

COLLEGE CREDIT COURSE DESCRIPTIONS

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

KEY TO SYMBOLS:

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

+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.

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

Courses in this college credit course listing with the first digit being zero (example: MUS 012) are not intended to transfer to another college or university.

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.

AAC—ACCOUNTING AND COMPUTING

+ AAC 160—General Accounting I

3 cr.

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.

+ AAC 161—General Accounting II

3 cr.

(A continuation of AAC 160) 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 AAC 160 and AAC 161 is equivalent to the completion of AAC 260. Three contact hours.

+AAC 260—Principles of Accounting I

3 cr.

A study of the principles of double entry records as related to the sole proprietorship form of organization. AAC 260 includes all of the topics listed under AAC 160 and AAC 161 with the exception of partnership and corporate accounting. A practice set is included. AAC 160 and AAC 161 may be substituted for credit in AAC 260. Three contact hours.

+AAC 261—Principles of Accounting II

3 cr.

Prerequisite: AAC 260. 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.

+AAC 262—Intermediate Accounting I

3 cr.

Prerequisite: AAC 261. 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.

+AAC 263—Intermediate Accounting II

3 cr.

Prerequisite: AAC 262. A continuation of AAC 262 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.

+AAC 280—Cost Accounting

3 cr.

Prerequisite: AAC 261. 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.

#AAC 281—Federal Tax Course (Tax Accounting)

4 cr.

A study of the Federal Internal Revenue Code regulations and cases which apply to the determination of income taxes for individuals, partnerships, corporations, estates and trusts. Topics considered: capital gains and losses, deductions and exemptions, tax credits, gross income, inventories, installment sales, depreciation and depletion, and bad debts. The scope is limited to basic fundamentals of the law and practical filing procedures. This course is recommended for terminal students and not for college transfer. Four contact hours. (Two meetings per week—Two class hours per meeting.)

ADS—ADVERTISING SERVICES

+ADS 261—Advertising

3 cr.

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.

AIC—AIR CONDITIONING

+ AIC 283—Air Conditioning & Heating

3 cr.

Prerequisite: APM 160, 161, MEY 160. An introductory course to environmental control of buildings and houses with emphasis on equipment performance and system design. Four contact hours: two class hours; two laboratory hours.

AIO—AIRCRAFT OPERATIONS

#AIO 162—Introduction to Aviation/Aerospace

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.

#AIO 165—Ground School I

3 cr.

Partial preparation for FAA Private Pilot's Written Examination, includes science of flight, airplane systems and instruments; weight and balance; aircraft performance; air traffic control; communications; and physiology of flight. Three contact hours.

#AIO 166—Ground School II

3 cr.

Continuation of Ground School I. Prerequisite: AIO 165 Ground School I or Private Pilot's Certificate. Completion of preparation for FAA Private Pilot's Written Examination. Includes meteorology, basic navigation, radio navigation, airman's information manual, and Federal aviation regulations. Three contact hours.

#AIO 167—Ground School III—Commercial Pilot

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; commercial pilot Federal aviation regulations. Three contact hours.

#AIO 168—Ground School IV—Instrument Pilot

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; instrument approaches. Three contact hours.

ANA—ANATOMY

*ANA 205—Comparative Anatomy

4 cr.

Prerequisite: BIO 102 or ZOO 101. 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, mudpuppy, pigeon and cat. Six contact hours.

*ANA 215—Human Anatomy and Physiology I

3 cr.

A study of the gross morphology and physiology of the human. The course includes sections concerned with cells, tissues, musculo-skeletal system, circulation, the lymphatic system, the excretory system and fluids and electrolyte balance. Four contact hours: two hours lecture; one two-hour laboratory.

***ANA 216—Human Anatomy and Physiology II** **3 cr.**
Prerequisite: ANA 215. A continuation of ANA 215. 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.

ANT—ANTHROPOLOGY

***ANT 220—Cultural Anthropology** **3 cr.**
The study of man, the concept of culture, and components of culture with emphasis on the different cultural adaptations of man worldwide. Three contact hours.

