As published in announcement, workshops or seminars which require special arrangement may provide no refund of fees if participant cancels after the time specified in announcement.

## Fee Refunds Non-College Credit Courses

**Requirements**

Refunds for cancelled classes will be processed automatically on a timely basis by the Finance Department.

Students who wish to drop a class to receive a refund or clear their financial aid must report to the Campus Student Records office and complete a drop card no later than five business days after the date shown on the registration receipt. No refund of fees will be made on classes for which the fee is \$5.00 or less, unless the college cancels the class.

**Amounts and Conditions of Refunds or Credit Memoranda**

If a veteran's deferment is authorized and the College cancels the class(es) or the registration of a student is cancelled, the deferment will be reduced by the amount of the cancelled class(es) for a student.

Amounts due the College will be deducted before any check or credit memorandum to the credit card account is issued.

If the College cancels the class and the student is placed in another class, no refund is authorized.

**Payment Dates**

Refund checks or credit memoranda to credit card accounts will be made in accordance with the schedule established by the College.

## Cancellation of Classes

If the College cancels a class at any time prior to its completion, the student's enrollment in that class will be cancelled and the student will be entitled to a 100 percent refund of fees paid for that class.

If the College cancels the class or the student's registration, the College will initiate the refund without written application by the student.



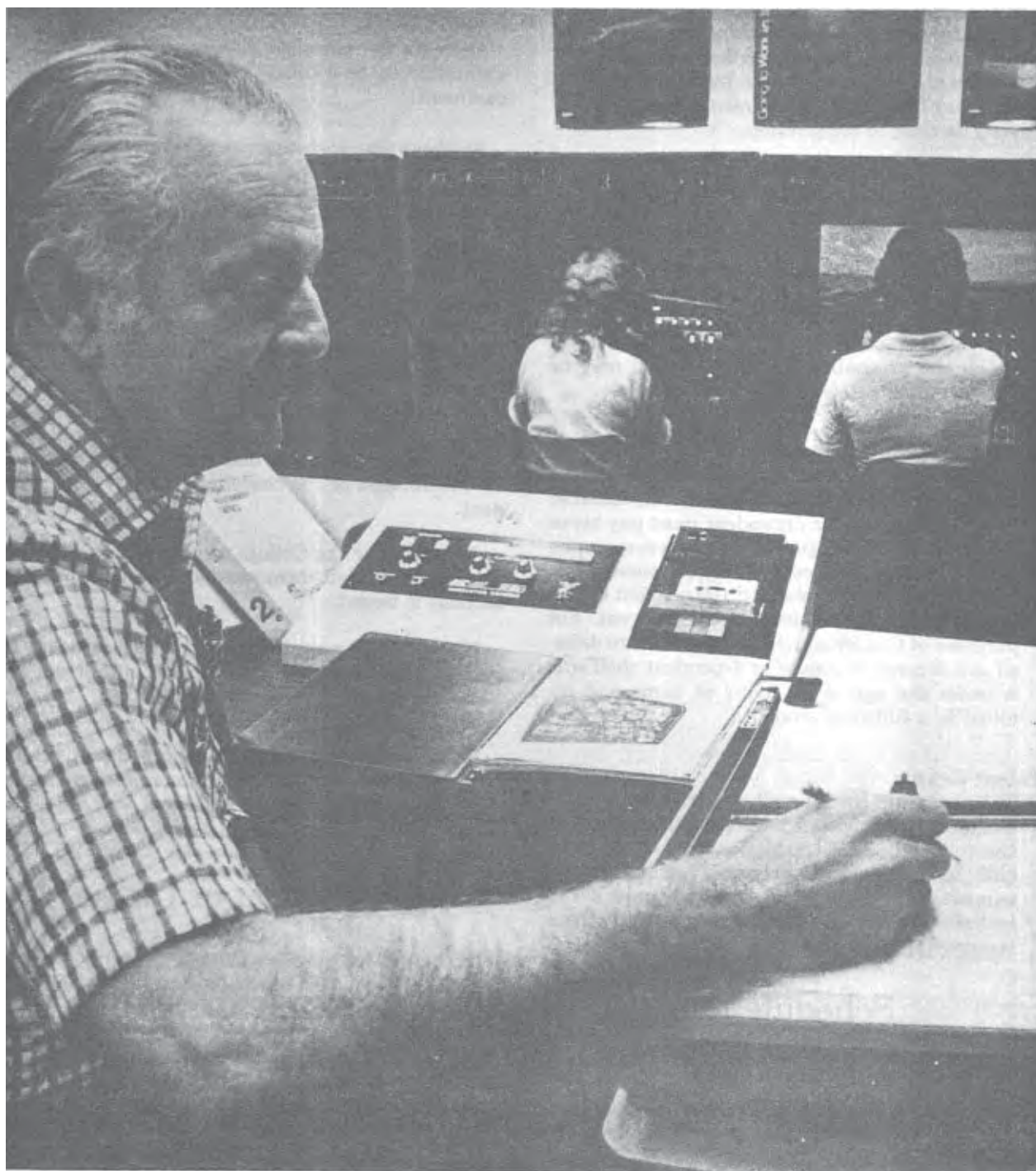
## Suspension, Termination or Cancellation of Enrollment

The College reserves the right to suspend, terminate, or retroactively cancel the enrollment of any student for any of the following reasons:

1. Disciplinary reasons.
2. Non-payment of course fees when payment is due, including non-payment resulting from dishonored checks.

## Agency Sponsored Payments

In instances in which a sponsoring agency or organization has agreed in writing to reimburse FJC for the registration fees and/or books for a particular student and does not render payment to the College in the prescribed manner, the sponsored student(s), will be liable for any charges incurred on his/her behalf and will be billed by the College. The student will be required to render payment within 15 days of the billing date.



# NON-COLLEGE CREDIT STUDIES

## Occupational Education

Non-college credit programs and courses offer a wide variety of preparatory and supplementary vocational training throughout the junior college district wherever the need exists and adequate facilities are located. Courses are taught in public school facilities during evening hours, in industrial plants, commercial office buildings, on campuses and centers of Florida Junior College at Jacksonville, and other suitable locations. The length and frequency of meetings for courses differ and are determined by the type and objectives of the course.

The primary purposes of these programs and courses are (1) to provide individuals with necessary skills to make them employable, (2) to provide individuals with training needed to upgrade or broaden their present skills and enhance their occupational opportunities, and (3) to provide the business and industrial community with trained personnel.

In the area of occupational education, the College maintains close liaison with, and is assisted by, program advisory committees, professional, civic, and church organizations, governmental agencies, business and industry, and other groups in determining needs and providing occupational education for the community.

A high school diploma or equivalent is not required for enrollment in most occupational education courses/programs but is highly recommended.

Persons can be admitted to preparatory occupational education programs only for the purpose of obtaining skills leading directly to securing employment.

Persons can be admitted to supplemental occupational education courses provided they are currently or have been previously employed in an occupation related to the course. Exceptions to this can be made by the applicant paying an additional course fee as described in the fee schedule, page 174.

The international student who wishes to be admitted to occupational educational courses must be enrolled as a full-time student. The student must also meet the admission requirements listed for an international applicant under the Adult High School Completion Admission Requirements.

## Occupational Preparatory Education and Evaluated CEU Courses Grading System

The grading system is designed to evaluate the performance of the student as fairly and equitably as possible.

Letter grades will be assigned for courses as follows:

I—INCOMPLETE  
S—SATISFACTORY  
U—UNSATISFACTORY  
W—WITHDRAWAL  
SI—SATISFACTORY/INCOMPLETE

Once a grade of S or U in a course has been reported to the Registrar, it may only be changed as follows:

1. Upon recommendation of the instructor who assigned the grade, with approval of the program director or dean.
2. Upon recommendation by the director, and approved by the dean, when the instructor who assigned the grade is no longer a member of the faculty of Florida Junior College at Jacksonville.

The I or SI grade may be changed by the instructor within the time limit indicated in the College Calendar.

Occupational Education courses, other than occupational preparatory education and evaluated CEU courses explained before, and all Adult and Continuing Education courses, except high school credit, receive no grade (NG).

## Developmental Education Downtown Campus

The Developmental Education Department at the Downtown Campus offers various programs to non-college credit students. The goal of the department is to assist students who need additional help in the academic area to reach their educational goals. Program strategies include:

1. Reading courses that may be taken for high school credit or self-enrichment.
2. Individualized instruction in reading.
3. Tutoring.
4. Diagnostic and prescriptive teaching in the individualized Manpower Training System (IMTS) in the areas of math, English, and reading.

Other services include:

1. Assistance in wise career decision-making and goal-setting through the Downtown Campus career center, Occu-



pational Assessment and Information System (OASIS).

2. In-depth student evaluation through the Evaluation Resource Center (ERC).

## Adult and Continuing Education

In the area of Adult and Continuing Education, the College cooperates with the public schools, community schools, health and welfare groups, civic and community clubs, business and industry, and other adult agencies to provide educational services.

Adults in the community have the opportunity to grow in basic knowledge, improve in home and community life, develop leadership and civic responsibilities, expand in knowledge in general education, and develop creativity in the fine arts.

Adult and Continuing Education Programs are offered where there is community need and interest. Florida Junior College at Jacksonville is offering Adult Education Programs and courses in more than 225 different locations throughout Duval County. Many programs, courses, and services are offered on a continuing basis. Short courses, in-service training programs, and courses of specific interest may be initiated by request from individuals and groups in the community, based upon resources available at time of request.

### Adult Basic Education

The Adult Basic Education Program of Florida Junior College at Jacksonville is designed to provide basic instruction in the fundamental academic areas of reading, writing, arithmetic, consumer education, and job readiness skills training for all adults of this community.

General instruction in the foregoing academic areas will develop basic learning skills for the adult which will facilitate the continuation of an education at the secondary level if desired.

The over-all curriculum of the Adult Basic Education Program includes arithmetic, spelling, social studies, science, functional citizenship education, life skills, consumer economics, occupational knowledge, government and law, community resources, and health. Student's performance in these general knowledge areas will be based upon achievement in the following skill areas: reading, writing, speaking, listening, problem-solving, computation and interpersonal relations.

The Adult Basic Education Program provides supportive services for its students in the areas of guidance and counseling, testing, specialized reading needs, employability services, auditory/visual screening, and speech therapy.

The Adult Basic Education Program will award the following certificates to deserving ABE students.

#### Certificate of Attendance

The Certificate of Attendance will be issued by the Director of Adult Basic Education to those students with excellent classroom attendance. This certificate will be based on the recommendation of the instructor.

#### Certificate of Achievement

A Certificate of Achievement will be issued to students successfully completing Level I, II or III of the Test of Adult Basic Education.

#### Certificate of Completion

An Adult Basic Education Certificate of Completion will be awarded to students who have successfully passed Level IV of the Test of Adult Basic Education.

Enrollment in Adult Basic Education classes is available to all adults who are 16 years of age or older.

Adult Basic Education classes are offered in Adult Centers which are located in schools, churches, and other available community facilities throughout Duval County at no cost to the students.

### Adult High School Completion Admission Requirements

Adults, 18 years of age or older, may choose to earn an adult high school diploma at the College by taking appropriate course work. Persons aged 16 and 17 also may enroll in the Adult High School Completion Program but must wait until a period of six calendar months has elapsed since the date of official withdrawal from public or private high school. Exceptions may be made when recommended in writing by the superintendent of schools or the superintendent's designee from the county in which the student resides while attending FJC or by the principal of a private high school in the local area.

Applicants to this program are required to present the following documentation:

1. Application for admission.
2. Copy of Social Security card.

3. Proof of high school withdrawal (for persons 16 or 17 years of age).
4. Proof of previous education. The following are acceptable for proof of previous education:
  - a. High school transcript.
  - b. Certification by student of completion below ninth grade level.
  - c. Verification from previous high school or school board that transcript cannot be obtained.
  - d. Waiver of (a) or (c) above by Student Appeals Committee.
5. International Applicant Requirements for admission are:
  - a. Application for admission.
  - b. A certified English translation of the transcript from the last high school attended.
  - c. Proof of proficiency in the use of the English language. Students from countries other than English speaking must submit satisfactory scores on the TOEFL examination (Test of English as a Foreign Language). This test is available through the Educational Testing Service, Box 899, Princeton, New Jersey 08540.

No international applicant will be considered for admission until all information (Items a through c) has been received. International students accepted for admission will be notified of their acceptance and will be provided with Form I-20A as required by the United States Department of Justice. International students must be enrolled as full-time students for the Fall and Winter Terms (I and II) and the Spring and/or Summer Terms (III and/or IV).

Students, 16 years of age or older, who are currently enrolled in a local public or private high school may upon permission from the high school principal or the principal's designee pursue course work at Florida Junior College at Jacksonville for transfer back to the high school from which the student expects to receive a diploma. Upon completion of the course work, it is the student's responsibility to request that a transcript be sent to the graduating high school.

Applicants to this program are required to present the following documentation:

1. Application for admission.
2. Copy of Social Security card.
3. Permission note from high school principal or the principal's designee indicating exact subjects to be taken.

## Adult High School Grading System

The grading system is designed to evaluate the performance of the student as fairly and equitably as possible.

Letter grades will be assigned for courses as follows:

- A—EXCELLENT
- B—GOOD
- C—AVERAGE
- D—POOR
- I—INCOMPLETE
- NP—NONPUNITIVE
- S—SATISFACTORY -- (Course not completed-No Credit)
- U—UNSATISFACTORY
- W—WITHDRAWAL
- Z—A vs C EXPOSURE (30 hours minimum)

Students registered in high school classes but not earning high school credit will receive a grade of NG (no grade).

Once a grade of A, B, C, D, NP, S, U, or Z in a course has been reported to the Registrar, it may only be changed as follows:

1. Upon recommendation of the instructor who assigned the grade, with approval of the division chairperson or director.
2. Upon recommendation by the director, and approved by the dean, when the instructor who assigned the grade is no longer a member of the faculty.

An "I" grade may be assigned only when extenuating circumstances prevent a student from completing the course work during the regular term. To be eligible to receive an "I" grade the student must have completed at least  $\frac{3}{4}$  of the course work.

The "I" grade may be changed by the instructor to A, B, C, D, NP, U, or Z within the time limit indicated in the college calendar.



## Adult High School Completion Requirements

There is no set required amount of time necessary to earn an Adult High School Diploma. The Florida State Department of Education has established that an adult can progress at the adult's own rate of speed and achieve credit by subject examination whenever the student judges that he or she is prepared. Thus, an adult may complete credit requirements as rapidly as the adult is able to prove his or her knowledge and skills.

A minimum of 16 unduplicated credits, grades nine through 12, excluding credit in physical education, shall be required for an Adult High School Diploma. Two of these credits must be earned at Florida Junior College at Jacksonville under Admission Status "A." Nine of these 16 credits must be earned in the following areas:

1. English (2 credits)  
One credit in English grammar required. Except where proficiency can be determined by the counselor, the student will be advised strongly to take a composition course as the second English credit.
2. Mathematics (2 credits)
3. Natural Science (2 credits)
4. Civics (1 credit)
5. American History (1 credit)
6. Reading Techniques (1 credit)

The additional seven credits may be earned in other areas as approved by the counselor subject to the following:

1. A course in Americanism vs. Communism is required for graduation. This requirement may be met by taking a one-half credit course or a non-college credit course of 30 clock hours.
2. A maximum of two work experience credits may be earned at 1,000 hours per credit. Each credit awarded must be based on a compilation of hours from a single place of employment.

All students must either pass State Student Assessment Test, Part I (SSAT I) at their previous high school, or be certified in Basic Skills through testing to meet requirements for SSAT I.

All students who have not completed graduation requirements by August 6, 1982, (including changes of "I" grades) must pass the State Student Assessment Test, Part II (SSAT Part II) prior to graduation.

Students are graduated under the catalog requirements which are in effect as of the date of graduation. The graduation date shall be the day on which the final requirement for the program is completed. In the case of an "I" grade being changed, the graduation date will be the day on which the final requirement is met for the course.

It is the high school student's responsibility to make application for graduation after the student has completed requirements.

## Military Service Credits

A person who has been admitted to the Adult High School Completion Program may request an evaluation of military educational experience and service by submitting documentary evidence to the Campus Student Records and Admissions office.

## High School Equivalency Diploma

The GED (High School Equivalency) Examination is a battery of five tests administered monthly by Florida Junior College to any person who is at least 18 years of age, out of school, and has a Florida address. Information on test registration may be obtained from any campus Student Records and Admissions office. The registration fee is established by the Department of Education. Persons who pass the exam receive a diploma from the State Department of Education.

HIGH SCHOOL REVIEW classes for GED test preparation are available through each campus Office of Adult and Continuing Education. The classes provide intensive review in areas covered on the GED Exam.

In addition, the GED TESTING SKILLS SEMINAR provides critical testing information for persons who wish to take the GED exam without enrolling in High School Review classes. The fee for the Seminar is \$4.00.

## High School Testing Program

BASIC SKILLS CERTIFICATION TESTING Students who have not passed the State Student Assessment Test, Part I (SSAT I) must meet certification requirements on a prescribed test of basic skills in its place. Information may be obtained in the Student Records and Admissions office on any campus.

STATE STUDENT ASSESSMENT TEST, PART II (SSAT Part II) is required for high school graduation. Information and applications are available in the high school counseling offices and the Student Records and Admissions offices on Downtown, Kent, North, and South Campuses. No fee.

HIGH SCHOOL CREDIT - BY - EXAMINATION (HSCBE), is available in a variety of high school academic subjects. Students may register for HSCBE in the Student Records and

Admissions office on Downtown, Kent, North, or South campus. The registration fee is \$4.00 unless the student is registered in a high school course having the same number, in which case the fee is waived.

### Senior Adult Center

The Senior Adult Center is a resource center for the educational needs of senior adults. It provides a variety of educational experiences for older adults. Approximately 170 non-college credit courses are offered in locations throughout the community, with particular emphasis on interests and concerns of senior adults. Seminars and workshops addressing specific needs are offered periodically to provide further training. For information or counseling, call the Senior Adult Center office at the Downtown Campus, 101 West State Street, 633-8390.

### Independent Living for Adult Blind (ILAB)

ILAB is an instructional program designed to increase the self-reliance of blind and deaf-blind adults and help them to achieve greater independence. Instruction is offered, on a year-round basis, in communication skills, including Braille and typing; daily living skills; mobility; and leisure time activities. Comprehensive social services and a full range of volunteer services are available.

### Women's Center

The Women's Center is located at the Downtown Campus, 101 West State Street, Room 3106. Personal, educational, and career counseling services are available to Florida Junior College at Jacksonville students and members of the community at no charge. Class offerings include Assertive Training, Career Development, Back to School/Back to Work, Opening Doors for Women, Supervisory Training, and others. The Center also offers special programming – short courses, workshops and seminars – to community organizations. Special programs have been designed for community business and professional women (twice monthly, Women's Information Exchange luncheons), for women in industrial training programs, single mothers, and women starting their own business. Call 633-8311 for additional information.

**CHALLENGE: THE DISPLACED HOME-MAKER PROGRAM**, is a uniquely designed three-week training program for displaced homemakers. A displaced homemaker is defined as an individual who:

1. is 35 years of age or older;
2. has worked in the home, providing unpaid employment;

3. is not gainfully employed;
4. has had or would have difficulty securing employment.;
5. has been dependent on the income of another family member but is no longer supported by such income, or has been dependent on federal assistance.

Challenge provides an intensive training and counseling program with emphasis placed on self-assessment, confidence building, goal setting, educational reentry, decision making and job seeking. Supportive services in the form of child care and transportation allowances are provided.

Challenge is located on the Downtown Campus, 101 West State Street, 633-8316.

### Nursing Continuing Education

A continuing education program is planned to meet the needs of nurses in updating knowledge and skills essential in professional practice. Continuing education courses are designed to enhance nursing practice and to help ensure the public safe and high quality nursing care.

Nursing practice is based on a continuously expanding body of knowledge and skills which prepares nurses to function effectively as members of the health care team.

Reassessment and ongoing evaluation will be done to determine the need for expanding this Continuing Education Program and offering additional relevant courses. Topics and locations will vary to meet the needs of the nursing community.

### Community Services

Through its program of community services, the College offers programs of study, institutes, short courses, seminars, workshops, clinics, and lectures to meet the educational needs of adult groups in the community.

Requests for such courses are encouraged. Consideration for such courses is based upon the level of instruction, the number of persons interested, and the availability of resources and qualified instructional personnel at the time of request.

Adults desiring to enter adult classes or programs should apply in person at the adult center or campus offering the subjects of their choice.

Any person, 16 years of age or older, is eligible to apply for enrollment. Specific course requirements or limitations will be explained at the center of the individual's choice.



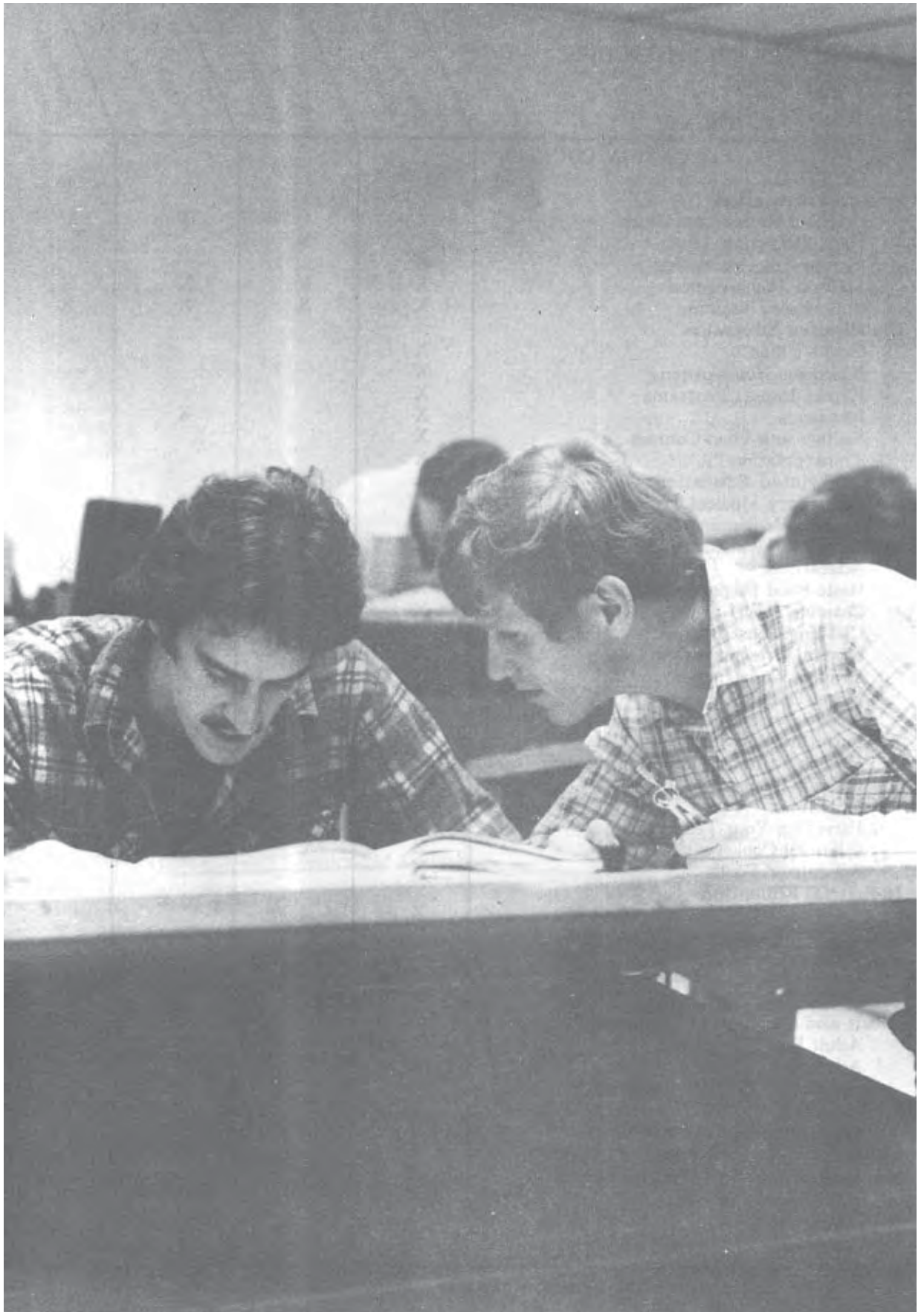
NON-COLLEGE CREDIT STUDIES	Fred H. Kent Campus	North Campus	South Campus	Downtown Campus
<b>OCCUPATIONAL EDUCATION PROGRAMS</b>				
<b>Agriculture Education</b>				
Nursery Operations		X		
<b>Business Education</b>				
Basic Typewriting	X	X	X	X
Keypunch		X		
Office Occupations (includes: Typing, Shorthand Business English and Office Machines)	X	X	X	X
<b>Distributive Education</b>				
Bank Teller Training	X			
Cashier/Sales/Checker	X			
Real Estate Principles & Practices	X		X	
<b>Health Related Education</b>				
Medical Assisting		X		
Nurse Assistant		X		
Practical Nursing		X		
Surgical Technician		X		
<b>Home Economics Education</b>				
Household Management Specialist	X			
Supervised Food Service Worker	X	X		X
<b>Industrial Education</b>				
Air Conditioning and Appliance Repair				X
Auto Body Repair				X
Automotive Machine Shop				X
Auto Mechanics				X
Brick and Blocklaying				X
Carpentry				X
Construction Electricity				X
Cosmetology	X			
Electronics, Radio & T.V.		X		
Gasoline Engine Mechanics				X
Industrial Electronics				X
Machine Shop				X
Marine Electricity				X
Marine Outside Machinist				X
Marine Pipefitting				X
Marine Shipfitting				X
Marine Welding				X
Plumbing and Pipefitting				X
Printing		X		
Sheet Metal				X
Truck and Diesel Mechanics				X
Welding		X		X
<b>Public Service Education</b>				
Basic Police Recruit			X	
Basic Security Officer			X	
Basic Training for Correctional Officer			X	
Fire Fighter Minimum Standards			X	
Water-Sewage Plant Communications				X

(An "X" in any of the right hand columns of the above chart indicates the campus on which a program is located.)

NON-COLLEGE CREDIT STUDIES	Fred H. Kent Campus	North Campus	South Campus	Downtown Campus
<b>OCCUPATIONAL EDUCATION/COURSES OF STUDY</b>				
<b>Business Education</b>				
Certified Professional Study			X	
Data Processing		X		
Income Tax Accounting	X			
Medical Transcription	X	X	X	X
Supervisory Training	X	X	X	X
<b>Distributive Education</b>				
Credit Union	X			
Executive Housekeeping	X			
Export-Import Programs	X			
Insurance	X		X	
Savings and Loan Courses	X			
Transportation	X			
<b>Health Related Education</b>				
Emergency Medical Technology		X		
Nursing Continuing Education		X		
<b>Home Economics Education</b>				
Alterations	X	X	X	X
Basic Food Preparation	X			X
Catering I & II	X			X
Clothing Construction	X	X	X	X
Custom Dressmaker	X			
Drapery Construction	X	X	X	X
Floral Design	X			
Food Service Supervisor	X			
Furniture Reupholstery	X			
Household Repair and Maintenance	X			
Interior Design	X			
Nutrition	X			
Parenting Your Teenager	X			
Quantity Cookery	X			
Specialized Foods	X			
<b>Industrial Education</b>				
Aviation	X			
Operating Engineers				X
<b>Public Service Education</b>				
Criminal Justice-Law Enforcement			X	
Fire Science and Prevention			X	
<b>Adult and Continuing Education</b>				
Adult Basic Education	X	X	X	X
Adult High School Completion	X	X	X	X
Continuing Education of Senior Adults	X	X	X	X
Continuing Education of Women	X	X	X	X
Community Instructional Services	X	X	X	X
High School Equivalency Diploma (G.E.D.)	X	X	X	X
Independent Living for Adult Blind		X		

(An "X" in any of the right hand columns of the above chart indicates the campus on which a program is located.)





# NON-COLLEGE CREDIT OCCUPATIONAL EDUCATION PROGRAMS OF STUDY AWARDS/RELATED COURSE(S)

## Agriculture Education

### CERTIFICATE OF TRAINING:

Nursery Operations  
AGG 0310 Nursery Operations

## Business Education

### CERTIFICATE OF APPLIED SCIENCE:

Office Occupations  
STS 0130 Office Occupations

### CERTIFICATE OF TRAINING:

Keypunch  
BDP 0010 Keypunch

Basic Typewriting  
TYG 0110 Basic Typewriting

## Distributive Education

### CERTIFICATE OF TRAINING:

Bank Teller Training  
FCR 0415 Bank Teller Training

Cashier Sales Checker  
GMR 0310 Cashier Sales Checker

Real Estate Principles and Practices  
RES 0211 Real Estate Principles and  
Practices

## Health Related Education

### CERTIFICATE OF APPLIED SCIENCE:

Medical Assisting  
MEA 0310 Medical Assisting

Practical Nursing  
PRN 0310 Practical Nursing

Surgical Technician  
STO 0310 Surgical Technician

### CERTIFICATE OF TRAINING:

Nurse Assisting  
NUA 0310 Nurse Assistant

## Home Economics Education

### CERTIFICATE OF TRAINING:

Supervised Food Service Worker  
FSM 0314 Supervised Food Service Worker

Household Management Specialist  
INM 0020 Household Management  
Specialist

## Industrial Education

### CERTIFICATE OF APPLIED SCIENCE:

Air Conditioning and Appliance Repair  
ACT 0309 A/C and Appliance Repair I  
ACT 0310 A/C and Appliance Repair II  
ACT 0311 A/C and Appliance Repair III

Auto Body Repair  
ABF 0109 Auto Body Repair I  
ABF 0110 Auto Body Repair II  
ABF 0111 Auto Body Repair III

Automotive Machine Shop  
MSH 0318 Automotive Machine Shop I  
MSH 0319 Automotive Machine Shop II  
MSH 0320 Automotive Machine Shop III

Auto Mechanics  
AUM 0309 Automotive Mechanic I  
AUM 0310 Automotive Mechanic II  
AUM 0311 Automotive Mechanic III

Brick and Blocklaying  
MAY 0309 Brick and Blocklaying I  
MAY 0310 Brick and Blocklaying II  
MAY 0311 Brick and Blocklaying III

Carpentry  
CAP 0309 Carpentry I  
CAP 0310 Carpentry II  
CAP 0311 Carpentry III

Construction Electricity  
IEL 0309 Construction Electricity I  
IEL 0310 Construction Electricity II  
IEL 0311 Construction Electricity III

Cosmetology  
COY 0309 Cosmetology I  
COY 0310 Cosmetology II  
COY 0311 Cosmetology III

Electronics, Radio & T V  
RTV 0309 Electronics, Radio & TV I  
RTV 0310 Electronics, Radio & TV II  
RTV 0311 Electronics, Radio & TV III



**Gasoline Engine Mechanics**

- ENR 0309 Gasoline Engine Mechanic I
- ENR 0310 Gasoline Engine Mechanic II
- ENR 0311 Gasoline Engine Mechanic III

**Industrial Electronics**

- ELS 0309 Industrial Electronics I
- ELS 0310 Industrial Electronics II
- ELS 0311 Industrial Electronics III

**Machine Shop Work**

- MSH 0309 Machine Shop Work I
- MSH 0310 Machine Shop Work II
- MSH 0311 Machine Shop Work III

**Marine Outside Machinist**

- MSH 0321 Marine Outside Machinist I
- MSH 0322 Marine Outside Machinist II
- MSH 0323 Marine Outside Machinist III

**Marine Pipefitting**

- PPF 0320 Marine Pipefitting I
- PPF 0321 Marine Pipefitting II
- PPF 0322 Marine Pipefitting III

**Marine Electricity**

- ELS 0313 Marine Electricity I
- ELS 0314 Marine Electricity II
- ELS 0315 Marine Electricity III

**Marine Shipfitting**

- MEW 0320 Marine Shipfitting I
- MEW 0321 Marine Shipfitting II
- MEW 0322 Marine Shipfitting III

**Marine Welding**

- WEL 0320 Marine Welding I
- WEL 0321 Marine Welding II
- WEL 0322 Marine Welding III

**Plumbing and Pipefitting**

- PPF 0309 Plumbing and Pipefitting I
- PPF 0310 Plumbing and Pipefitting II
- PPF 0311 Plumbing and Pipefitting III

**Sheet Metal**

- SHM 0309 Sheet Metal I
- SHM 0310 Sheet Metal II
- SHM 0311 Sheet Metal III

**Truck and Diesel Mechanics**

- DIM 0313 Truck & Diesel Mechanics I
- DIM 0314 Truck & Diesel Mechanics II
- DIM 0315 Truck & Diesel Mechanics III

**Welding**

- WEL 0309 Welding I
- WEL 0310 Welding II
- WEL 0311 Welding III

**CERTIFICATE OF TRAINING:**

- Printing
- GRA 0310 Printing

## Public Service Education

**CERTIFICATE OF TRAINING:**

- Basic Police Recruit Course
- LAE 0310 Basic Recruit Training for Police Officers
- Basic Security Officer Course
- SEO 0210 Basic Security Officers Training Course
- Basic Training for Correctional Officers
- COR 0418 Basic Training for Correctional Officers
- Fire Fighter Minimum Standards Course
- FOF 0422 Fire Fighter Minimum Standards Course
- Water/Sewage Plant Communications
- APC 0221 Water & Sewage Plant - Related Communications





# NON-COLLEGE CREDIT COURSE DESCRIPTIONS

All courses in the following list are not taught each term. Class schedules are published prior to each term which show the courses that will be offered.

## Occupational Education Courses

### **ACC 0030 Income Tax Accounting for Business**

The material taught in this course is based on the Internal Revenue Code. Persons in the tax accounting field who prepare returns for private individuals, merchants, and other businessmen are taught to prepare and keep suitable records for income tax purposes. They are taught to prepare their income tax returns according to legal interpretations.

### **AAC 0120 Basic Accounting**

A course designed as supplementary training to persons employed in a related field to acquaint the student with the complete bookkeeping cycle. Includes journalizing, posting financial statements, adjusting and closing books. Emphasis is given to inventory methods, special journals, control accounts, depreciation, and payroll methods.

### **AAC 0125 Basic Accounting II**

A continuation of basic accounting principles, (AAC 0120). Includes special journals and accounting for special business transactions, notes, accruals, partnerships, corporations, and the use of data processing in accounting.

### **AAC 0130 Basic Bookkeeping I High School Cr. ½**

A course designed to provide meaningful business problems at the beginner level, to equip students with basic vocational skills, to provide the students with an understanding of business forms and to help them develop proper work habits and attitudes. Units included will cover basic skills for record keeping, cashiers, banking, petty cash, and record keeping for retail sales clerks, students and families.

### **AAC 0132 Basic Bookkeeping II High School Cr. ½**

Prerequisite: AAC 0130. A course designed to provide meaningful business problems at the beginner level, to equip students with basic vocational skills, to provide the students with an understanding of business forms and to help them develop proper work habits and attitudes. Units included will cover record keeping for a purchasing department, a wholesale sales department, a payroll department, and for a small retail business.

### **AAC 0140 Basic Accounting I High School Cr. ½**

A course designed to acquaint the student with the accounting cycle with emphasis on journalizing and posting, the worksheet, financial statements, adjusting and closing procedures, and the use of special journals and subsidiary ledgers. The completion of a practice set is required.

### **AAC 0142 Basic Accounting II High School Cr. ½**

Prerequisite: AAC 0140. A further study of accounting cycle with emphasis placed on payroll systems, automated data processing, special journals, petty cash, fixed assets and depreciation, notes and interest, and partnerships and corporations. The completion of two practice sets is required.

### **AAC 0144 Advanced Accounting I High School Cr. ½**

Prerequisite: AAC 0142. An advanced study of accounting principles with emphasis placed on a review of the recording, summarizing, and reporting phases of accounting; departmental and payroll accounting; bad debts, depreciation and depletion of fixed assets, and prepaid and accrued expenses, partnerships; and voucher, inventory control, and budgetary control systems. The completion of a practice set is required.

### **AAC 0146 Advanced Accounting II High School Cr. ½**

Prerequisite: AAC 0144. A continuation of Advanced Accounting I with coverage of the following topics: taxes, notes, and drafts; corporations; automated systems; cost accounting; and management use of accounting data. The completion of two practice sets is required.

### **ABF 0109 Auto Body Repair I**

This course is designed specifically for job entry training in the repair and replacement of damaged automobile body parts, including the removal of dents, glass installation, body painting and refinishing, and upholstery.

### **ABF 0110 Auto Body Repair II**

Continuation of ABF 0109.

### **ABF 0111 Auto Body Repair III**

Continuation of ABF 0110.

### **ACT 0309 Air Conditioning and Appliance Repair I**

This course is designed specifically for job entry training and provides instruction in basic electricity, using hand tools and specialized tools and test equipment. It also covers the principles of refrigeration and servicing of refrigeration equipment such as refrigerators, ice makers, and room air conditioners.

### **ACT 0310 Air Conditioning and Appliance Repair II**

This course is a continuation of Air Conditioning and Appliance Repair I, and is designed specifically for job entry training and provides instructions in the servicing, testing and repairing of clothes washers, clothes dryers, dishwashers, electric ranges, and microwave ovens.

### **ACT 0311 Air Conditioning and Appliance Repair III**

This course is a continuation of Air Conditioning and Appliance Repair II and is designed specifically for job entry training and provides instruction in psychrometrics, load estimating, duct sizing, and servicing, resting, and repairing central air conditioners and heat pumps.

### **AGG 0310 Nursery Operations**

This course is designed for job entry training. The course consists of growth requirements, identification, soil preparation, propagation, fertilization, plant management, pruning and merchandising.

**AIC 0003 Air Conditioning, Refrigeration, and Heating**

To acquaint the student with the installation and service of air conditioning systems. Computation of heat gain and loss, diagnosis and correction of problems, reading of blueprints, diagrams, and schematics are included. Expendable materials supplied by student. This course is designed primarily for off-campus supplementary instruction.

**AIC 0309 Air Conditioning, Refrigeration and Heating I**

This course is designed specifically for job entry training and provides instruction to the student in the proper procedure for installing and servicing commercial and residential air conditioning systems, to compute heat gain and heat loss on buildings for summer and winter air conditioning, to diagnose and repair problems with commercial refrigeration systems of both medium and low temperature, and to read blueprints, plans, electrical diagrams and schematics necessary to perform the aforementioned tasks.

**AIC 0310 Air Conditioning, Refrigeration and Heating II**

Continuation of AIC 0309.

**AIC 0311 Air Conditioning, Refrigeration and Heating III**

Continuation of AIC 0310.

**AIC 0315 Air Conditioning, Refrigeration and Heating**

This course is designed primarily for apprenticeship instruction and its contents will include the proper procedure to install and service commercial and residential air conditioning systems, to compute heat gain and heat loss of buildings for summer and winter air conditioning, to diagnose and repair problems with commercial refrigeration systems of both medium and low temperature, and to read blueprints, plans, electrical diagrams and schematics necessary to perform the aforementioned tasks.

**AIC 0390 EMP Air Conditioning, Refrigeration and Heating**

This course is designed to meet the needs of industry employers and underemployed employees in the air conditioning, refrigeration and heating industry.

**AIM 0010 Aircraft Power Plants Mechanics**

This course is designed as supplementary instruction for persons already employed in the field or in a related field. Instruction will include theory, maintenance procedures, and safety precautions associated with aircraft power plants.

**AIM 0012 Airframe Mechanics**

This course is designed as supplementary instruction for persons already employed in the field or in a related field. Instruction will include theory, maintenance procedures and safety precautions associated with aircraft mechanics.

**AIM 0014 Airframe & Powerplant Mechanics**

This course is designed as supplementary instruction for persons already employed as airframe or powerplant mechanics or related occupations. Instruction will include theory, maintenance procedures, and safety precautions. Topics include mathematics, physics, basic electricity, aircraft hardware, materials and processes, and the use of handtools and measuring devices.

**AIO 0020 Advanced Instrument Training – Private Pilot**

A course designed for professional general aviation pilots to gain instrument rating or to maintain instrument flight currency under FAR Part 61. Course is limited to licensed private pilots. Training will be a combination of classroom lecture and time on FAA approved ATC 610K flight simulators.

**AIO 0022 Advanced Instrument Training – Commercial Pilots**

A course designed for commercial aviation pilots to maintain proficiency in Instrument Flight Operations and to meet the FAR requirements for currency in IFR experience under Part 61.

**AIO 0024 Advanced Instrument Training – Currency of Certificate**

A course designed for professional aviation pilots holding private or commercial licenses with instrument ratings to qualify for instrument flight currency using FAA approved ATC 610K flight simulators.

**APC 0011 Business English**

A study of the business letter, discrimination in the use of words, spelling, review of grammar, punctuation and development of language power. This course is designed for persons already employed in a related field for supplementary instruction.

**APC 0012 Business English High School Cr. 1**

A study of the business letter, discrimination in the use of words, spelling, review of grammar, punctuation and development of language power.

**APC 0014 Business English I High School Cr. ½**

An extensive review of grammar, punctuation, spelling, and vocabulary. Also covers listening and reading skills and shows the student how to use various reference books.

**APC 0016 Business English II High School Cr. ½**

Prerequisite: APC 0014. Comprehensive training in the writing of various types of business communications—letters, memos, and reports. Emphasis is placed on writing with an understanding of human behavior as well as a firm grasp of mechanical principles.

**APC 0221 Water & Sewage Plant – Related Communications**

Training in communications in preparation for the Water & Sewage Plant Operator's License Examination.

**APM 0011 Business Mathematics**

The course develops the arithmetical skills necessary for effective bookkeeping and merchandising transactions. Provides extensive practice in solving business problems including percentages, simple interest, and payroll for persons already employed in the field, or in a related field, for supplementary instruction.

**APM 0221 Water & Sewage Plant Operation – Math**

Training in mathematics in preparation for Water & Sewage Plant Operator's License Examination for persons already employed in the field, or in a related field, for supplementary instruction.



**APS 0222 Water & Sewage Plant – Related Chemistry**

This course covers an introduction to the principles of modern inorganic chemistry topics in structure of matter, gas laws, theory acids and solution and suspension, carbon and compounds for persons already employed in the field.

**APS 0224 Water & Sewage Plant – Related Chemistry**

This course is designed for apprenticeship training and covers an introduction to the principles of modern inorganic chemistry including topics in structure of matter, gas laws, theory acids and solution and suspension, carbon and compounds.

**AUM 0003 Automotive Mechanics**

This course consists of supplementary instruction in the repair of passenger automobiles and light delivery trucks, and includes engines, transmissions, clutches, carburetors, ignition systems, chassis, bodies, and power operated equipment.

**AUM 0309 Automotive Mechanic I**

This course is designed specifically for job entry training in the repair of passenger automobiles and light delivery trucks, including engines, transmissions, clutches, carburetors, ignition systems, chassis, bodies, and power operated equipment.

**AUM 0310 Automotive Mechanic II**

Continuation of AUM 0309.

**AUM 0311 Automotive Mechanic III**

Continuation of AUM 0310.

**AUM 0390 EMP Automotive Mechanics**

The course is designed to meet the needs of employers and underemployed employees in the automotive mechanics industry.

**AUM 0395 EMP Automotive Machine Shop**

The course is designed to meet the needs of employers and underemployed employees in the automotive machine shop industry.

**BCN 0315 Laborer's Apprenticeship Training**

Training in skills required by a laborer in the construction industry, including: safety and first aid, hand tools, handling construction materials, soil preparation, pipe laying, gasoline and electric powered equipment, concrete preparation and handling; concrete chipping and cutting, sandblasting, oxy-acetylene cutting, carpentry labor and other skills prescribed by apprenticeship standards. Enrollment limited to apprentices in Construction Laborer's Apprenticeship Training Program.

**BDP 0010 Keypunch**

A preparatory course designed to develop a salable competency in IBM 029, and 129 keypunch machines. Mohawk tape encoder, IBM sorter, collator and reproducer, as well as data entry clerical batching, and coding will be included. Prerequisite is a typing speed of 35 words per minute or better.

**BDP 0011 Keypunch High School Cr. ½**

A skill course designed to develop a salable competency in IBM 024, 029, and 129 keypunch machines. Mohawk tape encoder may be included. Includes making program cards and operating the IBM 082 sorter. Prerequisite is a typing speed of 35 words per minute or better.

**BDP 0070 Introductory Computer Concepts**

An introduction to the field of data processing to include the history of computers, the study of processing systems, computer hardware, and an introduction to programming systems. This course is intended for students, with no prior experience in data processing, who can benefit from this supplementary instruction. Three class hours, one laboratory hour.