***ANT 230—Physical Anthropology** **3 cr.**
The study of man as a biological and cultural animal including man's variations, evolutionary adaptations, and his place in the ecological system. Three contact hours.

APA—APPAREL AND ACCESSORIES

#APA 161—Fashion Merchandising I **3 cr.**
A description of ways in which operations of the various segments of the clothing and textile industry impinge on retailing. The course also includes a study of consumer behavior, retailing techniques, and the merchandising of home furnishing fashion items. Three contact hours.

#APA 162—Fashion Merchandising II **3 cr.**
A continuation of APA 161. Three contact hours.

#APA 164—Fashion Merchandising Seminar I **1 cr.**
A seminar designed to provide an opportunity to solve problems encountered in the work experience program, to learn skills necessary to fill out necessary reports, and to analyze various job descriptions pertaining to merchandising. The student will also have an opportunity to learn sales promotion and display techniques while participating in the work experience program. One contact hour.

#APA 172—Fashion Merchandising Practicum I **3 cr.**
A minimum of 20 hours per week of practical work experience approved by the student's advisor. The student will display the necessary ability of solving on-the-job problems relating to selling experiences, knowledge of merchandise with which the student is working, knowledge of retail store organization and operation; should display an enthusiastic attitude toward merchandising. Twenty contact hours.

#APA 265—Fashion Merchandising Seminar II **1 cr.**
Recommended prerequisites: APA 161, 162, 164, 172. A continuation of APA 164. The student must be currently enrolled in APA 274. One contact hour.

#APA 266—Fashion Merchandising Seminar III **1 cr.**
Recommended prerequisites: APA 161, 162, 164, 172, 265, 274. A continuation of APA 265. The student must be currently enrolled in APA 275. One contact hour.

#APA 274—Fashion Merchandising Practicum II **3 cr.**
Recommended prerequisites: APA 161, 162, 164, 172. A continuation of APA 172. Twenty contact hours.

#APA 275—Fashion Merchandising Practicum III**3 cr.**

Recommended prerequisites: APA 161, 162, 164, 172, 265, 274. A continuation of APA 274. Twenty contact hours.

APC—APPLIED COMMUNICATIONS**+ APC 291—Business Communications****3 cr.**

Prerequisite: ENG 101 or consent of instructor, 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.

APD—APPLIED DESIGN***APD 101—Crafts as an Element of Design****3 cr. (Evening: 2 cr.)**

This course is planned as an introduction to contemporary and traditional crafts. Weaving, macrame batik, and leathercrafts will be included. Basic techniques will be taught and personal creativity will be encouraged. Six contact hours. (Evening: Four contact 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.

APD 120—Design I*3 cr. (Evening: 2 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 studio hours. (Evening: four contact hours: one class hour; three studio hours.)

APD 121—Design II*3 cr. (Evening: 2 cr.)**

Prerequisite: APD 120 or consent of instructor. A continuation of APD 120. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

APD 230—Ceramics: Hand-Building I*3 cr. (Evening: 2 cr.)**

Prerequisite: ART 101 and APD 120 desirable. This course introduces the basic methods of ceramic production in hand-building and glaze application. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

APD 231—Ceramics: Hand-Building II*3 cr. (Evening: 2 cr.)**

A continuation of APD 230. Emphasis on creativity and special problems. Kiln stacking and firing also included. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

APD 232—Ceramics: Wheel Throwing I*3 cr. (Evening: 2 cr.)**

Prerequisite: APD 230 or consent of instructor. This course introduces the basic methods of wheel throwing along with kiln stacking and glazing techniques. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

APD 233—Ceramics: Wheel Throwing II*3 cr. (Evening: 2 cr.)**

A continuation of APD 232. Emphasis on perfecting the technique of wheel throwing and on creativity. Ceramic sculpture is included. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

***APD 234—Glaze Exploration** **3 cr. (Evening: 2 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 studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

***APD 280—Graphics I** **3 cr. (Evening: 2 cr.)**
Prerequisite: ART 101. The course consists of experimentation with line, tone etching, intaglio and relief printing. Six contact hours: one class hour; five studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

***APD 281—Graphics II** **3 cr. (Evening: 2 cr.)**
Prerequisite: APD 280. A more detailed study of intaglio materials and techniques. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio 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.