**BDP 0075 Mini-Micro Computing Systems**

This course is designed as supplementary instruction for persons employed in a related area. It is a survey of microcomputer applications, architectures, and availability, including the process of evaluating, ordering, and assembling kits and basic machine language programming. This course is for those interested in building their own computer systems. Desirable background includes strong foundations in high school mathematics, fundamentals of electricity and electronics, and/or basic concepts in data processing.

**BLR 0312 Blueprint Reading**

This course is designed as supplementary instruction for persons already employed in the field. The student will learn the proper procedure in the reading and interpretation of blueprints and architectural drawings, and from such designs compute labor, material, and equipment costs for construction work.

**BLR 0390 EMP Blueprint Reading**

The course is designed to meet the needs of the employers and underemployed employees in the blueprint reading field.

**CAP 0309 Carpentry I**

This course is designed specifically for job entry training in general carpentry work involved in erection of wooden building frames, installation of exterior and interior trim, floor-laying, form building, scaffold construction, stair-building, and other similar types of woodwork.

**CAP 0310 Carpentry II**

Continuation of CAP 0309.

**CAP 0311 Carpentry III**

Continuation of CAP 0310.

**CAP 0315 Carpentry**

This course is designed primarily for apprenticeship instruction and its contents will include training in general carpentry work involved in erection of wooden building frames, installation of exterior and interior trim, floorlaying, form building, scaffold construction, stair building, and other similar types of woodwork.

**CAP 0395 EMP Carpentry**

The course is designed to meet the needs of employers and under-employed employees in the carpentry industry.

**CEQ 0115 Operating Engineering**

This course is designed primarily for apprenticeship instruction. Its contents will include proper procedure in the maintenance and operation of selected power construction equipment ranging from air compressors to steam shovels.

**CGC 0011 Child Growth & Development High School Cr. 1**

A study of the child from prenatal through pre-school age with emphasis on physical, social, emotional and mental development. Cultural and environmental influences on the child will also be incorporated into this course.

**CGC 0015 Day Care Administration and Supervision**

This course is for the individual who is working in a child care center or wishes to expand work in or is working in day care administration and supervision. Areas to be covered include setting up a program; personnel management, fiscal management, systematic planning for day-to-day operations, public relations, evaluation, and human relations.

**CGC 0020 Making Child Care Teaching Materials**

This course is designed to teach students how to make child care teaching materials at little or no cost. It is especially appropriate for the individual who is already employed in the child care field.

**CGC 0025 Child Day Care Worker In-Service Training**

This course is designed to assist child day care workers in improving, on site, the quality of their care of young children. The areas of training to be covered, according to need, are child growth and development; child care programming and activities; health and safety practices; nutrition and good eating habits; design and use of physical space; working with parents; community health and social service resources; day care for multi-lingual children; day care for handicapped children; day care home administration; and handling behavior problems.

**CHD 0020 Growing With Your Young Child**

This class deals with the crucial and exciting first two years of a child's life. Parents will learn ways to enrich the physical, intellectual, and emotional growth of children six to 24 months of age. Common problems and needs of infants will also be discussed.

**CHD 0100 Child Development Associate Preparation Course**

This course is designed as supplementary instruction and is a competency-based, individualized, and predominately on-the-job training course designed to provide the student with the means of acquiring competencies needed to become a child development associate.

**CLT 0114 Specialized Clothing**

This course includes a combination of theory and laboratory and community experiences and is designed for students who have mastered basic construction skills. Major concepts include advanced construction techniques, special fitting problems, use of special fabrics and trims, design details, designer patterns, linings and underlinings, and special finishing techniques. The instructional activities include the construction of selected items such as bridal and evening wear, men's wear, children's wear, swimwear, lingerie, sportswear and fashion accessories. Concepts in management, safety, free enterprise, and consumer and economic education are taught as they relate to instruction.

**CLT 0310 Basic Clothing Construction**

This course is designed specifically for job entry training and is planned for the person who has had little or no experience in recently developed techniques in clothing construction and includes a study of pattern selection including body measurements and simple alterations; fabric selection and preparation with emphasis placed on "easy-to-sew" patterns and fabrics; selection, use, and care of modern sewing and pressing equipment; completion of a simple garment; and selection of suitable accessories.

**CLT 0311 Basic Clothing Construction High School Cr. 1**

This course is planned for the person who has had little or no experience in recently developed techniques in clothing construction and includes a study of pattern selection including body measurements and simple alterations, fabric selection and preparation with emphasis placed on "easy-to-sew" patterns and fabrics, selection, use, and care of modern sewing and pressing equipment, completion of a simple garment, and selection of suitable accessories.

**CLT 0312 Basic Clothing Construction**

This course is designed as supplementary instruction for homemakers. The student will learn the proper procedure involved in developing techniques in clothing construction and the course includes a study of pattern selection including body measurements and simple alterations, fabric selection and preparation with emphasis placed on "easy-to-sew" patterns and fabrics, selection, use, and care of modern sewing and pressing equipment, completion of a garment, and selection of suitable accessories.

**CLT 0313 Advanced Clothing Construction**

This course is designed as supplementary instruction for homemakers who have completed Basic Clothing Construction. It includes developing the ability to make more difficult pattern alterations, use of more complicated patterns, use and care of fabrics requiring special treatments and completion of at least one garment using more advanced techniques and details which give individuality to the garment that will be required.

**CLT 0314 Advanced Clothing Construction High School Cr. 1**

This course is designed for the person who has completed Basic Clothing Construction. It includes developing the ability to make more difficult pattern alterations, use of more complicated patterns, use and care of fabrics requiring special treatments and completion of at least one garment using more advanced techniques and details which give individuality to the garment that will be required.

**CMP 0506 Intermediate Clothing Construction High School Cr. 1**

This course is designed for the person who has completed Basic Clothing Construction, and includes a study of more difficult construction techniques and of fabrics more difficult to handle than were used in Basic Clothing Construction.

**CMP 0507 Basic Tailoring High School Cr. 1**

This course is designed for the person who has demonstrated proficiency in the skills of clothing construction and includes selection, use and care of fabrics suitable for tailoring techniques. The construction of a lined garment, such as a jacket, will be required.

**CMP 0508 Men's Clothing Construction High School Cr. 1**

This course is designed for the person who has demonstrated proficiency in the skills of clothing construction and would like to learn skills in making men's clothing. Included will be how to select and use a commercial pattern with appropriate alterations, if needed. The techniques for making polyester pants, men's shirts and ties will be demonstrated and the construction of these men's garments will be required. Industrial sewing will be utilized.



**CMP 0509 Alterations High School Cr. 1**

This course prepares the worker to alter and repair ready-to-wear garments for customers or retail shops or in their own homes as a private business. It involves an understanding of fabric handling, clothing construction, pressing, and training in fitting techniques. The approach of the course is based on the assumption that a successful alterationist must have a thorough understanding of garment construction in order to complete the necessary fitting changes.

**CMP 0510 Intermediate Clothing Construction**

This course is designed as supplementary instruction for homemakers who have completed Basic Clothing Construction, and includes a study of more difficult construction techniques and of fabrics more difficult to handle than were used in Basic Clothing Construction.

**CMP 0512 Basic Tailoring**

This course is designed as supplementary instruction for the person who has demonstrated proficiency in the skills of clothing construction and includes selection, use and care of fabrics suitable for tailoring techniques. The construction of a lined garment, such as a jacket, will be required.

**CMP 0513 Advanced Tailoring**

This course includes more difficult tailoring techniques with emphasis placed on fitting and acquiring more experience in working with woollens and other fabrics in making a tailored coat or suit. The course is designed as supplementary instruction for persons already employed in the field, or in a related field.

**CMP 0514 Men's Clothing Construction**

This course is designed for the person who has demonstrated proficiency in the skills of clothing construction and would like supplementary instruction in skills in making men's clothing. Included will be how to select and use a commercial pattern with appropriate alterations, if needed. The techniques for making polyester pants, men's shirts and ties will be demonstrated and the construction of these men's garments will be required. Industrial sewing will be utilized.

**CMP 0515 Alterations**

This course prepares the worker to alter and repair ready-to-wear garments for customers of retail shops or in their own homes as a private business. It involves an understanding of fabric handling, clothing construction, pressing, and training in fitting techniques. The approach of the course is based on the assumption that a successful alterationist must have a thorough understanding of garment construction in order to complete the necessary fitting changes.

**CMP 0516 Custom Dressmaking**

Course work includes supplementary techniques and skills in constructing custom made clothing. Students should acquire skills which will enable the student to become self-employed as a custom dressmaker.

**CMP 0517 Short Cuts in Sewing**

This course is designed for those who are proficient in the better clothing construction techniques but would like to make quick, casual clothes and children's clothes. This course will include supplementary instruction in short cuts in marking, construction, and finishing. Factory methods and the use of industrial machines will be emphasized.

**CMP 0519 Short Cuts in Sewing High School Cr.1**

This course is designed for those who are proficient in the better clothing construction techniques but would like to make quick, casual clothes and children's clothes. This course will include short cuts in marking, construction, and finishing. Factory methods and the use of industrial machines will be emphasized.

**CMP 0520 Fashion Design & Flat Pattern Drafting**

This course is designed for students with prior experience in clothing construction who are interested in designing garments for themselves and others. Major concepts of the course include the influence of individuals on fashion, fashion history, elements and principles of design and their application to fashion, and designing and constructing a garment. Persons with complicated fitting problems and those who wish to create individual fashions will benefit from the course.

**COR 0418 Basic Training for Correctional Officers**

The basic training for correctional officers is designed specifically for job entry training to give each student a basic understanding of the duties and responsibilities of the line correctional officer. In addition, it is designed to give the student an overview of the other related fields within the criminal justice system. Specific areas in which the student will receive instruction include operational procedures, legal aspects of corrections, supervisory practices and related technical skills. NOTE: Course is restricted to individuals sponsored with intent of employment by area law enforcement agencies.

**COR 0425 Specialized Corrections Training**

This course is designed to provide supplementary specialized instruction of area corrections personnel. Specific areas of instruction include numerous highly specialized subjects such as cause, effect and treatment of alcoholism, institutional crisis intervention; hostage negotiation, inmate classification; civil and legal rights of the confined; and correctional treatment techniques.

**COR 0426 In-Service Corrections Training**

This course is designed to provide supplementary in-service instruction of area corrections personnel. Specific areas of instruction include numerous subjects such as institutional and non-secure procedures; mechanics of search; fingerprinting; contraband control; discipline; interpersonal communications; counseling and guidance; offender treatment; medical, social and volunteer services; records and report writing; first aid; and firearms.

**COY 0309 Cosmetology I**

This is an introductory course and is designed to provide students with the essential concepts in the field of Cosmetology. In addition to classroom instruction, this course will introduce, through laboratory experience, all of the major concepts and practices of Cosmetology.

**COY 0310 Cosmetology II**

Prerequisite: COY 0309 or consent of professor. This course includes a combination of theory and working in the laboratory. Major concepts and practices introduced in COY 0309 will be continued. Intermediate skills will be developed on clients in the school-operated salon.

**COY 0311 Cosmetology III**

Prerequisite: COY 0309 and COY 0310 or consent of the professor. Theory and practices included in the State Board preparation are emphasized. In addition, a practical application of skills and techniques with emphasis on speed will be stressed in an effort to get the student's performance up to an employment competency level.

**DEA 0912 Dental Assisting Seminar**

This seminar is designed as supplementary instruction to upgrade skills of dental assistants and dental hygienists.

**DEH 0912 Post-grad Dental Hygiene Clinic**

This course is taught in a clinical situation with student/patient contact to upgrade skills of dental hygienists and dental assistants.

**DIM 0109 Diesel Engine Mechanics**

This course is designed as supplementary instruction for persons already employed in the field or in a related field. Instruction will include theory, maintenance procedures, and safety precautions associated with diesel powered engines.

**DIM 0313 Truck & Diesel Mechanics I**

This course is designed specifically for job entry training in theory, diagnosis, maintenance, and repair of light and medium duty trucks and fork lift equipment.

**DIM 0314 Truck & Diesel Mechanics II**

Continuation of DIM 0313.

**DIM 0315 Truck & Diesel Mechanics III**

Continuation of DIM 0314.

**DIM 0390 EMP Diesel Mechanics**

This course is designed to meet the needs of employers and underemployed employees in the diesel mechanics industry.

**DIM 0395 EMP Truck Mechanics**

This course is designed to meet the needs of employers and underemployed employees in the truck mechanics industry.

**DTG 0312 Drafting**

This course is designed as supplementary instruction for persons already employed in the field or in a related field. The student will learn proper procedure in the preparation of clear, complete and accurate working plans and detail drawings from rough or detailed sketches or notes for engineering or manufacturing purposes according to specified dimensions.

**ELS 0112 Basic Electronics**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will learn the proper procedure in the installation, maintenance, and repair of electronically controlled and operated distribution systems used in industry and commercial businesses.

**ELS 0119 Radio Operators Training Course**

This course is designed as supplementary instruction in radio operating procedures and FCC regulations as they apply to amateur radio operators. Training in the International Morse Code, and Basic Electronic Theory is included. The student will have the opportunity to take the Novice Class Radio Operators license test upon completion of this course. Tests are supplied by the Federal Communications Commission (FCC) and only those passing this exam will receive their operators license.

**ELS 0120 Examination Preparation: Radiotelephone Operators License**

A 64-hour review of material for the Federal Communications Commission Commercial Radiotelephone Operators Licenses including communications laws, operating procedures, basic and advanced electronic theory and examination procedures.

**ELS 0309 Industrial Electronics I**

This course is designed to prepare a person for full-time employment in the industrial electronics field. Included in the course are theory, trouble shooting, testing, and safety precautions.

**ELS 0310 Industrial Electronics II**

Continuation of ELS 0309.

**ELS 0311 Industrial Electronics III**

Continuation of ELS 0310.

**ELS 0313 Marine Electricity I**

This course is designed to prepare a person for job entry and full-time employment in marine electricity; it includes theory, trouble shooting, testing, safety precautions, and good work habits.

**ELS 0314 Marine Electricity II**

Continuation of ELS 0313.

**ELS 0315 Marine Electricity III**

Continuation of ELS 0314.

**ELS 0390 EMP Marine/Industrial Electricity**

This course is designed to meet the needs of employers and underemployed employees in the marine/industrial electricity field.

**ELS 0410 Examination Preparation: Certified Electronics Technician**

This course is designed to prepare students for the National Organization of Certified Electronic Technicians' Examination covering television signals, transmission lines, electronic components, solid state electronics, A/C theory, and television/radio construction. The Certified Electronics Technician exam will be administered at the final class meeting and is industry-approved.

**EME 0010 Basic Emergency Care**

This is an approved Department of Transportation course for persons already employed in the field, and not interested in college credit. This course can be used for re-certification as an EMT.

**EME 0011 Basic Review Emergency Care**

This is a 20-hour refresher course for those already employed in the field who need a review for three-year re-certification by the Division of Health.

**EME 0012 Advanced (Rescue) Emergency Care**

This course is designed as supplementary instruction and includes a review of life saving procedures, intravenous fluid therapy and use of various equipment, such as defibrillators and synchronizers.

**EME 0014 Emergency Medical Technology Seminar**

This seminar is designed as supplementary instruction to upgrade the skills of the working emergency medical technician.

**EME 0018 Basic Life Support**

This course is designed as supplementary instruction to provide a periodic update on cardio-pulmonary resuscitation.

**EME 0020 Basic Life Support Instructor**

This course is designed as supplementary instruction to enable those with the Basic Life Support programs in health careers to become instructors.

**EME 0024 12 Lead Electrocardiogram**

This course is designed for supplementary training and includes an application of technical principles in actual operation of laboratory, following didactic presentation of principles. It also includes a study of electrodes, electrode application, montages, recording techniques, observation of laboratory operation and practice of electrode application under supervision.



**ENR 0003 Gasoline Engine Mechanic**

This course includes training in the inspection and repair of the mechanical equipment of gasoline powered engines (other than automobile and truck), including motor testing, carburetor adjusting, fuel line cleaning, generator adjusting, valve replacing and grinding, piston ring installing, and replacing broken or damaged parts. This course is designed primarily for off-campus supplementary instruction.

**ENR 0010 Gas Turbine Engine Mechanics**

This course is designed as supplementary instruction for persons already employed in the field or in a related field. Instruction will include theory, maintenance procedures, and safety precautions associated with gasoline turbine engines.

**ENR 0309 Gasoline Engine Mechanic I**

This course is designed specifically for job entry training in the inspection and repair of the mechanical equipment of gasoline-powered engines (other than automobile truck), including motor testing, carburetor adjusting, fuel line cleaning, generator adjusting, valve replacing and grinding, piston ring installing, replacing and grinding, and replacing broken or damaged parts.

**ENR 0310 Gasoline Engine Mechanic II**

Continuation of ENR 0309.

**ENR 0311 Gasoline Engine Mechanic III**

Continuation of ENR 0310.

**ERE 0010 Professional Engineers Refresher Course**

A review of theory and current design practice in the major engineering disciplines. This course provides guidance and orientation in preparation for State Board Examinations for Professional Engineers Registration. This course is designed primarily for off-campus supplementary instruction.

**FAR 0008 Family Relationships High School Cr. 1**

This course places emphasis on the needs and interests of various family members ranging from youngest to oldest and on ways of adapting daily activities and home facilities for greatest satisfaction of family members. Opportunity for consideration of individual problems will be provided.

**FAR 0010 Parenting the Foster Child**

This is a specialized parenting skills course for foster parents. Through methods of active participation which will include small group interactions, participants will have an opportunity to expand their knowledge and explore new skills for meeting the special demands of caring for a foster child.

**FAR 0012 Parenting Your Teenager**

This course presents the developmental process of adolescence as it occurs within the context of the rapidly changing American family. The course explores several general issues: family communication, values system, problem solving, conflict resolution, and setting limits. Specific areas such as drug and alcohol use and abuse, sexuality and planning for the future will also be addressed.

**FCR 0410 Credit Administration**

This course, designed as supplementary training for persons employed in a related field, concerns itself with a statement and discussion of factors influencing and determining loan policies. Methods of credit investigations and analysis, credit techniques, collection methods, specific credit problems, and regular, as well as unusual types of loans, are outlined and discussed.

**FCR 0411 Investments**

Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this supplementary training course describes the nature of such funds and how their uses are determined. It also analyzes the primary and secondary reserve needs of commercial banks, the sources of reserves, and their random and cyclical fluctuations, showing the influence of these factors on investment policy. This analysis is followed by a study of yield changes as they affect a bank's long-term holdings.

**FCR 0412 Bank Communication**

In this course, the student is given an opportunity to study all phases of speech situations. The text is directed primarily to the student already employed in, and seeking to become proficient in, the communication field of banking. This course will help prepare the student in proper procedures on the public platform, and other speech situations. Having studied the basic principles involved in organizing and presenting a speech, the student is given suggestions to aid in developing speaking ability in such situations as conferences, panel discussions, radio, and television.

**FCR 0413 Investments Securities**

This course is designed as supplementary training for persons already employed in a related field. It helps the student to understand how the stock market works, the important role it plays in our nation's economy, and how it helps people share in the growth of our business enterprises.

**FCR 0415 Bank Teller Training**

This course is designed as job entry training to enable individuals to quickly function efficiently on the job as new tellers. Also, tellers with experience can strengthen specific skills and become aware of the professional aspects of their jobs. Teller training can improve performance and attitudes towards co-workers and customers.

**FCR 0420 Savings and Loan Principles**

This course stresses the basic principles of savings and loan organizations and explains the procedures involved in their operation. It is designed specifically as supplementary training for persons employed in a related field.

**FCR 0421 Banking Business Administration**

In this course, emphasis is placed on the managerial responsibility of coordinating carefully the many facets of a business enterprise. It also stresses the background of administration, financial management, production, labor-management relations, marketing, coordination and control, and public relations problems. It is designed specifically as supplementary training for persons employed in a related field.

**FCR 0423 Commercial Law and Banking**

This course, designed specifically as supplementary training, is an introduction to law for bankers. Among the legal topics considered are jurisprudence, the court system and civil procedure, contracts, quasi-contracts, property, torts and crimes, and agency. The standard commercial law subjects, including corporations and partnerships, are discussed. Though commercial law principles are broadly presented, attention is concentrated on the Uniform Commercial Code.

**FCR 0424 Economics of Banking**

This course sets forth the current principles explaining how our economic system operates and is designed specifically as supplementary training for persons employed in a related field. It takes up the determination of relative value in markets with different types of competition, and applies the underlying principles to incomes and commodities. Also includes the basics of international economics and finance, and the limitations and related pitfalls of economics.

**FCR 0426 Trust Function Services**

This course is designed specifically as supplementary training and presents a complete picture of the services rendered by institutions engaged in trust business. It endeavors to keep clear the distinction between business and legal aspects of trust functions.

**FCR 0427 Bank Accounting**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. It is based on a new second edition text that supplies a comprehensive treatment of all up-to-date principles and also gives the student ample opportunity through examples, illustrations, and correlated activities to learn how the principles are applied. End-of-unit summaries have special sections for both principles and managerial implications.

**FCR 0430 Banking Psychology**

This course is designed specifically as supplementary training for students in business and technical fields. It is also suitable for personal enrichment. This course includes group dynamics, leadership, ethics, motivation and morale, social systems, formal and informal organizations, and other selected topics.

**FCR 0431 Analyzing Financial Statements**

This course is organized into two main sections: Characteristics of Financial Statements and Financial Statement Analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. This course is designed specifically as supplementary training for persons employed in a related field.

**FCR 0432 Banking Principles**

This course is designed specifically as supplementary training and presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view the profession in a broad (and operational) perspective. The descriptive orientation is intentional. Banking is increasingly dependent upon personnel who have the broad perspective so necessary for career advancement.

**FCR 0433 Money and Banking**

This course is designed specifically for supplementary training for persons employed in a related field. It stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply the student's knowledge to the particular job. Historical treatment has been kept to a minimum. Emphasis is also placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, government fiscal policy, balance of payments and foreign exchange yield curves and the structuring of portfolios.

**FCR 0436 Banking Installment Credit**

This course is designed specifically as supplementary training for persons employed in a related field. It concisely presents the techniques of installment lending. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, and collecting the amounts due. Each phase of a bank's installment credit operation should be carefully scrutinized to be certain that the most efficient methods are employed, for only through an efficient operation can a bank maximize its profits on this particular kind of credit. Other topics discussed are inventory financing, special loan programs, business development and advertising, and the public relations aspects of installment lending.

**FCR 0440 Credit Union**

This course is designed to provide the knowledge and tools necessary to make credit union employees more professional and better informed and to attain leadership qualities which are very important today.

**FIF 0310 Fire Fighter Minimum Standards Course - Phase I**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. Specific areas of instruction for this phase include overview of the fire service, apparatus and equipment, fire chemistry and behavior, and tools and small equipment.

**FIF 0311 Fire Fighter Minimum Standards Course - Phase II**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. Specific areas of instruction for this phase include care and use of protective breathing equipment, ladders, types and use of portable fire extinguishers.

**FIF 0312 Fire Fighter Minimum Standards Course - Phase III**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. Specific areas of instruction for this phase include fire streams, fire extinguishment, forcible entry, and fireground salvage work.

**FIF 0313 Fire Fighter Minimum Standards Course - Phase IV**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. In this phase specific instruction is provided in the construction, care, and proper use of fire hose.

**FIF 0314 Fire Fighter Minimum Standards Course - Phase V**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. Specific areas of instruction for this phase include fire building overhaul practices, ventilation, fireground rescue, in-service inspections, and emergency vehicle operations.

**FIF 0315 Fire Fighter Minimum Standards Course - Phase VI**

This course is designed to provide elementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. In this phase specific instruction is provided in first aid in the fire service.

**FIF 0316 Fire Fighter Minimum Standards Course - Phase VII**

This course is designed to provide supplementary instruction of area volunteer fire fighters in partial fulfillment of the State Fire Fighter Minimum Standards Curriculum. Specific instruction is provided in liquid, structural, gas and electric burns.

**FIF 0411 Fire Fighters' Leadership Course**

This course is designed to provide fire service officers with leadership techniques and skills. It will include leadership types, responsibility of leadership, fire fighting tactics, etc. Note: course is restricted to in-service personnel.



**FIF 0413 Fire Pump Operators Course**

The student will be introduced to the operation and care of fire pumps. In addition, the student will be provided with an understanding of pump construction and the working principles surrounding its operation. Note: course is restricted to in-service fire fighters.

**FIF 0415 Fire Officer Instructor Course**

This course is designed for persons already employed in the field. The student will learn the purpose and types of training necessary in fire department operations. In addition, selection criteria for instructors and utilization of training equipment will be presented.

**FIF 0417 Fire Stream Practices**

The student will be provided with instruction pertaining to various kinds of pressure, friction loss formulas, etc. In addition, supplying standpipe, sprinkler system, and snorkel will be addressed. Note: course is limited to in-service fire fighting personnel.

**FIF 0418 Fire Ground Tactics & Procedures**

Students will be provided with instruction concerning the development of principles dealing with command and control, familiarization with apparatus tools and equipment, fire ground strategy, etc. Note: course is restricted to in-service fire fighters.

**FIF 0419 Aerial Ladder Operations**

The fire fighter will be instructed in trusses and construction, hydraulic systems, stabilizing jacks, ladder pipes, etc. Note: course is limited to in-service fire fighting personnel.

**FIF 0420 Hazardous Materials**

This course is divided into two sections. The first of these deals with why materials explode, why they are unstable, and how they react with water, air, and each other. The second section explores toxicity.

**FIF 0422 Fire Fighter Minimum Standards Course**

This course is designed to prepare a student for certification and initial employment as a fire fighter in the State of Florida. Successful course completion will qualify a student to take the minimum standard written, oral, and practical examination as administered by the Bureau of Fire Standards and Training. Note: course is restricted to individuals sponsored with intent of employment by area fire departments.

**FIF 0424 Emergency Vehicle Operations Course**

This course is designed for supplementary training and will focus on the construction, maintenance, use, and operation of fire service vehicles. Attention is given to vehicle nomenclature, safe driving practices, apparatus operations, and safety.

**FMC 0311 Office Practice**

This course is designed specifically as supplementary training for persons in a related field. Instruction includes filing, ten-key adding machine, key driven and electronic calculator, duplicating (spirit and mimeograph), and basic record keeping.

**FMC 0312 Office Machines**

The types of machines used in a particular class are determined by the needs of the group for whom instruction is provided. Emphasis is placed on the use of the machines in the bookkeeping process. Content of the course is selected from realistic business problems and actual business forms. This course is designed for persons already employed in the field, or in a related field, for supplementary instruction.

**FMC 0320 Office Practice I High School Cr. ¼**

This is a course designed to give students an understanding of important clerical functions performed in offices and to develop a comprehension of the application of these functions to related office procedures. Units covered will include basic skills for office jobs, processing data, mailing and shipping services, business filing, records management, receptionist duties, and telephone and telegraph services.

**FMC 0322 Office Practice II High School Cr. ¼**

Prerequisite: FMC 0320. This is a course designed to give students an understanding of important clerical functions performed in offices and to develop a comprehension of the application of these functions to related office procedures. Units covered will include producing mailable letters, office typewriting, purchasing and receiving, selling, inventories, financial duties, copying and duplicating, and a business career.

**FMC 0324 Office Machines I High School Cr. ¼**

A study of the ten-key adding machine, printing calculator and electronic calculator, including a practice set using the machines studied. The course develops skills in solving business problems.

**FMC 0326 Office Machines II High School Cr. ¼**

Prerequisite: FMC 0324. Advanced work on the common office machines used in FMC 0324. The course entails development of percentages, ratios, and the mathematical formulae used in business operations.

**FMD 0010 Industrial Supervision and Foremanship**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It includes training in the supervision of workers by studying and interpreting blueprints, sketches, and written or verbal orders, determining procedure of work, assigning duties, and inspecting work of quality and quantity production; time-keeping, production record keeping, and other record keeping, employing, training, and discharging workers, and setting up and inspecting equipment prior to regular operation and other areas necessary for successful supervision.

**FMD 0390 EMP Industrial Supervisory Development**

This course will be designed to meet the needs of employers and underemployed persons in industry.

**FMD 0395 EMP Construction License Review**

This course is designed as supplementary training to assist students in obtaining necessary skills to pass the construction licensing examination.

**FOD 0012 Waiter-Waitress Training**

This course covers techniques used in greeting guests, seating them, taking orders, serving food, proper sanitation practices, and suggestive selling to aid uncertain customers. It is designed specifically as supplementary training for persons employed in a related field.

**FON 0002 Nutrition**

This course, designed for homemakers, includes a study of the basic principles of nutrition and their application, the relation of food selection to health, and ways to improve poor dietary practices. Attention is given to planning and preparing family meals which may be easily adapted to the special needs of all age groups. Concepts in management, consumer education, sanitation, and safety are taught as they relate to instruction.

**FON 0003 Basic Principles of Nutrition**

This course is designed as supplementary instruction for persons working in a related field, and includes a study of the basic principles of good nutrition and the relation of food selection to health. The aim is to interpret nutrition in terms of its practical application in the planning, preparing, and serving of meals and relating these meals to the other food for the week. It also aims to develop an understanding of daily dietary allowances for various age groups and the responsibility for providing these. It includes information on foods with maximum nutritive value and how to purchase, store, and prepare them in order to retain these values to the maximum.

**FON 0007 Low Calorie Cooking**

The student will acquire knowledge and demonstrate skill in planning and preparing meals designed to promote weight loss. The student will study labels from prepared foods to determine food additives and compare costs of foods labeled "low calorie" or "dietetic" as opposed to non-dietetic brands. Ways to make low calorie dishes attractive and palatable will be emphasized. This course is specifically designed for homemakers.

**FON 0008 Low Cholesterol Cooking**

The student will acquire knowledge and skill in planning and preparing foods recommended by physicians and the Heart Association for inclusion in low cholesterol diets. Techniques for including these foods in family meals will be emphasized. This course is specifically designed for homemakers.

**FON 0104 Diet Therapy**

This course provides a scientific approach to food and nutrition and functions of the body processes. Emphasis is placed on the knowledge of types of foods related to specific disorders and the implementation of special diets as prescribed by physicians. Included will be diets low in sodium, calories, and cholesterol. This course is designed as supplementary instruction for homemakers.

**FON 0109 Bread Making**

This course includes a study of the ingredients and techniques involved in making and baking a variety of breads. Included will be a study of nutritive values, ingredients, methods of mixing, baking, storage and service of breads. Quick and yeast breads including sour dough breads and starters will be emphasized, as well as breads of foreign countries. This course is designed as supplementary instruction for homemakers.

**FON 0110 Specialized Foods**

This course includes a combination of theory and laboratory and community experiences. Major concepts include aesthetics of food; planning, selecting, preparing, serving and storing foods for special occasions; foreign cookery; creative cookery; alternative ways of serving food; food preservation methods; food garnishing; energy saving food preparation methods; and techniques in using specialized tools and equipment. Concepts in management, safety, free enterprise, and consumer and economic education are taught as they relate to instruction.

**FSM 0312 Quantity Cookery**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The student will learn proper procedure to improve quality and quantity of food served. It includes principles and techniques of quantity food production. Actual preparation of foods in quantity provides on-the-job experiences using principles and techniques learned. Trainees learn proper use and care of equipment, use of available serving tools to assure adequate portions, and gain experience in calculating and recording quantities of food used, adjusting and standardizing recipes for numbers to be served.

**FSM 0314 Supervised Food Service Worker**

This course is designed to prepare persons for employment in the food service area. The student will work, under supervision, in the preparation and serving of food in institutions such as hospitals, homes for the aged, nursing homes, children's homes, and day-care centers. Follows hygienic practices in preparing food for cooking, during the cooking process, serving and storing; follows safety regulations in use of all types of equipment and the handling of hot foods; uses the basic skills required in preparation of standard large quantity recipes for vegetables, salad and dressings, milk cookery, egg cookery, soups, meat, fish and poultry, quick breads, sandwiches and desserts; serves food at table or on trays according to situation. The student will organize work in relation to work space and within time limitations.

**FSM 0315 Food Service Supervision**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction which includes orientation to the food service department, organization and ethics, nutrition, menu making and planning, merchandising and procurement of food, principles of food preparation and service, housekeeping, safety, sanitation and personal hygiene supervision. Skills acquired prepare students for supervisory roles in hospitals, institutions and extended care facilities, day care centers, kindergartens, and homes for the aging. Suggested hours of training - 90 hours class work and 36 weeks evaluated work experience.

**FSM 0317 Basic Food Preparation**

This course is designed for homemakers, to include purchase procedures; use, care, storage and arrangement of equipment; and management of human and material resources. Specialized activities include experiences in planning, preparing, and serving food for a variety of occasions.

**FSM 0318 Supervised Food Service Worker High School Cr. 1**

The student taking this course works under supervision in the preparation and serving of food in institutions such as hospitals, homes for the aged, nursing homes, children's homes, and daycare centers. The student follows hygienic practices in preparing food for cooking, during the cooking process, serving and storing; follows safety regulations in use of all types of equipment and the handling of hot foods; uses the basic skills required in preparation of standard large quantity recipes; serves food at table or on trays according to situation; and organizes work in relations to work space and within time limitations.

**FSM 0320 Catering I**

This course is designed as supplementary training for persons employed in home or commercial catering. Instruction includes: menu planning for catered events; preparation and service of foods; purchase, use and care of equipment. Management of time and money; sanitation and safety; decoration and service of foods for special occasions. Special activities include field trips to commercial caterers and participation in commercially catered affairs.

**FSM 0322 Catering II**

This course is designed to provide supplementary instruction and give students an opportunity to apply knowledge and skills needed for home and commercially catered events. Instruction includes business practices, management, portion and cost control, and record keeping. Specialized activities include the actual catering of several events by the students.

**FSM 0510 Advanced Foods**

This course is designed as supplementary instruction for homemakers and includes the more specialized preparation of food for family meals such as meats, seafoods, poultry, vegetables, and desserts. Consideration will be given to budgeting, marketing, and storing foods, as well as table service for all occasions.



**FSM 0511 Organization and Management**

This course is designed as supplementary instruction to teach managers the fundamentals of organization (i.e., the characteristics of desirable organization, development of a functional organizational plan, establishment of a line of responsibility and authority, the various environmental factors which influence the organization, and management). The work plan, the relation of personnel to the organization, the difference in laws, regulations and policies, where responsibility lies in carrying them out, and the relationship of records to management control are all handled in detail.

**FSM 0512 Accounting and Reporting**

This course is designed to teach food service managers and accountants the principles involved in recording and reporting the activities of any quantity food service business. It includes a study of what constitutes a sound record keeping and reporting system, and provides daily practice in maintaining adequate records and reporting information clearly and accurately. This course is designed as supplementary instruction for persons already employed in the field, or in a related field.

**FSM 0513 Purchasing**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will learn the general principles of purchasing, knowledge of the different grades of food, how these grades are determined, and their importance in specifying quality and controlling costs. Also included is the study of marketing functions, laws, regulations, purchasing procedures, and necessary purchasing records.

**FSM 0514 Food Service Management**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The course will assist employees in finding and solving problems of quantity food service. It includes characteristics of a good food service, and its place in the total education program with comprehensive overview of the principles of menu planning, purchasing, food preparation and service, equipment use and care, sanitation and safety, personal cleanliness and grooming, and the value of a good working relationship within the organization and with the school community. Emphasis is placed upon the need for greater knowledge in operating school food services, to insure maximum benefits to the children and the need for continuous training.

**FSM 0517 Orientation to Food Service**

The students will explore employment opportunities in the food service industry, including job opportunities in hospitals, extended care facilities, restaurants, hotels, motels, fast food operations and private clubs. Emphasis is placed on the analysis and the acquisition of educational and personal competencies required for job success.

**FSM 0518 Sanitation and Safety**

The student will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. The student will identify causative agents of food-borne illnesses and demonstrate preventive techniques by adhering to sanitation standards. Emphasis is placed on methods of accident and fire prevention.

**FSM 0519 Menu Design and Food Merchandising**

The student will acquire knowledge and demonstrate skill in menu planning, costing and pricing menu items, and designing menu format. Effective merchandising methods in food display, advertising, and interior decorating will be utilized. Positive public relations techniques will be emphasized.

**FSM 0520 Food Service Apprenticeship I**

The student will acquire knowledge and skills needed by a professional cook in the food service industry, including orientation; sanitation, safety, and first aid; basic principles of cooking and meat preparation; use and care of equipment and other skills specified in the apprenticeship standards. Enrollment is limited to students who meet standards prescribed by the National Apprenticeship Training Program of the Educational Institute, American Culinary Federation. The duration of the training program is three years. The program is comprised of three courses.

**FSM 0521 Food Service Apprenticeship II**

The student will acquire knowledge and skills needed by a professional cook in the food service industry, including restaurant cookery; stocks, soups and sauces; vegetable preparation and cookery and other skills specified in the apprenticeship standards. Enrollment is limited to students who meet the standards prescribed by the National Apprenticeship Training Program of the Educational Institute, American Culinary Federation. The duration of the training program is three years. The program is comprised of three courses.

**FSM 0522 Food Service Apprenticeship III**

The student will acquire knowledge and skills needed by a professional cook in the food service industry, including: broiling, grilling and frying; breakfast cookery; baking, pantry operations; and other skills specified in the apprenticeship standards. Enrollment is limited to students who meet the standards prescribed by the National Apprenticeship Training Program of the Educational Institute, American Culinary Federation. The duration of the training program is three years. The program is comprised of three courses.

**FSM 0525 Child Care Food Handlers' and Managers' Course**

This course is designed to offer child care food handlers and managers with information on sanitation; nutrition and meal planning; child development; accounting and record keeping; and food purchasing and service.

**GMR 0310 Cashier - Sales - Checker**

This course is designed specifically for job entry training and includes instruction in the proper finger method of recording amounts on a cash register; to properly departmentalize sales; to handle taxable items; to process actual merchandise orders, handle cash, and balance cash drawers.

**GRA 0310 Printing**

This course is designed specifically for job entry training. The course consists of offset camera, platemaking, stripping, and small offset presses; letterpress composing, bindery and letterpress printing, including hand fed and automatic presses.

**HEE 0110 In-Service Training for Home Economics Teachers**

This course is designed to provide in-service training for part-time instructors in Home Economics programs. The course includes how adults learn, as well as teaching techniques and learning activities in relation to predetermined goals.

**HEF 0101 Slipcover Construction**

Course work includes instruction for homemakers in fabric selection; techniques of handling various fabrics, making cord, fitting cord to corners, and inserting zippers. Care of slipcovers is also included. This course is designed for persons already employed in the field, or in a related field, for supplementary instruction; however, intensive study could develop job entry level skills.

**HEF 0102 House Design**

This course is designed for homemakers as supplementary instruction. It involves the functional planning of interiors. There will be a series of exercises in analyzing and evaluating plans to develop good judgment when buying or building a house. These exercises will cover the following aspects: family living and needs in a house, choosing a site; climate; construction blueprints; plumbing; heating, and electrical provisions; historic backgrounds of houses; architectural style and understanding the architect's role; evaluating a ready-built place; legal guides; planning kitchens and storage areas; remodeling an old house; landscaping design, field trips to reinforce classroom exercises.

**HEF 0103 Interior Design High School Cr. 1**

This course includes a study of the ways in which attractive and livable interiors can be planned in relation to individual and family housing situations and incomes, choosing and combining line, color, design and various materials, and wall, window and floor treatments as they relate to other phases of decoration. Practical information concerning choice of furnishings and equipment will be included. This course may include construction of slipcovers, draperies, curtains, and bedspreads.

**HEF 0104 Interior Design**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It includes a study of the ways in which attractive and livable interiors can be planned in relation to individual and family housing situations and incomes, choosing and combining line, color, design and various materials, and wall, window and floor treatments as they relate to other phases of decoration. Practical information concerning choice of furnishings and equipment will be included.

**HEF 0105 Advanced Interior Design**

This course is designed as supplementary instruction for the person who has completed HEF 0104, Interior Design. It includes advanced study of the elements and principles of design.

**HEF 0310 Drapery Construction**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. Course work includes instruction in choosing fabrics, construction of various types of curtains and draperies, and selection of hardware. A comparison of cost factors is also included. Intensive study could develop job entry level skills.

**HEF 0312 Furniture Reupholstery**

This course includes the selection of tools, materials and equipment; use of power equipment; dismantling of furniture; basic construction processes; fitting the muslin cover; planning and preparing the fabric platform cover; planning and preparing the panels, outsides and trimmings; pleated skirts, dust ruffles, and making cushions. This course is designed for persons already employed in the field, or in a related field, for supplementary instruction; however, intensive study could develop job entry level skills.

**HEF 0313 Advanced Reupholstery**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. This course includes channeling, tufting, making skirts, repairing, and spot touch-up of furniture, color and color schemes, and headboards; however, intensive study could develop job entry level skills.

**HOF 0001 Household Care, Repair, and Maintenance**

This course is designed as supplementary instruction directed toward making the home owner self-sufficient in handling minor care, repair, and maintenance problems. The content includes problems with electric power, plumbing emergencies, care and repair of floors and floor coverings, interior painting, wallpapering, furniture care and repairs, miscellaneous repairs, tools needed, safety, and combating pests and fungi.

**HOF 0002 Home Accessories**

This course is designed as supplementary instruction, and includes application of techniques and skills in making new, or reworking used, accessory items for the home. Project possibilities: bedspreads, dust ruffles, pillow shams, ottomans, hassocks, wall hangings, lamps, lampshades, curtains, window shades, linens, waste baskets, storage boxes, candle making, candle holders, small braided or hooked rugs, and other accessory furnishings in which an interest may be expressed by students.

**HOF 0005 Housing and Home Furnishing Techniques for Modern Homemakers**

This course includes planning, selecting and utilizing equipment, furniture, accessories and household textiles; furniture renovation; energy conservation; home improvement; and home maintenance. Concepts in management, safety, free enterprise, and consumer and economic education are taught as they relate to instruction. The course also includes a combination of theory, laboratory and community experience.

**HOM 0001 Management and Family Economics**

This course is planned as supplementary instruction for the homemaker or potential homemaker. The purpose of the course is to relate the use of time, energy, and money to the attainment of the individual, family, and occupational goals. Specific topics included are care and upkeep of the home and furnishings with the least expenditure of time, energy, and money, while considering the benefit and satisfaction of the individual, as well as the family unit. Consumer education is emphasized.

**IEL 0309 Construction Electricity I**

This course is designed specifically for job entry training which includes the installation of wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.

**IEL 0310 Construction Electricity II**

Continuation of IEL 0309.

**IEL 0311 Construction Electricity III**

Continuation of IEL 0310.

**IEL 0315 Construction Electricity**

This course is designed primarily for apprenticeship instruction, and its contents will include the proper procedure for installation of wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.

**IEL 0316 Electric Wiring**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The student will be trained in installation of wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.



**IEL 0317 Electric Wiring**

This course is designed primarily for apprenticeship instruction and its contents will include the proper procedure to install wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.

**IEL 0390 EMP Construction Electricity**

This course is designed to meet the needs of employers and underemployed employees in the construction electricity industry.

**INM 0010 Home Management/Personal Safety for the Blind**

This course focuses on the various abilities needed by blind adults for independent living. In the area of home management, the student will be introduced to problems of maintaining a home effectively, including budgeting, nutrition, and techniques allowing a blind person to cook safely and clean efficiently. In the Communication Component, the student may learn Braille, typing, the use of handwriting aids designed for the visually impaired and the use of electronic equipment. Personal safety is emphasized in orientation and mobility training which enables a person to move about the environment safely and to master skills necessary for independent travel.

**INM 0020 Household Management Specialist**

This course is designed to prepare students for various levels of employment in institutional and household management services. Instruction includes a combination of laboratory and community experiences in specific phases of home management and services. Included in the training program is an overview of home management employment opportunities, basic employability skills, human relations, and work laws and regulations. Training also includes house cleaning techniques; use, care and storage of household materials and supplies; care of home furnishings; preparation, service and storage of foods; elementary care of elderly, children and convalescents, management of time, energy and resources; and work simplifications and motion economy knowledge in coordinating home management responsibilities.

**INS 0210 Principles of Insurance**

This course, designed specifically as supplementary training, will seek to develop principles that can be used in understanding insurance companies' contracts and practices. The approach will be essentially functional. Emphasis will be on the presentation of principles and explanations of practices. Methods of comparing the relative cost will be presented.

**INS 0216 Principles of Health Insurance**

This course is designed as supplementary instruction for persons already employed in the field. It is an introduction to health insurance and covers health losses and protection, expense and income coverage, and health insurance, its growth, and many areas of coverage offered by government, commercial, and Blue Cross-Blue Shield organizations.

**INS 0220 CLU - Investments and Family Financial Management**

This course is designed specifically as supplementary training and includes a study of various aspects of investment principles and their application to family financial management. Included are the subjects of yields, limited income securities, growth factors, and analysis of financial statements. Also discussed are family budgeting, property insurance, mutual funds, variable annuities, and aspects of other investment media.

**INS 0222 CLU - Life Insurance and Company Operations**

This course is designed specifically as supplementary training and includes a study of legal aspects of contract formation, policy provisions, assignments, ownership rights, creditor rights, beneficiary designations, disposition of life insurance proceeds and settlement options. Also, the course discusses types of insurers, risk selection, company investments, financial statements, and regulation and taxation of companies.

**INS 0224 LUTC - Personal Insurance**

This course is designed specifically as supplementary training and includes a study of the value of life insurance; qualities of a successful life agent; the life agent's work, habits, and self-discipline; self-evaluation; what life insurance is capable of providing; how to convert to commission dollars; the prestige of the life agent; programming; and the keys to the sale.

**INS 0225 LUTC - Business Insurance**

This course is designed specifically as supplementary training and includes a study of sales and purchase agreements; analysis of life insurance needs in the business market; professional stature; the business insurance approach; the key man; the language of business; how life insurance can be used to offset losses due to taxes; probate costs; attorneys' fees; final expenses in liquidation; on-the-spot successful sales presentations; and techniques used to acquaint business owners with the perils they face.

**INS 0226 LUTC - Disability Income Insurance**

This course is designed specifically as supplementary training and includes a study of the growing need for coverage; public awareness; advantage of being a switch hitter; steps in becoming an income replacement specialist; tax advantages of disability income insurance; and overcoming objections.

**INS 0228 CLU - Pension Planning**

This course is designed specifically as supplementary training and includes a study of the basic features of private pension mechanisms, including tax considerations, cost factors, funding instruments, profit-sharing plans and tax sheltered annuities.

**INS 0229 CLU - Economics**

This course is designed specifically as supplementary training and includes a study of economic principles, the government and banking institutions which have an effect on the national economy, national income, theory and application of price determination, business cycles, money and banking, international trade and finance, and problems of economic growth.

**INS 0230 LOMA - Fundamentals of Life Insurance**

This course is designed specifically as supplementary training and includes a study of the nature of modern life insurance, plans for life insurance, the level premium system, terms of the policy, legal aspects of life insurance, death and disability claims, health insurance, industrial insurance, group insurance and social security.

**INS 0231 LOMA - Life Company Operations**

This course is designed specifically as supplementary training and includes a study made of the different types of life insurance organizations, home office and field office organization, mortality tables, premium calculation, risk selection, re-insurance, governmental regulation and taxation, investments of life insurance companies, financial statements, and new ideas and planning in the business of life insurance.

**INS 0232 LOMA - Legal Aspects of Life Insurance**

This course is designed specifically as supplementary training and includes a study of how the life insurance contract is formed and made valid, the rights of the policy owner and beneficiary and the life insurance contract in operation.

**INS 0233 LOMA - Life Insurance Accounting**

This course is designed specifically as supplementary training and includes a study of elementary commercial book-keeping, classifications of transactions, insurance entries, investment operations, punched card data processing, and fiscal period reporting.

**INS 0234 LOMA - Economics and Investments**

This course is designed specifically as supplementary training and includes a study of economics, income and growth, financial organizations, money and banking, income distribution, investment and security purchasing and purpose.

**INS 0235 LOMA - Mathematics of Life Insurance**

This course is designed specifically as supplementary training and includes a study of life insurance mathematics, compound interest, relation of mathematics to annuities, how to calculate premiums, reserves, dividends, and non-forfeiture values.

**INS 0236 LOMA - Office Administration - Agency and Home Office**

This course is designed specifically as supplementary training and includes a study of office organization, sales organization, office management, systems, data processing, office layout and personnel.

**INS 0237 LOMA - Advanced Life Insurance**

This course is designed specifically as supplementary training and includes instruction to provide students with more detailed knowledge of life insurance and company operations. It is intended primarily for career employees who wish to do intensive study in the business operations of a life insurance company and its more intricate characteristics. This course is considered to be a collegiate level offering and is divided into six parts. Parts 3-7 are considered to be core subject areas and Part 8 is listed as a specialized field of interest.

**INS 0240 CLU Advanced Estate Planning**

This course is designed specifically as supplementary training and includes a study of tax laws affecting estate planning (estate and gift income taxation of trusts and estates, and state death taxes) and the instrumentalities used in estate planning (wills, trusts, life insurance, business purchase agreements, powers of appointment and others) along with fact finding, analysis of facts, and presentation of a proposal. This course is designed for CLU's, CPA's, lawyers and trust officers.

**INS 0241 CLU - Individual Life - Health Insurance**

This course is designed specifically as supplementary training and includes a study of the role of life and health insurance in meeting economic security needs, types of individual and special life and annuity contracts, individual health insurance contracts including disability and medical expense insurance, and the arithmetic of life insurance as related to premiums, reserves, non-forfeiture values, surplus, and dividends.

**INS 0242 CLU - Group Insurance**

This course is designed specifically as supplementary training and includes an analysis of group life and group health insurance, including disability income and medical expense plans, marketing, underwriting, reinsurance, premiums, and reserves. Also, the course discusses socio-economic problems related to old age, unemployment and disability, and various plans that have been developed to meet these problems.

**INS 0243 CLU - Income-Estate, Gift Tax**

This course is designed specifically as supplementary training and includes a study of the federal income tax system with particular reference to the taxation of life insurance and annuities. The course deals with the income taxation of individuals, sole proprietorships, partnerships, corporations, trusts and estates.

**INS 0244 CLU - Accounting and Finance**

This course is designed specifically as supplementary training and includes a study of basic accounting principles, data accumulation systems, income measurement, valuation of assets and liabilities, and financial statement analysis. Also, the course includes business financial activities related to budgeting, short and long-term financing, and other items which will help the CLU candidate to better appreciate how life and health insurance fit into the financial structure of a business.

**INS 0245 CLU - Business Insurance**

This course is designed specifically as supplementary training and includes a study of business uses of life and health insurance, and partnership and corporation continuation problems and their solution through use of buy-sell agreements properly funded to preserve and distribute business values. Also discussed are other business uses of life and health insurance, and a section on human behavior and ethics in life underwriting.

**INS 0255 CLU - Estate Planning**

This course is designed specifically for supplementary training and includes a study of advanced subjects in life underwriting, emphasizing estate planning, disposition of property, administration of the property in trusts and estates, taxation of estates and gift transfers, and the effective use of life insurance toward minimizing financial problems. Note: The CLU Course 10 Examination must be taken last, or concurrently with any remaining examinations in the ten-course series for which a candidate needs credit.

**INS 0260 Personal Lines Underwriting**

The course presents the underwriting decision-making process to personal lines insurance. Also provides an in depth analysis of underwriting factors and the pricing of various types of personal lines insurance. The course provides preparation for the Insurance Institute of America (IIA) national examination; UND 62, Associate in Underwriting. Prerequisites recommended - 2 parts of the INS courses or completion of the Principles of Property and Liability Underwriting or equivalent underwriting experience.

**INS 0262 Principles of Property and Liability Underwriting**

The course is an introduction to the insurance underwriting function and analysis of the underwriting decision-making process. The course covers both individual risk underwriting and the underwriting management of written accounts. Other topics covered are: uses of reinsurance; analyzing underwriting information; communicating with producers; monitoring underwriting results; and principles of rate making. The course provides preparation for the Insurance Institute of America (IIA) national examination; UND 61 Associate in Underwriting. Prerequisites recommended - 2 parts of the INS courses (INS 21, 22, & 23) and/or 2 years underwriting experience or equivalent.



**INS 0265 Commercial Property & Multiple-Lines Underwriting**

This course presents the techniques of the underwriting decision-making process to the commercial property lines of insurance. There is heavy emphasis on analyzing frequency and severity of fire and other perils, real and personal property exposures and controls, indirect loss exposures, and marine risk. The course provides preparation for the Insurance Institute of America (IIA) national examination; UND 64, Associate in Underwriting. Prerequisites recommended — completion of Principles of Property and Liability Underwriting and Commercial Liability Underwriting or equivalent underwriting experience.

**INS 0267 Commercial Liability Underwriting**

This course presents the techniques of the underwriting decision-making process for the commercial liability lines of insurance. The course case studies cover not only the major types of commercial liability insurance (auto, general liability, worker compensation, products and professional liability), but also the handling of special accounts and large risks. The course provides preparation for the Insurance Institute of America (IIA) national examination; UND 63, Associate in Underwriting. Prerequisites recommended — completion of either Principles of Property and Liability Underwriting or equivalent underwriting experience.

**ITR 0010 Export and Import Practices**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It provides training for entrance into the export and import business. Preparation of forms for import and export duties and taxes on different classes of merchandise is included.

**LAE 0310 Basic Recruit Training for Police Officers**

This basic course is designed specifically to provide job entry training to give each student the basic knowledge and understanding required to satisfactorily perform the duties and responsibilities of the police patrol person. Specific areas of instruction include constitutional and criminal law, criminal evidence, court organization and procedures, patrol procedures, criminal investigation, police community relations, traffic control, juvenile procedures, civil disorders, first aid, defensive tactics and firearms training. Note: Course is restricted to individuals sponsored with intent of employment by area law enforcement agencies.

**LAE 0410 Police Refresher Course**

This course is designed to provide supplementary instruction of area law enforcement personnel. Specific areas of instruction include criminal law, criminal evidence, investigations, patrol procedures, traffic control, juvenile procedures, defensive tactics, firearms and first aid.

**LAE 0411 Police Intermediate Course**

This course is designed to provide supplementary instruction of area law enforcement personnel. Specific areas of instruction include the criminal justice system, law and legal procedures, police community relations, basic police procedures and techniques, police and traffic engineering, and firearms.

**LAE 0412 Police Advanced Course**

This course is designed to provide supplementary instruction of area law enforcement personnel. Specific areas of instruction include police supervision, basic staff work, advanced police procedures and techniques, and current law and court decisions.

**LAE 0413 Police Supervision Course**

This course is designed to provide supplementary instruction of area law enforcement personnel. Specific areas of instruction include principles of organization and management, techniques of working with people, plans and development, and personnel selection and training.

**LAE 0414 Police Mid-Management Course**

This course is designed to provide supplementary instruction of area law enforcement personnel. Specific areas of instruction include organization and management, decision making and planning, working with people, personnel development and evaluation, police records, operations, and current court decisions.

**LAE 0415 Police Executive Development Course**

This advanced course is designed to provide police administrative officers with an in-depth appreciation of their role and the forces bearing on it. The course provides for analysis of current dimensions of the managerial role to bring new perspectives to analyzing the police administrator's problems. Specific areas of instruction include the nature of managerial responsibility, development of a philosophy of management, development and maintenance of a sound organization and behavioral climate, and the effective use of financial resources.

**LAE 0416 Specialized Law Enforcement Training**

This course is designed to provide supplementary specialized instruction of area law enforcement personnel. Specific areas of instruction include numerous highly specialized subjects such as investigations of auto theft, burglary, counterfeiting, forgery, gambling, robbery and sex crimes; control of riots and violent civil disorders; crisis intervention; explosives and incendiary devices; forensic pathology and autopsy procedures; and tactical operations.

**LAE 0417 Basic Evidence Technician Course**

This course is designed to provide area police personnel supplementary specialized instruction required for qualification and assignment as an evidence technician. Specific areas of instruction include crime scene procedures; collection, preservation and identification of physical evidence; crime scene sketching; types of examinations; and photography.

**LAE 0422 Tests for Intoxication**

The student is instructed in the operation of a precision breath testing instrument and the operational principles and design functional features. In addition, the historical, technical, and legal background surrounding chemical testing is discussed. The procedures for processing a suspect, gathering and recording evidence, and maintaining the chain of evidence are also presented. Note: This course is restricted to in-service law enforcement personnel seeking State (Florida) certification.

**LAE 0525 Police Instructor Techniques Course**

This course is designed to provide supplementary specialized instruction of area law enforcement personnel. Specific areas of instruction include development of climate for student participation, factors related to student learning, role versus conceptual learning, the instructor's role, course development, demonstrations and use of training aid and resource material, and evaluation techniques.

**LAE 0526 In-Service Law Enforcement Training**

This course is designed to provide supplementary in-service instruction of area law enforcement personnel. Specific areas of instruction include numerous subjects such as accident investigation, arrest procedures, crime scene procedures, criminal law, first aid, firearms, human relations, juvenile diversion, investigations, organized crime, police discretion, patrol techniques, search and seizure, traffic law enforcement, and uniform crime reporting.

**LAE 0527 Auxiliary Law Enforcement Training**

This course is designed to provide supplementary instruction of several categories of auxiliary law enforcement personnel, including police reserves, service technicians, civilian supervisors, the various specialized posses, police explorers and parking enforcement specialists. Specific areas of instruction include basic law for police, administration of criminal law, investigations, patrol procedures, police community relations, civil disorders, traffic control, defensive tactics, firearms, first aid, and various areas designed for the specific mission of the auxiliary group.

**MAM 0010 Business Management**

This course is designed specifically as supplementary training for persons already employed in the field. It seeks to develop an understanding of the economic and social environment within which business functions. Practice in decision making and management functions is discussed, including financial, marketing, production, and legal matters. This is a ten-week course, meeting one night a week for three hours.

**MAM 0012 Operating a Small Business**

This course is designed as supplementary training for operators of small businesses. The course includes topics such as capital and finance, proprietorship, laws regulating business, taxation, management and organization, personal, budgeting and cash flow, and marketing research.

**MAM 0014 Distributive and Mid-Management Education Seminars**

A series of seminars designed as supplementary instruction for persons already employed in such an area of interest as Insurance, Real Estate, Transportation, Banking, and Hotel/Motel/Restaurant Operations, to be offered in response to community and/or industry demand at such times and in such places as will permit maximum participation by interested groups.

**MAM 0016 Motor Fleet Safety Supervisor**

This course is designed as supplementary instruction for all levels of management and supervision already employed in the field and responsible for efficient and safe fleet operations.

**MAM 0020 Floral Industry Management**

This course is designed to upgrade employees in the floral industry. Emphasis will be placed on practices and problems in retail floral management, such as facility planning, merchandising, selling and markup, personnel relations, advertising, and new design techniques.

**MAO 0390 EMP Shipfitting**

This course is designed to meet the needs of employers and underemployed employees in the shipfitting industry.

**MAY 0309 Brick and Blocklaying I**

This course is designed specifically for job entry training in laying brick, terra cotta, hollow tile, stone, and similar building blocks in the construction of walls, partitions, arches, fireplaces, chimneys, smokestacks, and other structures.

**MAY 0310 Brick and Blocklaying II**

Continuation of MAY 0309.

**MAY 0311 Brick and Blocklaying III**

Continuation of MAY 0310.

**MAY 0312 Brick and Blocklaying**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will learn proper procedure for laying brick, terra cotta, hollow tile, stone, and similar building blocks in the construction of walls, partitions, arches, fireplaces, chimneys, smokestacks, and other structures.

**MAY 0315 Brick and Blocklaying**

This course is designed primarily for apprenticeship instruction and its contents will include training in laying brick, terra cotta, hollow tile, stone, and similar building blocks in the construction of walls, partitions, arches, fireplaces, chimneys, smokestacks and other structures.

**MEA 0310 Medical Assisting**

The medical assistant course of study is an intensive course designed specifically for job entry training and planned to orient the individual to a multitude of basic skills in the physician's office. Examples of these skills are secretarial practices and procedures, examining room techniques, and laboratory procedures. This course requires 1,080 hours, which includes clinical practice in the physician's office. Applicants must be able to type 35 words per minute.

**MEW 0320 Marine Shipfitting I**

This course is designed specifically to provide basic indoctrination and training in the skills of the marine shipfitter in shipyards and related industries. It covers the use of hand tools, power tools, shop equipment, the various shapes used, and manufacturing processes for metals. The use of layout, marketing and measuring tools, simple geometric construction and related math, layout and development, and blueprint reading are also included. The student will learn basic shipboard and shipyard organization and safety procedures relating to the shipfitter trade.

**MEW 0321 Marine Shipfitting II**

This course is designed specifically to cover the skills required and the possibilities of the marine shipfitter in the bending, welding, leveling, plumbing and squaring, lining up and tack welding, lifting and installing of steel plates, shapes, angles, and brackets.

**MEW 0322 Marine Shipfitting III**

This course is designed specifically to cover the skills required and the responsibilities of the marine shipfitter in the use and installation of castings, foundations, gratings, and miscellaneous hull fittings. It also covers hull structure tests including air and hydrostatic tests. The functions of the shipfitter in team concept projects will also be covered.

**MEY 0390 EMP In-Plant Industrial Training**

This course will be designed to meet the needs of the employers and their employees.

**MLS 0500 Panorama of Advances in Medical Technology**

This course is a seminar on the normal and pathologic physiology of the varied elements of the blood. The student's knowledge of principles of medical laboratory science will be expanded and updated in this area.

**MSH 0003 Machine Shop**

This course will include safe work habits, good workmanship, accuracy and job pride. Students will be urged to perform in up-to-date and modern methods of work operations. The course is designed to provide students with both the practical experience and the related information. Emphasis will be on drafting, blueprint reading and related mathematics. A step by step series of lessons will be presented throughout the course. Each student will be given a considerable amount of individual instruction along with manipulative skills. This course is designed primarily for off-campus supplementary instruction.



**MSH 0309 Machine Shop Work I**

This course is designed specifically for job entry training in the construction and repair of all kinds of metal parts, tools, and machines, and in the operation of all machine tools, including lathes, milling machines, planers, shapers, and drill presses.

**MSH 0310 Machine Shop Work II**

Continuation of MSH 0309.

**MSH 0311 Machine Shop Work III**

Continuation of MSH 0310.

**MSH 0318 Automotive Machine Shop I**

This course is designed primarily to produce workers capable of performing the duties of an automotive machinist at job entry level. It includes training in cleaning, inspecting, grinding, drilling, honing and reassembling of automotive parts. Emphasis is on safe work habits, pride in workmanship, and accuracy.

**MSH 0319 Automotive Machine Shop II**

Continuation of MSH 0318.

**MSH 0320 Automotive Machine Shop III**

Continuation of MSH 0319.

**MSH 0321 Marine Outside Machinist I**

This course is designed specifically to provide basic indoctrination and skills training for the marine outside machinist in shipyard and related industries. It covers the repair of basic mechanical systems such as bearings, couplings, gears, valves, and pumps. The theory of operation, disassembly, repair and replacement of parts, and reassembly of typical units of shipboard auxiliary machinery are covered. Also included is training in the use of hand tools, precision measuring instruments, portable power tools, packing, gaskets, lubrication, blueprint reading, and basic layout. The student will learn basic shipboard and shipyard organization and safety procedures relating to the repair of mechanical systems.

**MSH 0322 Marine Outside Machinist II**

This course is designed specifically to cover the skills required and the responsibilities of the marine outside machinist in the installation and repair of major shipboard mechanical systems such as pressure air systems, distilling plants, steering engines, main propulsion machinery, and associated auxiliary equipment and support systems. The theory of operation, disassembly, repair and replacement of parts, and installation and alignment of both individual units and systems in the machinery normally found aboard ship are covered.

**MSH 0323 Marine Outside Machinist III**

This course is designed specifically to cover the skills required by the marine outside machinist in the operation and use of heavy power tools used in shipboard repair applications and the basic metallurgy skills required in these repairs. It covers the theory and practical application of machine operations such as the bench grinder, drill press, lathe, and milling machine. It also covers the identification, selection, application, and limitations of various metals in shipboard mechanical systems. Through advance team training on specific projects, it continues development of repair team skills in the areas of removal, disassembly, re-installation, and alignment of major and auxiliary shipboard mechanical equipment. Safety of personnel and protection of equipment will be emphasized.

**MSH 0390 EMP Machine Shop**

This course is designed to meet the needs of employers and underemployed employees in the machine shop industries.

**MTY 0390 EMP Industrial Mechanics**

This course is designed to meet the needs of employers and underemployed employees in the industrial mechanics field.

**MTY 0395 EMP Hydraulics**

This course is designed to meet the needs of employers and underemployed employees in the hydraulics industry.

**NUA 0310 Nurse Assistant**

This course is designed to prepare a non-professional worker with the fingertip skills to perform selected activities under the direct supervision of the registered professional nurse. This course requires 240 hours which is taught within an eight-week period.

**NUR 0512 Nursing Seminar**

This seminar is designed to upgrade the skills of the Registered and/or Licensed Practical Nurse. The student will be introduced to current nursing trends and problems and will participate in the development of solutions in conjunction with instructors.

**ORH 0010 Ornamental Landscaping**

A course designed to upgrade the skills of landscapers, gardeners, and nursery workers, enabling them to keep abreast of the latest developments and techniques in their profession. The course also provides refresher training for Certified Critics and for reinstatement of expired certificates.

**PAD 0010 Grant Writing and Management**

This course is a workshop/laboratory course designed to give participants a comprehensive understanding of the wide variety of funding sources available to community-based private non-profit organizations, finely tuned capabilities in the skills and tools of grant development and management, and actual guided experience in the development of one or more grant proposals.

**PCL 0390 EMP Basic Pest Control**

This course is designed to meet the needs of employers and underemployed employees in the pest control industry.

**PDE 0317 Jacksonville Drywall Decorators and Painters Apprenticeship**

This course covers the technical aspects of painting, paper hanging and drywall finishing. The painting section covers methods of application of types of paint, surface preparation and material makeup and tinting. The paper hanging section covers materials and surface preparations. The drywall section covers tools and methods of application.

**PPF 0309 Plumbing and Pipefitting I**

This course is designed specifically for job entry training in the assembly and installation of air, gas, water and waste disposal systems, including the cutting, reaming, and threading of pipe, caulking and wiping joints, and the installation of gas, water, and sanitary fixtures and equipment with supports, hangers, or foundations.

**PPF 0310 Plumbing and Pipefitting II**

Continuation of PPF 0309.

**PPF 0311 Plumbing and Pipefitting III**

Continuation of PPF 0310.

**PPF 0315 Plumbing and Pipefitting**

This course is designed primarily for apprenticeship instruction and its contents include training in the assembly and installation of air, gas, water and waste disposal systems, including the cutting, reaming, and threading of pipe, caulking and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers, or foundations.

**PPF 0320 Marine Pipefitting I**

This course is designed specifically to provide basic indoctrination and training in the skills of the marine pipefitter in shipyards and related industries. It covers the use of hand tools, power tools, shop equipment, shop safety, blueprint reading, pattern layout, pipe fittings, valves, gauges, fixtures, water tanks, and piping materials. The student will learn basic shipboard and shipyard organization and safety procedures relating to the repair and installation of piping systems.

**PPF 0321 Marine Pipefitting II**

This course is designed specifically to cover the skills required and the responsibilities of the marine pipefitter in the bending, fabricating, and installing of non-ferrous piping systems. Silver brazing procedures and methods are included.

**PPF 0322 Marine Pipefitting III**

This course is designed specifically to cover the skills required and the responsibilities of the marine pipefitter in the bending, fabricating, and installing of steel piping systems. The cleaning and testing methods applicable to marine piping systems are also covered.

**PPF 0390 EMP Plumbing**

This course is designed to meet the needs of employers and underemployed employees in the plumbing industry.

**PPF 0395 EMP Pipefitting**

This course is designed to meet the needs of employers and underemployed employees in the pipefitting industry.

**PRN 0310 Practical Nursing**

This course of study is designed to prepare individuals within 12 months to share in giving direct care to patients in the hospital, nursing home, or home. A minimum of 1,320 hours is required to complete the program. Classes are admitted twice annually. A high school education and an acceptable score on the aptitude test are required. The program is accredited by the State Department of Education and the Florida State Board of Nursing. Persons who successfully complete the course are eligible to write the State Board Test Pool Examination to qualify for licensure to practice as a Licensed Practical Nurse and to use the title of LPN.

**PTR 0020 Office Support Seminar**

This seminar is designed as supplemental instruction for persons already employed in the field. It presents a series of instructional activities related to selected topics offered in response to requests by business organizations or agencies. Curriculum program and format will vary according to the training needs of employers. Each seminar curriculum will be directed toward improving the office duties and responsibilities of clerical, secretarial, and other office support personnel.

**PTY 0312 Photography and Photo-Finishing**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The student will receive training in the making of photographic negatives from which prints can be developed, using studio-type and other cameras and training in the washing, drying, trimming, mounting of photographic prints, retouching prints and covering imperfections and in surface finishing of prints.

**PUR 0010 Public Relations: The Art of Positive Communications**

This course stresses communication and public relations skills which will provide those individuals associated with the field of public relations the opportunity to upgrade their skills. These individuals and community action groups will then be able to promote issues, programs, or organizations. The success of a public relations program depends upon an understanding of the communication process and the wise application of the proper tools. Topics covered include working with the media, marketing, writing and layout, resource development-volunteers and fund raising, and developing a promotional campaign. Each participant will be encouraged to learn by doing and sharing.

**RES 0211 Real Estate Principles and Practices**

This course is designed specifically as occupational preparatory training and is intended to orient students with the knowledge and understanding of legal and ethical principles necessary for the real estate profession to continue to elevate itself for the protection of the public and to enable the real estate practitioner to enjoy the privileges due the practitioner by the Florida Real Estate Commission. This course, when successfully completed, fills the educational requirement enabling an individual to apply for the real estate salesman's state examination.

**ROO 0317 Apprenticeship Residential and Industrial Roofing**

This course is designed to meet the needs of contractors and apprentices in the residential and industrial roofing industry.

**RTE 0010 Basic Radiologic Technology**

This course is designed to include principles of radiologic technology with particular emphasis in the areas of radiation protection and radiation biologic effects. It is intended for persons who are currently or previously employed as X-ray technicians, subject to new licensure requirements in Chapter 10D-74, Florida Administrative Code.

**RTV 0309 Electronics, Radio & TV I**

This course is designed specifically for job entry training and includes fundamentals of electronics and training in the installation, testing, adjusting, and repair of industrial electronic equipment to include repair of radio and television receiving equipment. Additional instruction in radio transmitting equipment will be offered to those students who complete this course.

**RTV 0310 Electronics, Radio & TV II**

Continuation of RTV 0309.

**RTV 0311 Electronics, Radio & TV III**

Continuation of RTV 0310.

**RTV 0390 EMP Basic TV Production**

This course is designed as supplementary training and provides practical experience in a television studio with emphasis on general production techniques. Students will operate TV cameras, arrange lighting and microphones, learn the "director's language", and apply the techniques in actual TV program production.



**SAM 0003 General Business I High School Cr. ½**

This course is designed to develop an understanding of some of the characteristics of our economic system and an appreciation of how our economy is changing. The student will develop an understanding of how most of our economic needs and wants are met through businesses that operate within the framework of the American economic system. Included is a study of services provided by banks, stores, credit agencies, insurance companies, investment firms, savings institutions, transportation companies, and other enterprises.

**SAM 0005 General Business II High School Cr. ½**

Prerequisite: BUS 0003. This course is designed to develop an understanding of how business, governments, workers and individual nations must depend on each other in varying degrees for economic growth and well-being. Emphasis is placed on how each student can plan for a successful future in our economic world.

**SAM 0010 Supervisory Training**

This course is designed as supplementary instruction for persons already employed in a related field. The course consists of planned learning experiences which include a study of the basic principles of supervision and how to apply these principles in practice. It covers supervision, human relations, job advancements, and the development of other supervisory skills.

**SAN 0015A Water/Sewer Plant Management & Supervision**

The course is designed to meet the needs of persons employed in water/sewer plant operations.

**SEM 0010 Home Economics Seminar**

Home Economics Supplemental Instruction Seminars are a series of seminars designed as supplemental instruction for persons previously and/or currently employed in clothing/textile/interior design/or food-related operations which will be offered in response to industry and/or community demand. The time and meeting places of the seminars will vary according to the needs of the participants.

**SEO 0210 Basic Security Officers Training Course**

This course is designed specifically as supplementary training and covers a variety of areas considered to be directly related to security work. Areas such as firearms, first aid, arrest techniques, and search and seizure are discussed.

**SHM 0309 Sheet Metal I**

This course is designed specifically for job entry training in fabricating, assembling, altering, repairing, and installing sheet metal articles and equipment.

**SHM 0310 Sheet Metal II**

Continuation of SHM 0309.

**SHM 0311 Sheet Metal III**

Continuation of SHM 0310.

**SHM 0315 Sheet Metal**

This course is designed primarily for apprenticeship instruction and its contents include training in fabricating, assembling, altering, repairing, and installing sheet metal articles and equipment.

**SHM 0390 EMP Sheet Metal**

This course is designed to meet the needs of employers and underemployed employees in the sheet metal industry.

**SOW 0010 Activity Programs in Long-Term Care Facilities**

This course is designed to help currently employed activity coordinators in long-term care facilities to improve their programs. Instruction will be in the following areas: physical and psycho-social aspects of aging, administration and supervision, direction of recreational and therapeutic activities, use of volunteers, and communication.

**STO 0310 Surgical Technician**

This course of study is designed to prepare students in 10 months to function as a member of the surgical team in a hospital operating room under the direct and continuous supervision of qualified professional nurses and surgeons. The course consists of theory and practice in the application and principles underlying the care of patients in the operating room. A certificate will be awarded upon completion of the course. Particular emphasis is placed upon the skills involved in scrubbing and circulating during surgical procedures, and in the preparation and maintenance of sterilized and unsterilized supplies.

**STS 0020 Medical Terminology**

Medical Terminology is designed as supplementary instruction for persons already employed in a related field and is a study of the development of a medical vocabulary commonly used in physicians' offices. Emphasis is given to physiologic and anatomic terms and organic systems.

**STS 0110 Basic Business Shorthand**

This course is designed specifically as supplementary training for persons employed in related fields. It is an introductory course in principles and skills of shorthand designed to meet the minimum standards of performance in shorthand and transcription comparable to those in local business offices.

**STS 0112 Intermediate Shorthand & Transcription**

This course is designed for persons already employed in a related field, as supplementary instruction. The course will require the student to review the principles of Gregg shorthand; to develop further the student's ability to spell and to punctuate; to develop command of the mechanics of English; to handle the problems of office dictation, and to teach efficient transcription techniques.

**STS 0113 Advanced Shorthand & Transcription**

This course is designed as supplementary instruction to integrate shorthand, English, and typewriting skills and to develop the student's ability in producing transcripts.

**STS 0116 Beginning Shorthand I High School Cr. ½**

Prerequisite or corequisite: TYG 0120. This is a beginning course in the principles of Gregg shorthand. Emphasis is placed on theory and basic dictation and transcription practice.

**STS 0117 Beginning Shorthand II High School Cr. ½**

Prerequisite: STS 0116 or equivalent. This course is a continuation of Beginning Shorthand I with increased emphasis on dictation and transcription.

**STS 0118 Advanced Shorthand and Transcription I High School Cr ½**

Prerequisite: STS 0117 or equivalent. This course is designed to review Gregg shorthand theory and to develop the ability to transcribe rapidly and accurately. Emphasis is placed on mastery of English mechanics also.

**STS 0119      Advanced Shorthand and  
Transcription II      High School Cr. ½**  
Prerequisite: STS 0118. This course covers accelerated dictation and transcription with emphasis on the finished product.

**STS 0125      Machine Shorthand**  
This course is designed specifically as supplementary instruction for persons already employed in a related field. The student will be trained in touch shorthand and the use of the stenograph machine. Course consists of theory and practice.

**STS 0130      Office Occupations**  
Instruction is based on secretarial needs and is intended to provide training, specifically in the clerical and stenographic fields. The instruction is designed specifically for job entry training and is geared to individuals having little or no previous secretarial training. In providing the best opportunity for individual progress, this course includes typing, Shorthand, Business English, and on a concurrent basis, instruction is provided in Office Machines, Office Procedures, Bookkeeping and Business Mathematics. The class will meet during Fall, Winter, and Spring Terms (I, II, and III) on a daily basis.

**STS 0132      Office Occupations**  
Instruction is based on secretarial needs and is intended to provide training, specifically in the clerical and stenographic fields. The instruction is designed for supplementary training and is geared to individuals having little or no previous secretarial training. In providing the best opportunity for individual progress, this course includes Typing, Shorthand, Business English, and on a concurrent basis instruction is provided in Office Machines, Office Procedures, Bookkeeping, and Business Mathematics.

**STS 0135      CPS Review Course**  
This course designed as supplementary instruction to prepare students to take the examination for Certified Professional Secretaries. A two-term course, it will cover Environmental Relationships; Business and Public Policy; Economics of Management; Financial Analysis and the Mathematics of Business; Communications and Decision Making; and Office Procedures. Time segments for each of the areas will be established as needed within the terms.

**STS 0140      Word Processing – Magnetic  
Typewriter Keyboard**  
This course includes supplementary instruction in the function and use of the magnetic typewriter keyboard in the development of basic business documents. Students will learn to operate the automated equipment including record, playback; to correct and revise documents. Instruction in the logging and filing systems for the automated equipment will be included.

**STS 0142      Word Processing – Memory  
Typewriter      High School Cr. ½**  
This course is designed to integrate the typewriter keyboard skills. The student will be trained in the operation and use of the memory typewriter together with filing and logging systems for stored typewritten information.

**TYG 0110      Basic Typewriting**  
This course in typewriting for business use is designed specifically as occupational preparatory training to assist persons to acquire mastery of the keyboard and to develop the ability to type personal and business letters accurately and in good form.

**TYG 0112      Advanced Typewriting**  
This course is designed as supplementary instruction to develop sufficient skills, techniques, and knowledge in the use of the typewriter for the student to work in a business office, in a clerical or stenographic position.

**TYG 0120      Basic Typewriting I      High School Cr. ½**  
This course is designed to assist students in acquiring mastery of the keyboard for job entry training and for personal use. Basic typing skills and applications include centering, tabulating, personal and business communications, themes, outlines, report manuscripts, and inventory measurements.

**TYG 0122      Basic Typewriting II      High School Cr. ½**  
Prerequisite: TYG 0120. This course is designed to continue improving basic typing skills. Applications included are personal and business letters, tabulations, manuscripts and reports.

**TYG 0124      Advanced  
Typewriting I      High School Cr. ½**  
Prerequisite: TYG 0122. A continuation of basic skills in speed and accuracy with emphasis on production typing of special tables and columnar reports, business letters and envelopes, special correspondence, and business forms, reports, and manuscripts.

**TYG 0126      Advanced  
Typewriting II      High School Cr. ½**  
Prerequisite: TYG 0124. A continuation of production typing with emphasis on mailability of business correspondence and reports as used in a typical office situation.

**WEL 0309      Welding I**  
This course is designed specifically for job entry training in fusing metal parts by means of oxyacetylene torch or electric welding apparatus and welding rods to fabricate metal articles or to repair damaged metal objects.

**WEL 0310      Welding II**  
Continuation of WEL 0309.

**WEL 0311      Welding III**  
Continuation of WEL 0310.

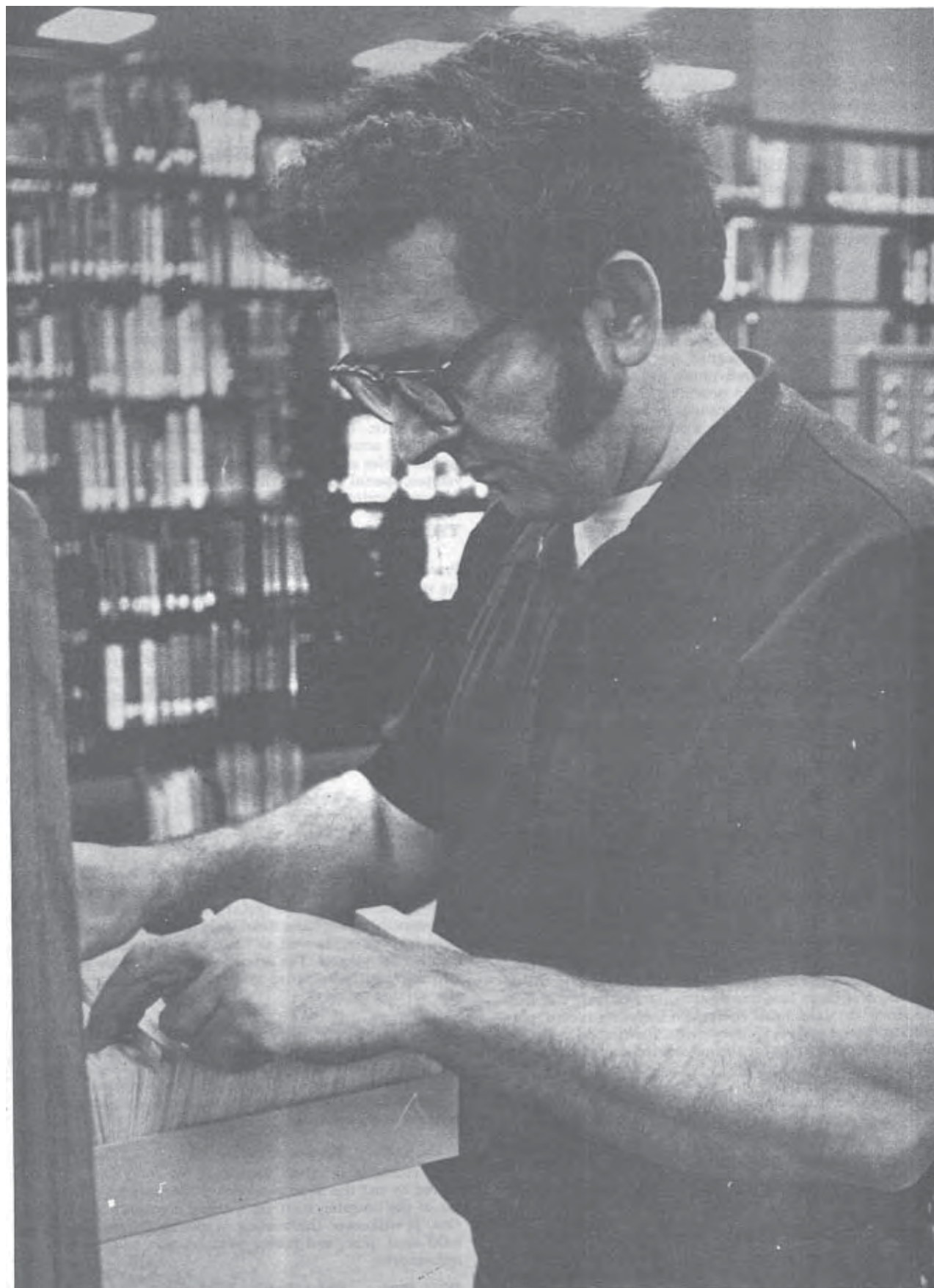
**WEL 0320      Marine Welding I**  
This course is designed specifically to provide basic indoctrination and training in the skills required by the marine welder in performing shielded metal arc welding in any position. It covers the use of basic hand tools and portable power tools used by welders as well as basic oxyacetylene cutting and burning techniques. The student will learn basic shipboard and shipyard organization and safety procedures relating to the welding trade.

**WEL 0321      Marine Welding II**  
This course is designed specifically to cover the skills required and the responsibilities of the marine welder in the welding of plate up to one inch, pipe up to eight inches, and large fillet welds. This course basically covers gas metal arc welding in all positions.

**WEL 0322      Marine Welding III**  
This course is designed specifically to cover the skills required by and the responsibilities of the marine welder in the use of the tungsten inert gas welding procedure in any position. It will cover the welding of aluminum, stainless steel, mild steel, pipe, and tubing with relation to shipboard requirements.

**WEL 0390      EMP Welding**  
This course is designed to meet the needs of employers and underemployed employees in the welding industry.





# ADULT AND CONTINUING EDUCATION COURSES

## ACC 0001 Bookkeeping High School Cr. 1

An introductory course of basic principles, concepts, and knowledge required for practical bookkeeping in everyday living.

## AIO 0016 Aerospace Education High School Cr. 1

Aerospace Education is a course designed to acquaint students with the worlds of air and space. It will provide them with the basic knowledge, skills, and attitudes about aerospace that will enable them to live and function in tomorrow's society. The course will relate social and economic problems with aerospace technology and show the potential of future development in the field.

## ANA 0001 Anatomy High School Cr. 1

Introduction to the organization of the structure and functional characteristics of man. A study of the morphological changes which occur from a cellular and subcellular level to the whole organism.

## ART 0001 Art Appreciation High School Cr. 1

A study of the art of significant periods, its contribution to civilization, aesthetic and human values.

## ART 0003 Fundamentals of Art High School Cr. 1

A study of the fundamentals of drawing and painting, concepts of drawing principles and composition, and a study of techniques.

## ART 0004 Advanced Art High School Cr. 1

A course to further develop the student's understanding of the concepts and techniques of drawing and painting and to provide continued opportunity for practicing these skills. Prerequisite: Fundamentals of Art or its equivalent.

## ART 0005 Oil Painting High School Cr. 1

Techniques of oil painting, color theory, and creativity. Students are required to purchase all materials needed for the course.

## ART 0010 Fundamentals of Art for Older Adults

This course is designed for senior adults. Instruction will be provided in the fundamentals of arts, encompassing composition, harmony, rhythm, balance, emphasis, proportion, line, form, texture, and color. The student may carry out projects using one or more of the following media: charcoal, Cray-pas, pencils, pen and ink, oils, acrylics, watercolors, pastels, or even collage.

## ART 0011 Drawing For Older Adults

This course is designed for senior adults. It is an introduction to the basic disciplines of drawing, using charcoal, pencil, pen and ink, Cray-pas, pastels, and colored pencils.

## ART 0012 Watercolor, Acrylic, Oil Painting for Older Adults

This course is designed for senior adults. The media used in this course is limited to oil, acrylic, and watercolor. Instruction will be provided in techniques of watercolor, acrylic and oil painting and in color theory. It will be helpful if the student already has some experience using fundamentals of art; however, instruction will include drawing and other basics.

## BIO 0001 General Biology High School Cr. 1

A study of the origin, development, structure, functions, and distribution of plants and animal life.

## BIO 0002 Health Science High School Cr. 1

This course is a study of the human body, including the skeletal system, muscular system, digestive system, circulatory system, respiratory system, nervous system, endocrine system, urinary system, and the reproductive system. Also included in this course are safety and first aid.

## BLC 0001 Afro-American History High School Cr. 1

This course is designed to provide evidence that the culture of Afro-Americans is one in which all Americans can take pride. It is hoped that black students will be aided in their development of self worth and dignity.

## BUS 0001 General Business High School Cr. 1

A non-vocational course intended to provide the adult student with a basic understanding of general business practices as they relate and have application to the everyday business affairs of the lay citizen.

## CED 0002 Consumer Health

This course is aimed at senior adults needing information on consumer health resources. Topics covered will include how to look for a doctor, evaluating health care advertising, nutrition, diet, exercise, consumer agencies and rights, and consumer involvement.

## CED 0005 Consumer Education Law

This course is designed to provide low-income residents with basic facts regarding the laws of daily living in a community. It has been organized to interpret the law in a comprehensive and easily understood manner. It will deal primarily with the laws that govern the lives of low-income and undereducated citizens. The course will assist these citizens to know what local help is available to them. This course is also designed to promote positive attitudes toward and involvement in utilization of the American free enterprise system as it deals with land, people, organization, and government.

## CHE 0001 Chemistry High School Cr. 1

Course covers the areas of elements and compounds, oxygen and hydrogen, water and solutions, carbon and its oxides, and acids, bases and salts.



**COA 0020 Consumer Gardening**

This course provides instruction on the techniques of starting, maintaining, and harvesting a consumer garden. Instruction includes the following areas: kinds and varieties of vegetables, planning the garden, landscaping with vegetables; proper soil preparation, composting; planting the garden, proper care of the garden; garden pests; harvest and storage; mini-gardening, kitchen gardening, nutritional value of vegetables; and canning and freezing methods.

**COM 0010 Persuasion for Practical Purposes**

This course introduces the student to persuasion strategies and communication skills useful in influencing others to take action or change their beliefs. Through consideration and classroom practice of students' real life situations, selection and effective use of persuasion strategies will be covered. Topics presented include person-to-person communication, mass persuasion, public speaking, and motivation.

**COP 0001 Community Emergency Preparation**

This course is designed to prepare individuals for rendering essential community services on a voluntary basis in time of serious emergency or disaster.

**CRW 0010 Personal Life History Writing**

This course is designed for older adults. The students will learn to write their personal life histories through three components: reminiscence, instruction, and preparation of material. The students will be guided through remembering their past, cataloguing these memories into a filing system, using old photographs, writing the first paragraph, writing one experience, writing expanded stories, compiling a table of contents and index, layout of material, printing preparation, duplication and distribution.

**DRA 0001 Drama High School Cr. 1**

Planning and execution of production functions; scene construction and painting, props, costuming, lighting and other full technical responsibilities.

**DRT 0101 General Shop, Drafting I High School Cr. 1**

An introduction to the broad field of drafting as used in everyday living, architecture, engineering, and construction, for general technical use. The laboratory work provides opportunities for students to learn to make and use drawings. It includes the uses of drawings in industries and occupations such as sheet metal, machine shop, plumbing, electricity and electronics.

**ECO 0001 Economics, How to Get A Job**

This course offers insight into one's abilities, limitations, interest, aptitudes, and personal traits. It shows students how to set and achieve job goals commensurate with one's ability, background, and interests. Emphasis is on building self-confidence of unemployed/underemployed members of minority groups.

**ECO 0002 Personal Money Management**

This course is designed to assist adults in handling their day-to-day and long-term financial affairs. Course emphasis is on subjects important in personal money management. Included are budgeting techniques, combating inflation, types of bank accounts, borrowing and use of credit, types of investments, taxation, and retirement and estate planning.

**ECO 0004 Home Economics for Senior Adults**

This course includes topics which are designed to provide older adults with instruction that will help them cope with health and economic problems of aging. Instruction will be conducted in one or all of the following areas: Needlework, Basic Clothing Instruction, Advanced Clothing Instruction, Food Preparation, Nutrition.

**ECO 0005 Getting It All Together on a Limited Income**

This course is designed to assist persons in managing their lives and handling the stress involved in surviving on a very limited income. Practical information and discussions will cover topics such as smart shopping, budgeting, parenting, resolving conflict with neighbors, caring for your body, and launching a plan of action for life improvements.

**ECO 0006 Career Planning**

This course is designed to meet the needs of adults who wish to start or change careers. In an effort to choose a career path, students will explore their own skills and abilities by use of vocational testing, class discussion, and research. They will learn interviewing skills, resume writing, and how to approach the job market.

**ECO 0010 Back to School, Back to Work**

An intensive eighty-hour class to aid individuals with immediate need to make a decision about returning to school, work or both. Emphasis will be on developing self respect and confidence, assertive communication skills, life directions and goals so that students take responsibility for their lives and become self-supporting. Resume writing, career fields, job training, job search, and interview techniques will be covered.

**ECY 0001 Environmental Control Awareness High School Cr. 1**

This course is designed to give the student insight into the causes, problems and solutions of air, water, and noise pollution. The overall theme of the course is based on making the student aware of the delicate ecological balance which pollution control attempts to maintain. Upon successful completion of this course, the student should have sufficient depth in the area of environmental control to adequately instruct others in the basis of environmental control.

**ECY 0003 Nature Study and Conservation High School Cr. 1**

The study of nature through personal exploration of remaining wilderness tracts. Students will learn backpacking and wilderness camping techniques vital to personal safety and will participate in field trips designed to acquaint the student with problems concerning our dwindling natural resources.

**ECY 0006 Everything You Want To Know About Solar Energy and More**

This course is designed to inform the general public of the development and uses of solar energy to provide insight for the general public to know what is available from solar energy and have a general understanding of the subject.

**EFL 0001 English for Foreign Born High School Cr. 1**

English for the alien is a class designed for students who have difficulty with the English language. This course is especially designed for new arrivals in the United States.

**ENG 0001 English Grammar High School Cr. 1**

This course is designed to meet the needs of high school students and adults to further their mastery of basic, fundamental concepts of English grammar.

**ENG 0002 Reading Techniques High School Cr. 1**

This is a developmental course which emphasizes basic reading skills and comprehension.

**ENG 0003 Speed Reading High School Cr. 1**

An advanced course designed to increase reading speed and further improve reading skills and comprehension.

**ENG 0004 Creative Writing High School Cr. 1**

This course is designed to encourage students to express their thoughts and to improve self-confidence in the use of language. Students enrolling must possess a certain skill with language and grammar and must have a desire to write. Knowledge will be gained in methods of writing both fiction and non-fiction.

**ENG 0005 How to Succeed in College High School Cr. 1**

This course is designed for the immediate high school graduates to assist them in making an easier adjustment to the college environment. The course is offered in two parts: speed reading and college guidance.

**ENG 0006 English I High School Cr. 1**

English 2200, a programmed course in grammar and usage, is designed to introduce students to grammar, sentence building, correct usage, and punctuation. It is further designed to provide a quick recapitulation of the elements of language.

**ENG 0007 English II High School Cr. 1**

English 2600 provides a programmed approach to mid-level high school grammar and usage. It offers one-step-at-a-time learning with written responses which require both thinking and recall. The accompanying textbook provides frequent opportunity for students to evaluate their progress and to coordinate the various segments of instructional material covered. An expanded study is provided of the basic parts of speech, the role of modifiers, effective sentence structure, subject-verb agreement, all phases of punctuation, and related grammatical techniques.

**ENG 0008 English III High School Cr. 1**

English 3200 provides a programmed approach to an in-depth study in grammar and usage. It consists of more than 3,200 very carefully arranged frames which enable the students to reason their way through one-step-at-a-time. Strictly senior level, English 3200 requires a good prior command of the basic grammatical processes. Sentence patterns — simple, compound, and complex — are explained along with other grammatical techniques leading to smooth sentence structure. Solutions are offered to the more advanced problems often related to effective use of the parts of speech. Skills with graphics are covered in a manner preparatory to college entrance.

**ENG 0010 Developmental Writing High School Cr. 1**

The purpose of this course is to help the student develop skill in expressing thoughts clearly and concisely. This is primarily a writing course, requiring that the student already have a substantial background in grammar. A grade average of C in English 2600 (or its equivalent) is a prerequisite.

**ENG 0011 Grammar/Composition High School Cr. 1**

This course is designed to provide the student with specialized training in writing. Learning experiences are built on the foundation of standard English grammar, the framework of communication. The principles of grammar presented in the course are functional. Numerous practice exercises are provided within each unit so that the students will be able to master the principles as they study. Principles of spelling, punctuation, capitalization, abbreviation, and number style are taught as tools to be used by the writer in order to guide readers into correct, clear interpretations of the message.

**ENG 0012 Grammar/Composition**

This course is designed to provide the student with specialized training in writing. These learning experiences are built on the foundation of standard English grammar, the framework of communication. The principles of grammar presented in the course are functional. Numerous practice exercises are provided within each unit so that the students will be able to master the principles as they study. Principles of spelling, punctuation, capitalization, abbreviation, and number style are taught as tools to be used by the writer in order to guide the readers into correct, clear interpretations of the message.

**ENG 0014 Communication Skills**

This course is designed to help persons improve in communication skills, in order to pass the functional literacy test needed to earn an Adult High School Completion Diploma.

**ENG 0015 Basic Reading Techniques I High School Cr. 1**

A diagnostic, prescriptive course in reading designed to begin at the student's level in rate and comprehension. Phoneme-grapheme (sound-symbol) relationships, words in context, structural analysis, sight words, and dictionary pronunciation and meaning are stressed in building vocabulary. Detecting sequence, following directions, and recognizing topics and main ideas are studied in building comprehension. Instruction is conducted individually and in groups. A wide variety of machines and materials are available to achieve a grade level of 8.5 in reading.

**ENG 0017 Developmental Reading Techniques II High School Cr. 1**

A diagnostic, prescriptive course designed to develop the student's vocabulary and comprehension. Efforts are concentrated on developing reading skills essential for generalized high school materials. Reference sources, the use of the library, the SQ3R study method, and outlining, are stressed for use in the content areas. Group and individual instruction and a variety of machines and materials are available to achieve a grade level of 10.5 in reading. Prerequisite: Reading Techniques I (Basic) or equivalent grade level of 8.5 in reading.

**ENG 0019 Advanced Reading Techniques III High School Cr. 1**

A diagnostic and prescriptive course designed to provide the students with an opportunity to increase their power in critical reading, technical vocabulary and in rate of efficiency. Memory improvement, skimming and scanning, and test taking techniques are stressed. Group and individualized instruction and a variety of machines and materials are available to achieve a grade level of 12.5 in reading. Prerequisite: Developmental Reading Techniques II or equivalent grade level of 10.5 in reading.



**ESY 0001 Driver Education for the Physically Handicapped High School Cr. 1**

This course is designed for the physically handicapped, and may be taught as a classroom subject, as a "behind the wheel" subject, or a combination of both methods. The course may include traffic laws, safe driving habits, defensive driving techniques, basic automotive operations, and actual driving practice with a driving instructor.

**ESY 0003 Safety Education**

This course is designed to cover the principles and information related to individual, home, and public safety.

**EVR 0010 Stress Management**

This course exposes students of all ages to an understanding and appreciation for the effects of environmental and personal stress. Stress-related disorders, their causes and controls, and numerous stress management techniques will be discussed from the lay perspective. The primary objective of this course is to enable the students to assume an active role in the reduction of unnecessary stress and anxiety in their daily lives. An extensive bibliography of suggested readings will be provided.

**FAR 0005 Teaching Your Children About Sex**

A course designed to enable parents and prospective parents to deal more effectively and honestly with children's questions about their own sexuality.

**FRE 0001 French High School Cr. 1**

This course is adapted to the needs and interests of adults who wish to acquire a speaking and oral comprehension ability in introductory French.

**GEO 0001 Geography High School Cr. 1**

A general course in geography which includes a study of the physical, economic, political, and cultural aspects of important geographic areas and people, and their influence on world conditions and problems.

**GER 0001 German High School Cr. 1**

This course is adapted to the needs and interests of adults who wish to acquire a speaking and oral comprehension ability in introductory German.

**GRA 0010 Graphic Art for Older Adults**

This course is designed for senior adults. It is an introduction into the field of graphics involving various media and forms such as relief and serigraph. Drawing, printing, matting, and framing will be included.

**GRA 0101 General Shop Graphics High School Cr. 1**

This course is an introduction to the field of graphics involving various media and forms and provides a non-vocational approach to the study of printing, drawing, and related areas.

**GRE 0005 Modern Spoken Greek Language High School Cr. 1**

This course is adapted to the needs and interest of students who wish to acquire a speaking and oral comprehensive ability in modern Greek. One will learn the Greek alphabet, learn to speak short sentences, and learn to read and write a Greek letter.

**HEB 0010 Hebrew High School Cr. 1**

This course consists of learning basic Hebrew grammar, developing a 250-word vocabulary and recognizing Hebrew characters in print and script. One will also learn to read Hebrew print and translate simple sentences from Hebrew to English and from English to Hebrew.

**HEN 0002 Personal Safety**

This course is designed to provide skills, knowledge, training and information in securing one's personal safety in the home as well as self-defense and street safety.

**HEN 0003 Education for Parenthood**

A series of classes for expectant mothers and fathers to study maternity care, parental adjustment, baby needs, and physical preparation for pregnancy, labor, and postpartum periods. Expectant mothers must have their doctor's permission to enroll and must be in the last three months of pregnancy.

**HEN 0004 Early Pregnancy Preparation Class**

This course is designed for mother-to-be in the early months of pregnancy. The course will cover exercises, physical fitness, nutrition, and baby care.

**HEN 0005 Education for Parenthood Refresher**

This is a four-week course designed for expectant couples who have previously taken the Education for Parenthood course during an earlier pregnancy. It provides a review of the relaxation and breathing techniques to be used during labor and delivery, as well as an introduction to any recent developments in childbirth education.

**HEN 0006 Continuing Education for Parenthood**

A course designed to help new parents cope with the unexpected problems which arise as a result of a new baby, including child development, sibling problems, illnesses, family adjustments, and baby care. No one particular course of action is recommended, but many options are presented to the couples. Open discussion and exchange of ideas is encouraged.

**HEN 0007 Creative Activity in the Nursing Home**

This course is designed with the needs of nursing home residents in mind. It includes a variety of creative activities which help keep hands, bodies, and minds alert and active. It will provide instruction in one or more of the following areas: creative writing, drawing, painting, crafts, food preparation, needle skills, health, reality orientation, remotivation, and use of leisure time.

**HEN 0009 Preparation for Cesarean Childbirth**

A series of classes designed to meet the needs of couples anticipating a Cesarean delivery and to promote family-centered Cesarean care. Course material will include discussion of emotional needs, nutrition, anatomy and physiology of pregnancy and the Cesarean birth techniques to use for the birth and after the delivery, and adjustments during the postpartum period.

**HEN 0010 Basic Cardiac Life Support**

This course is designed to teach one how to apply cardiopulmonary resuscitation. Basic cardiac life support is the new name given cardiopulmonary resuscitation. It is that particular phase of emergency cardiac care that either, 1) externally supports circulation and respiration; or 2) prevents a circulatory or respiratory arrest or insufficiency through prompt intervention. Any trained person may apply B.C.L.S. An Emergency Medical Services System (EMS) is a communitywide co-ordinated means of responding to sudden illness or injury. This course will teach one how to activate our own community EMS system as well as what one may expect of the system. Each student will receive certification from the American Heart Association for successful completion of this course.

**HEN 0012 Cardiac Rehabilitation Self Care**

This course is designed to educate the individual who has suffered an acute myocardial infarction, post-operative coronary artery bypass, surgery, or who has been determined a high coronary risk. It also provides education to family members and helps improve the quality of life for those involved with the program.

**HEN 0014 Physical Management & Stress Alleviation**

A therapeutic course designed for use in adult institutions. Its purpose is to instruct students in methods of physical maintenance and stress reduction or alleviations. The course will include instruction in body awareness, fine and gross motor activities, ways of dealing with stressful situations, and practical usage of the various methods taught.

**HEN 0015 Taking Care of Your Body**

A course which explores matters pertinent to physical and personal well-being. Topics will include consumer health, exercise, nutrition, stress reduction, heart disease, diabetes, cancer, contraception, menopause, rape, diet, the medicine chest, health careers and cardiopulmonary resuscitation.

**HEN 0020 Mental Fitness**

This course is intended to inform the public about mental health related topics and teach mental health skills which citizens can use in their own lives. A variety of programs are available under this title, and course length is dependent upon the topic to be covered.

**HEN 0025 Asthma and the Family**

This is a four-week course to provide educational sessions with the pediatric asthma patient and family. This program provides positive concepts as to how one deals with asthma, the reactions of the illness, disabilities, and prevention of severe pulmonary disease in adulthood.

**HEN 0030 Weight Management**

This course is designed to make the student aware of the reasons for overweight and to present methods to resolve overweight problems through a nutritionally sound diet. This course will help the student to develop better eating habits and a more positive self-concept. It will help to develop workable solutions to the student's individual problems. Individual attention will be given to each student in planning menus specified for particular needs, as well as providing nutritionally sound methods of food preparation.

**HEN 0035 How to Stop Smoking in Five Days**

This course is designed to demonstrate how an inveterate smoker can overcome the habit and stop smoking cigarettes by following a self-imposed five-day plan.

**HEN 0040 A Growing Problem: Drug Use & Abuse**

This course is designed to raise the community's awareness and understanding of the problem of drug abuse. This will be accomplished by providing information concerning the magnitude of the problem of drug abuse, the legal aspects of the problem, and signs and symptoms of the drug abuser, as well as the problem of drug abuse in women, youth and senior citizens. Information relative to prevention and treatment of the problem will be included in this course.

**HES 0005 Crime Prevention**

This course is directed toward the reduction and prevention of crime in neighborhood communities. Emphasis is placed upon each participant's particular problem and concerns relating to crime prevention. The program includes the history of crime prevention, components of the criminal justice system, and personal and home security measures such as locks, alarms, lighting, crimes against women and the elderly, and community involvement in crime prevention.

**HIS 0003 Problems of Democracy High School Cr. 1**

Materials covered in this course show how and why the historical problems are vital in contemporary thinking.

**HIS 0004 World History High School Cr. 1**

A survey of European and Asiatic History. Explains the world today by showing the political, economic, and social development in the United States from Colonial days to the present.

**HIS 0005 American History High School Cr. 1**

Emphasis is placed on political, economic, and social development of the United States from colonization to the present.

**HIS 0006 American History High School Cr. ½**

Emphasis is placed on political, economic, and social development of the United States from colonization to present.

**HUM 0001 Introduction to the Humanities High School Cr. 1**

An inter-disciplinary introduction to the creative arts. Course will examine in a general way the fundamental elements of the visual arts, music, letters, films, and electronic media, and the way humanists have used these in expressing themselves.

**IDS 0001 Adult Basic Education**

This course provides instruction in the elementary skills of reading, writing, arithmetic, spelling, social studies, health, science, and art for adults who desire a foundation of study at the secondary level.

**IDS 0003 General Education**

Instruction in general education subjects, includes elementary and secondary levels. This offering is designed to accommodate the needs of a class which consists in part of individuals who are on the high school level.

**IDS 0005 High School Review**

An intensive review of the four major academic areas of English, mathematics, social studies, and science on the secondary level in preparation for GED examinations that lead to the high school equivalency diploma.

**IDS 0007 GED Testing Skills Seminar**

The GED Testing Skills Seminar will provide critical, to-the-point information about the High School Equivalency Examination to persons who have enrolled to take the test at the next available date. The professor will not attempt to teach content in this seminar, but rather the goal will be to familiarize students with the general format of the test, and with what types of questions will be asked. During the course of the seminar, students will be given the GED test philosophy, statistics regarding the exam, and actual brief testing experience, guidelines for successful test-taking in general, and an opportunity to discuss any questions they may have about the exam.

**ITA 0001 Italian High School Cr. 1**

This course consists of pronunciation, elements of grammar, simple conversation exercises, reading, and composition. Visual and auditory aids are employed.

**LAT 0001 Latin I High School Cr. 1**

This course is designed to develop a basic vocabulary, proper pronunciation, and correct grammatical patterns.

**LAW 0001 Law for the Lay Person High School Cr.1**

The purpose of this course is to acquaint the lay person with the various phases of law that affect everyday life, regardless of occupation or profession. Included are topics such as contracts, sales, business law, personal property transaction, real property, domestic relations, the courts and law, negotiable instruments, agents, wills and other aspects of law needed to assist the lay person.



**LIS 0001 Library Science High School Cr. 1**

This course is designed to introduce the students to all of the resources of the media center, both printed and non-printed, which will aid them in becoming effective users of any library.

**LIT 0001 Literature High School Cr. 1**

Reading and discussion of literature by English authors from the Anglo-Saxon period through the modern age.

**LIT 0002 Literature - Great Books**

This course is designed to study distinctive characteristics of Hebrew and Christian literature and make comparisons with other well-known literary works by world authors. Experiences are enlarged through the recognition of allusions, or Biblical themes, or word origins and vocabulary study, and of literary structures. Unusual sentence structure and punctuation are noted. Provisions for individual expression through class discussions, parallel readings, and creative written assignments make this course both interesting and educational.

**LIT 0003 Literature - Great Books High School Cr. 1**

This course is designed to study distinctive characteristics of Hebrew and Christian literature and make comparisons with other well-known literary works by world authors. Experiences are enlarged through the recognition of allusions, or Biblical themes, or word origins and vocabulary study, and of literary structures. Unusual sentence structure and punctuation are noted. Provisions for individual expression through class discussion, parallel readings, and creative written assignments make this course both interesting and educational.

**LIT 0005 Bible History - Bible High School Cr. 1**

This course is designed to meet the needs of adult students desiring instruction in biblical history, literary form and culture and their influence and pertinence to and upon modern culture and society.

**LIT 0007 World Poetry High School Cr. 1**

The course will survey the major poets of Greece, Rome, France, and Germany, with brief studies of other European poetry. It will include a workshop for members of the class who write poetry.

**LIT 0008 World Literature High School Cr. 1**

A course designed for more mature students. It contains some of every type of literature. Authors are contemporary and from numerous countries. The course has unusual features: tests are divided into cognitive and affective, and definitely scheduled conferences with the student are an integral part of the course. It is also individualized to fit into the adult program.

**LIT 0009 Understanding Literature High School Cr. 1**

This is a programmed course well suited to the individualized instruction of the adult program. It is based on generalized themes which are common to all literature, such as feeling, character, imagery, and style. In keeping with its programmed nature, the material is divided into manageable parts.

**LIT 0010 Literature I High School Cr. ½**

This course is arranged topically. Authors are contemporary Americans and all types of literature are included. Although none of them is considered a prerequisite for another, this course is regarded as the first in the "Adventures" series.

**LIT 0011 Literature II High School Cr. ¾**

This course is an anthology of American literature. There are two major emphases. One is topical. The other concentrates on selected authors.

**LIT 0012 Literature III High School Cr. ¾**

This florilegium is not limited by time, place, or type. It is an eclectic selection of writers from the ancient to the present and from many countries. Included are short stories, novels, plays, poems and non-fiction. Readings are on a more mature level than Literature II.

**LIT 0014 Literature I High School Cr. 1**

This course is arranged topically. Authors are contemporary Americans and all types of literature are included. Although none of them is considered a prerequisite for another, this course is regarded as the first in the "Adventures" series. A student will be required to read a selected novel and to submit a research paper.

**LIT 0015 Literature II High School Cr. 1**

This course is an anthology of American literature. There are two major emphases. One is topical. The other concentrates on selected authors. A student will be required to read a selected novel and to submit a research paper.

**LIT 0016 Literature III High School Cr. 1**

This florilegium is not limited by time, place or type. It is an eclectic selection of writers from the ancient to the present and from many countries. Included are short stories, novels, plays, poems and non-fiction. Readings are on a more mature level than Literature II. A student will be required to submit a research paper.

**MAT 0001 Mathematics, General High School Cr. 1**

A course designed to satisfy the needs of individuals whose interests require a knowledge of modern general mathematical skills and concepts.

**MAT 0002 Business Mathematics High School Cr. 1**

This course covers problems involving proprietorship, sales, profits and losses, payroll, simple interest and real estate, leading to work with integers, fractions and decimals commonly used in business, insurance, bonds, compound interest, and corporation and financial statements.

**MAT 0003 Modern Mathematics High School Cr. 1**

This course is designed primarily for those who wish to have an orientation to and an understanding of the basic concepts and terminology of the new mathematics program being taught in the elementary and junior high schools in Florida.

**MAT 0004 Algebra I High School Cr. 1**

An introduction to algebra with emphasis on fundamentals, the solution of equations, and the application of equations to everyday problems.

**MAT 0005 Algebra II High School Cr. 1**

Continuation of Algebra I with emphasis on fractions, fractional equations, quadratic equations, elementary trigonometry, ratio and proportion, and radicals with problems using these.

**MAT 0006 Trigonometry High School Cr. 1**

Emphasis is placed on vectors, complex numbers, circular functions, inverse functions and the proof of trigonometric identities. The use of logarithms and computations, and the solution of triangles are also included in the course.

**MAT 0007 Plane Geometry High School Cr. 1**

A course dealing with geometric figures in a plane surface in which construction and deductive reasoning with triangles, perpendicular and parallel lines, polygons and the circles are emphasized. Special emphasis is placed on congruent triangles. This course is useful especially in the fields of mechanical drawing, design, surveying, engineering, aviation, navigation, and the physical sciences.

**MAT 0008 Basic Mathematics High School Cr. 1**

A course designed to insure competency in computation with integers, fractions, and decimals. Practical application of percentage and measurements, including the metric system, is stressed.

**MAT 0009 Consumer Mathematics High School Cr. 1**

This course is designed to cover the wide range of consumer problems such as banking, insurance, bonds, stocks, home ownership and installment buying. Also included are problems involving proprietorship, payrolls, sales, discounts, simple interest, compound interest, financial statements and profits or losses.

**MAT 0010 Introduction to the Metric System High School Cr. ¼**

This course is designed to acquaint the student with the use of the International System of Units and satisfy the needs of adults for metrication training.

**MAT 0011 Mathematic Skills**

This course is designed to help persons improve in mathematic skills, in order to pass the functional literacy test needed to earn an Adult High School Completion Diploma.

**MEW 0001 General Shop Metals High School Cr. 1**

Designed for both beginning and advanced students. Incorporates all machine shop phases including bench and sheet metals, forging, foundry, and welding.

**MUS 0001 Basic Music Theory High School Cr. 1**

A course designed for the beginning music student. Includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing, dictation, and keyboard skills.

**MUS 0003 Instrumental Music High School Cr. 1**

A course offered to meet the needs of individuals who wish to learn fundamentals of playing various musical instruments and who wish to practice in group instrumental music activities.

**MUS 0005 Community Orchestra High School Cr. 1**

The Community Orchestra provides instrumentalists in the college and community an opportunity to perform works representative of a broad spectrum of orchestral literature, to refine techniques of ensemble playing, and present concerts each term. Membership is by permission of the director and/or audition; participation by string majors is required.

**MUS 0007 Choral Music High School Cr. 1**

A course in both individual and group singing, with emphasis on group vocal experience that may be useful to the individual who participates in community musical activities.

**MUS 0010 Choral Music for Older Adults**

This course is designed for senior adults. Emphasis will be on group singing and performance. Some music history and music appreciation may be included. Group experience may be useful to individuals as they participate in other community musical activities.

**MUS 0011 Community Orchestra for Older Adults**

This course is designed for senior adults. It provides an opportunity for older musicians to practice and perform in group instrumental musical activities. It will accommodate people who want to learn to play an instrument as well as people who want to improve their existing instrumental skills. Any instrument is welcome; however, participants must provide their own. Public performances will be given periodically.

**MUS 0012 Piano for Older Adults**

This course is designed for senior adults. It provides group instruction for students who want to learn to play the piano, or for students who want to improve their existing piano skills. Special emphasis is given through group instruction, to establishing good reading habits and rhythmic orientation, providing ensemble material, and introducing the student to the fundamentals of theory and musical structure.

**MUY 0001 Music Appreciation High School Cr. 1**

This course will teach the student to listen creatively and will acquaint the student with form and various styles in classical music.

**ORI 0001 The World of Work High School Cr. 1**

This course is designed to assist students in acquiring an intelligent and panoramic view of the world of work.

**PEA 0001 Self Defense for Women**

This course is designed primarily for women who want to learn the art of self defense. Conditioning exercises, safe falling, and defensive techniques will be stressed. Training and information related to preventative measures to assure safety are included.

**PEA 0002 Playground Supervision**

This course covers the basic instruction and concepts that parents or teachers need in guiding the child's mental, social, and physical development. It deals with after-school playground supervision of games, dances, materials, progression, and techniques in teaching games and rhythmical activities to pre-school and school age children.

**PEA 0005 Dancing for Older Adults**

This course is designed for senior adults. Students will begin with the elements of dance and simple dance movements and progress to more advanced movements involving increasing complexity and difficulty, dancing with others, and self-expression. Dancing will include individual movement, partnering, and group dancing. This course provides the opportunity for older adult learners to participate and perform in other community dance activities.

**PHI 0004 Attitudes Toward Death**

Death poses questions of ultimate significance to us. Many people feel ill-prepared to face their own death or the death of a loved one. Through the centuries, humans have thought about death, speculated about immortality and expressed their feelings in a wide variety of ways. The question of death has taken on new dimensions in our century — a time when life processes can be supported by machines and when traditional religious beliefs are challenged. Toward the end of the course we will look at the funeral and burial practices of our day and explore ways that legal papers, insurance and funeral arrangements can be prepared more expeditiously and meaningfully.



**PHI 0005 Living Religions of the World: Our Search for Meaning**

A comparative study of traditional religious concepts in relation to some of today's more popular new religions, cults and metaphysical philosophies. Some of the Eastern Religions, Mystics and Zen Masters, Christianity/Judaism, Islam, Hare Krishna and the new controversial Moonie Movement will be considered for analysis. Mind expanding and positive thinking programs such as Scientology, Dianetics, psycho-cybernetics, Bio Feedback and EST (Erhard Seminar Training) will also be discussed.

**PHS 0001 General Science High School Cr. 1**

An introductory survey course designed to acquaint the student with both the physical and biological sciences.

**PHS 0003 Physical Science High School Cr. 1**

A course normally given for high school credit, designed to acquaint the individual with various aspects of the physical sciences. It includes elements of physics, chemistry, geology, astrology, meteorology and other selected physical science topics.

**PHS 0004 Earth Science High School Cr. 1**

This course is a study of the planet earth, the earth's changing surface, and the earth's atmosphere.

**POR 0001 Portuguese High School Cr. 1**

This course is designed to develop a basic vocabulary, proper pronunciation, and correct speech patterns, enabling the adult learner to converse in everyday language and to develop an appreciation for the historical and cultural values of the country and their continuing contribution to Western Civilization.

**POS 0001 American Government High School Cr. 1**

This course includes a study of such topics as the constitution; legislative, executive and judicial branches, and functions of national, state, and local government; finance and taxation; national defense; health, education and welfare; elections; citizenship.

**POS 0002 Civics High School Cr. ½**

This course deals with the structure and function of government at the local, state, and national levels. Seven units must be completed satisfactorily for one-half credit.

**POS 0003 Civics High School Cr. 1**

This course deals with the structure and function of government at the local, state, and national levels. Ten units must be completed satisfactorily for one credit.

**POS 0004 Americanism Vs. Communism High School Cr. ½**

An analysis of American Government, democratic principles and the basis of communism.

**POS 0005 Americanism Vs. Communism High School Cr. 1**

An analysis of American Government, democratic principles and the basis of communism. Each student must give an oral report in class and turn in one written report upon a topic approved by the professor.

**POS 0007 Current Affairs Education**

Contemporary changes in education-law, curriculum, discipline, and motivation are presented in light of the social, economic and governmental forces that cause them. The course includes development of communication skills related to integration and job discrimination.

**PSY 0001 Psychology High School Cr. 1**

This is a basic study of human behavior. Consideration is given to the family and its place in society, psychology and human relations, coping with the problems of a changing society and cultural environment, understanding the interests, aptitudes and desires of individuals and matters of personal and group adjustment.

**PSY 0004 Psychology of Awareness**

This course is designed for senior citizens. It includes exploration, experimentation, and interaction designed to assist participants to a fuller and more satisfying experience of self, others, and environment through heightened appreciation of here-and-now reality; training and practice in emotional self-support and conflict resolution utilizing Gestalt and Transactional Analysis approaches.

**PSY 0005 Pre-Retirement/Retirement Education**

This course is designed to assist those already retired to live with retirement in independence and dignity, or to prepare individuals approaching retirement for their quiet years. It will include informational and referral services; i.e., Social Security, Medicare, and Medicaid and all others of consequence and importance to the senior adult.

**PSY 0006 Skills for Parents**

This course will emphasize how to communicate better with your children (and other people, too). Some of the skills that will be covered are how to really listen, how to communicate your feelings, how to solve average problems in the family, and become prime trainers, educators, and enrichers of your children.

**PSY 0007 Mental Health First Aid**

This course is to teach the student to provide immediate stop-gap help to persons immediately in danger of committing suicide. The student will receive instruction on prevention of suicide, drug abuse, and other mental health disorders — includes identifying problems, recognizing, and responding to a crisis.

**PSY 0008 Parenting the Adopted Child**

This course is for the parents or "expectant" parents of adopted children. Through study and discussions, various concerns regarding adopted children will be examined. Special problems and needs of these youngsters will be discussed, such as explaining that the child is adopted, handling the child's questions about the natural parents, relationship to natural children in the family, adoption of older children and interracial adoptions. Basic emotional needs of both adopted and natural children will be explored as well as local sources of adoptive information and standards.

**PSY 0009 Education — A Family Affair**

This course is designed to assist parents of school-age children with interpretation of school requirements, standardized test scores, courses of study, academic deficiencies, help with reading, writing, spelling, and mathematics for their children, and other school related problems. This course will include developing skills to help parents assist their school-age children in study methods, listening habits, peer group relationships and coping skills necessary to succeed in school.

**PSY 0010 Divorce: A New Challenge**

This course is designed to help divorced people deal in a positive way with their changing roles in society. Discussions will include topics such as the emotional impact of divorce, family relationships, single parenting, legal and financial issues, entering the work force or changing jobs, developing new personal/social relationships, and making individual plans for action.

**PSY 0011 Assertive Communication Training I**

The course includes the theory and practice of assertive behavior; awareness of one's interpersonal rights; distinguishing among non-assertive, assertive and aggressive responses; practicing simple assertions as well as emphatic, negative feelings; and confrontive assertions and other interpersonal problems relating to coexistence and brotherhood.

**PSY 0012 Managing Your Work World**

A three-hour seminar for women and minorities designed to enable them to examine ways of managing their own careers and those of the people they direct, ways of dealing with local discrimination in the job market, ways of developing more flexibility in their work habits, ways of behaving assertively rather than aggressively, and ways of changing their self-image.

**PSY 0014 Assertive Communication Training II**

This course is designed as a review of assertive and rational skills with extensive practice time scheduled during class. Topics include relaxation techniques and assertive skills important in developing a satisfying social network and close relationships.

**PSY 0015 Pre-Release Program for the Incarcerated**

This pre-release program has been created to offer guidance and counseling to the incarcerated in transition from confinement to freedom. This program will provide the means for reintegrating and readjusting the offender back into the community.

**PSY 0019 Helping Skills**

This course will teach the 3 R's of crisis intervention work to individuals who want to become "people helpers" in the Crisis Intervention Program of Jacksonville. The 3 R's are: (1) recognizing a person in a crisis, (2) responding to a person in a crisis, and (3) referring a person in a crisis to the proper source of help.

**PSY 0025 Understanding Your Aging Parent**

Adult children of aging parents will learn to understand the entire range of problems which confront the elderly. They will be taught the common misconceptions about the physiological, psychological, and social losses involved in the aging process. They all begin to understand their own feelings as they seek to provide effective help for their aging parent, and new communication skills will be developed for family interaction.

**PSY 0030 Single Parenting -- Becoming a New Kind of Family**

The course is designed to assist single parents in raising children alone. Active participation, discussions, and lecture will be used in covering topics including children's reactions to being from a one-parent family; parent-child communication; relationships with the absent parent; developing outlets for yourself; and developing a sense of being a complete family.

**PSY 0035 Survival: Coping with Separation and Divorce**

This program is designed as an open-entry, open-exit class for those who are contemplating or are in the process of divorce. Focus is on persons who are in immediate need of help. The program will offer emotional support and an opportunity to deal with issues such as crisis, loss, loneliness, anger and guilt, and finding new strengths. Options for referral services will be presented.

**PSY 0040 Understanding Your Child**

This course deals with specific issues and concerns that parents may have as they help their children grow and develop to their full potential. Topics to be covered include the child's stages of growth and development, parent-child communication, discipline, helping your child learn.

**RUS 0001 Russian High School Cr. 1**

Conversation rather than grammar is emphasized. This course also includes a brief background in Russian history, culture, and literature.

**SLD 0001 Sign Language High School Cr. 1**

This course is designed to teach individuals to communicate with the deaf through the use of finger positions. Another common name for this is finger spelling.

**SOC 0001 Sociology High School Cr. 1**

This course includes the study of cultural influences on our society, the forms, institutions, and functions of human groups, and the various types of individual and group relationships.

**SOC 0003 Introduction to North American Indians**

A survey of the North American Indian from their first appearance on this continent through their development into tribes.

**SOC 0005 Education for the Aging**

Courses are offered under this title which are designed to provide middle-aged and older adults with information that will help them cope with the problems of aging. Information on pre-retirement planning, the psychological aspects of aging, the role of the aged in the modern world, and courses dealing with health, housing, financial planning, and worthy use of leisure time will be explored. Implications of current social, scientific, economic, and political developments on the older citizen are studied.

**SOC 0007 Interpersonal Relations for the Handicapped**

This course is designed to teach the handicapped person appropriate social and sexual behavior for everyday living in our society. The students will receive instruction in etiquette, hygiene, social roles and relationships, authoritative relationships, and dating, ramifications and implications.

**SOC 0009 Parents of the Handicapped**

This course is designed to provide parents with information beneficial to them in rearing their handicapped child. Some of the topics to be discussed will be attitudes, behavior problems, reality therapy, legal responsibilities and rights, appropriate social activities and behavior, marriage and basic education skills.

**SOC 0010 Life Planning**

This course is designed to provide the basic facts for understanding money from a simple workable budget through the potential of aggressive investments. Information will be made available by presenting every day life occurrences including such topics as the meaning of joint ownership to a wife as well as her spouse; what "gifts" are taxable and when and how to choose a safe but profitable investment, large or small. Other topics to be introduced will include banking, establishing credit, taxes, installment buying, insurance, real estate, wills and trusts.



**SOC 0015 Human Sexuality**

A series of classes for individuals interested in the field of human sexuality education. Information and learning experiences will enable participants to clarify their own personal feelings and values regarding sexuality and become more knowledgeable of psychological, sociological, and biological contributions in the field of human sexuality.

**SOC 0020 Public Forum**

The public forum will provide an opportunity for interested citizens to hear specialists speak on pending community problems and to have the opportunity of expressing themselves concerning these problems.

**SOC 0021 Developing a Social Network**

This course is designed for persons who are in need of developing a new supportive social network of friends and acquaintances. It will focus on individual needs and interests, social strengths and fears, communication skills, and ways to alleviate depression. Emphasis will be on self-evaluation and taking responsibility for one's own feelings and behavior. Class members will be encouraged to find ways of meeting their needs in their own social framework.

**SOC 0022 Being a Homemaker and Loving It**

This course is designed to lead homemakers to greater personal satisfaction in their career in the home. Discussion topics include homemaker as referee, communication that works, stretching the dollar, making every minute count, health and nutrition, improving family relationships. How to be "just" a homemaker without feeling guilty.

**SOC 0025 Opening Doors For The Widowed**

Course discussions deal with specific topics to help the widowed cope with the emptiness of widowhood and reaffirm life. Class topics include information on legal matters, adjustment to grief and other emotions, choosing a vocation or avocation, returning to school or job training and building a new social network. Although any widowed person is eligible to enroll, those widowed within the past few years will find it most helpful. Instructors are widows or those who have been widowed.

**SOC 0030 Advocacy for the Abused-Neglected Child**

This class is designed to train community volunteers to advocate on the behalf of the abused-neglected child in the Duval County Juvenile Court. Training will include the following: role and responsibility of the advocate, current case laws on abuse and neglect, courtroom procedures, investigative techniques, legal terminology, and community support services.

**SOP 0001 Human Relations**

A down-to-earth review of modern concepts in human relations including allocation of time, motivation, communication, race relations, and emotional stability to instill positive attitudes about living and working together.

**SOP 0002 Leadership Training**

This course is designed to develop skills in group or community leadership. It covers techniques of group work and group dynamics, effective speaking, and how to conduct a meeting.

**SOP 0003 Parliamentary Procedure**

This course includes study and practice of the principles and rules governing deliberative assemblies. It is designed to benefit the presiding officer and member alike in participation in local government, communication with public officials, and ensuring each individual's rights.

**SPA 0001 Spanish I High School Cr. 1**

Elements of grammar; pronunciation, elementary conversation, and reading of simple Spanish texts.

**SPA 0002 Spanish II High School Cr. 1**

Review of grammar, with conversation and composition, and reading of Spanish texts.

**SPE 0001 Public Speaking High School Cr. 1**

This course includes the fundamentals of effective speaking practice in organization of materials and delivery, development of voice, vocabulary, diction, and poise.

**STD 0010 Orientation to the Professions**

This course is designed to give young adults information and guidance about various professions in which they have shown an interest. The course will be taught by active or retired practitioners in various professions (law, medicine, business, fine arts, etc.). The course will also include research into the professions, aptitude and interest testing, field trips, and exploration of self and of the professional working world.

**STS 0001 Notetaking/Speedwriting High School Cr. 1**

This course provides opportunities for learning to write with speed in as short a period of time as possible. It aims primarily to meet the needs of individuals having notetaking responsibilities, including reporting and record keeping, in community organizations, and in other personal use activities.

**STS 0002 Beginning Shorthand High School Cr. 1**

Students enrolling in this course will learn the shorthand alphabet with emphasis on dictation and transcription and the application of correct principles of grammar. Standards of performance in transcription are comparable to those of regular high school courses in beginning shorthand.

**TYG 0101 Typewriting High School Cr. 1**

A course in typewriting for personal use. It is designed to assist students in acquiring mastery of the keyboard and in developing the ability to write personal and business letters accurately and in good form.

**WOC 0101 General Shop, Wood High School Cr. 1**

This course provides experiences in the use of basic hand and power tools in working with wood and related materials. The work involves planning, designing, and constructing functional articles of use and value.





# RECREATIONAL/AVOCATIONAL COURSES

The College offers avocational and recreational courses on request from the community. These courses are supported by fees (self supporting) and not funded by the State. The fee structure for these courses is calculated to cover the direct instructional cost of offering the course to the community. The list of available courses is included here.

AAC 0810	Personal Income Tax Seminar	HEF 0810	Upholstery
AIO 0010	Aviation Ground School-Private Pilot	HEN 0810	Yoga
AIO 0014	Aviation Ground School-Instrument Rating	HOM 0002	Clothing Selection
APD 0810	China Painting	HRT 0810	Basic Home Building
APD 0811	Ceramics I	HUM 0810	Travel: Mostly Europe
APD 0812	Ceramics II	HUM 0811	Introduction to Antiques
APD 0813	Pottery	JEW 0810	Jewelry Crafting
ART 0810	Arts and Crafts	LEI 0810	Fine Arts Enrichment Center Summer Program
ART 0811	Decoupage	LIS 0810	Reading for Leisure
ART 0812	Watercolor Painting	LIT 0810	Book Review
ART 0813	Painting, Naturalism to Abstract	LIT 0812	Women in Literature
ART 0814	Shell Craft	LIT 0814	The Southern Literary Renaissance
ART 0815	Metal Sculpture	LTW 0810	Sandal Making & Leather Construction
ART 0816	Macrame I	MET 0810	Meteorology for Airman and Boatman
ART 0817	Macrame II	MUS 0810	Singing For Pleasure
ART 0818	Creative Art for Children	MUS 0811	Piano Lab - Beginning
ART 0820	Stained Glass Window Construction	MUS 0812	Beginning Guitar
ART 0822	Creative Cartoons	MUS 0813	Community Jazz Lab
BIO 0810	Genealogy - Discovering Your Family Heritage	MUS 0814	Music Readiness I
BUN 0810	TV Communications	MUS 0815	Music Readiness II
CCL 0810	Introduction to Numismatics	MUS 0816	Applied Music I
CLT 0111	Sewing for Selling	MUS 0817	Applied Music II
CLT 0113	Creative Needlecraft	MUS 0819	Applied Music III
CLT 0315	Basic Sewing	MUS 0820	Musicianship Class
CLT 0316	Advanced Sewing	MUS 0821	Group Music Instruction
CLT 0811	Beginning Crewel Stitchery	MUS 0822	Music Seminar
CLT 0813	Japanese Embroidery	OCE 0810	Secrets of the Sea
CLT 0816	Patchwork Quilting	ORH 0810	Raising Indoor Plants
CLT 0817	Rug Hooking	ORH 0811	Home Landscape: Design
CLT 0818	Rug and Wall Hangings	ORH 0812	Ornamental Horticulture
CLT 0819	Weaving	PEA 0810	Modern Jazz Dance I
CLT 0821	Creative Wardrobe Planning	PEA 0811	Modern Jazz Dance II
CLT 0823	Creations in Fabrication	PEA 0812	Hawaiian Dance
CMP 0511	Boutique Sewing	PEA 0813	Ballet
CSE 0810	How to Buy and Sell Your House	PEA 0814	Ballroom Dancing
CSE 0811	How to Reduce Costs Around the Home	PEA 0815	Square Dancing
CSE 0812	How to Win Contests	PEA 0817	Judo
CSE 0813	Interviewing: Basic Techniques	PEA 0818	Beginning Swimming
CSE 0814	Memory and Concentration	PEA 0819	Competitive Swimming I
CSE 0816	Know Your Car	PEA 0820	Competitive Swimming II
DRA 0810	Acting for Fun and Self Expression	PEA 0821	Slimnastics
DRA 0811	Art of the Amateur Magician	PEA 0822	Exercise and Competitive Play
DRA 0812	Introduction to Theatre for Children	PEA 0823	Gymnastics I
ENG 0811	Letter Writing	PEA 0824	Gymnastics II
ENR 0810	Motorcycle Care and Repair	PEA 0826	Understanding Football
ENR 0815	How To Service Your Small Engines	PEA 0827	Bowling
FMT 0810	Modeling I	PEA 0828	Soccer
FMT 0811	Modeling II	PEA 0829	Volleyball
FON 0001	Food for You	PEA 0830	Belly Dancing
FON 0005	Health and Weight Control	PEA 0831	Modern Dance
FON 0101	Gourmet Foods	PEA 0832	Karate for Beginners
FON 0103	Microwave Cooking	PEA 0833	Swimming and Lifesaving
FON 0105	Elegant Entertaining	PEA 0834	Tennis
FON 0810	Adventures in Dining	PEA 0835	Fundamentals of Dance
FON 0811	Oenology: The Study of Wines	PEA 0840	Aerobic Dance
FON 0812	Eat Smart	PED 0810	Introduction to Bridge
FSM 0310	Cake Decorating	PEL 0810	Sports Officiating
GRA 0810	Graphoanalysis (Handwriting Analysis)	PEL 0811	Tournament Chess
GRA 0811	Calligraphy	PHI 0810	Get Control of Your Time and Life
HEF 0003	Flower Arranging	PHI 0811	Meditation
		PHI 0813	Astrology