APM—APPLIED MATHEMATICS

#APM 061—Introduction to Technical Math **3 cr.**
A review of high school mathematics for students who lack the background necessary for enrollment in APM 160. The course includes review of number theory, fractions, decimals, ratio and proportion, percentages, areas, volumes and basic algebra as applied to engineering calculations. Three contact hours.

+APM 141—Business Mathematics **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.

+APM 160—Technical Math I **3 cr.**
Prerequisite: Two years of High School algebra or APM 061. 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.

+APM 161—Technical Math II **3 cr.**
Prerequisite: APM 160 or MAT 119. A continuation of APM 160 which covers 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.

#APM 164—Engineering Calculations **1 cr.**
Slide rule basic operations, multiplication, division, finding squares, cubes, square roots, cube roots, reciprocals, and common logarithms. Some trigonometric operations. One contact hour.

+APM 280—Technical Math III **3 cr.**
Prerequisite: APM 161 or MAT 122. 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.

ART—ART

***ART 101—Drawing I** **3 cr. (Evening: 2 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 studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

***ART 102—Drawing II** **3 cr. (Evening: 2 cr.)**

Prerequisite: ART 101 or consent of instructor. A continuation of ART 101. Six contact hours: two class hours; four studio hours. (Evening: Four contact hours: one class hour; three studio hours.)

***ART 110—Art Appreciation** **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.

***ART 211—Art History I** **3 cr.**

A history and critical study of painting, sculpture, and architecture from prehistoric times to the Renaissance. Three contact hours.

***ART 212—Art History II** **3 cr.**

Prerequisite: ART 211. A continuation of the history and criticism of art from the Renaissance to the present. Three contact hours.

***ART 231—Painting I** **3 cr. (Evening: 2 cr.)**

Prerequisite: ART 102 or consent of instructor. 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. (Evening: Four contact hours: one class hour; three studio hours.)

***ART 232—Painting II** **3 cr. (Evening: 2 cr.)**

Prerequisite: ART 231. A continuation of ART 231 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. (Evening: Four contact hours: one class hour; three studio hours.)

AST—ASTRONOMY

***AST 110—Introduction to Astronomy** **3 cr.**

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 his own planet and its satellite, the moon. He 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.

BCN—BUILDING CONSTRUCTION AND MAINTENANCE

#BCN 181—Building Construction

3 cr.

Prerequisite: DTG 170, CIT 180, APM 160. 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 282—Planning and Estimating

3 cr.

Prerequisites: BCN 181, MEY 160. 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.

BDP—BUSINESS DATA PROCESSING SYSTEMS

+BDP 170—Introductory Computer Concepts

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.

+BDP 171—Data Processing Mathematics

3 cr.

Co-requisite: BDP 170. An essential course for Data Processing majors who do not have a strong background in Mathematics. 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. Three contact hours.

+BDP 172—Basic Assembly Language Programming

3 cr.

Prerequisite: BDP 170 and BDP 171. 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; test, debug, and document their computer solutions to business problems. Those desiring to specialize in systems programming are strongly urged to continue with BDP 293 Advanced Assembly Language Programming. Four contact hours.

+BDP 173—Data Processing Applications

3 cr.

Prerequisite: BDP 170. 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.

+BDP 174—Data Processing Workshop

3 cr.

Prerequisite: BDP 173. 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.

- +BDP 176—RPG Programming** **3 cr.**
 RPG (Report Program Generator) is a problem-oriented programming language designed essentially to obtain data from single or multiple files, 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.
- +BDP 270—Basic Programming** **3 cr.**
 Prerequisite: BDP 170 or ELS 270 and one of the following: APM 160, BDP 171, MAT 120. 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.
- #BDP 272—Data Management & Utility Programs** **3 cr.**
 Prerequisites: BDP 173. A study of file 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.
- +BDP 278—FORTRAN Programming** **3 cr.**
 Prerequisites: BDP 170 and one of the following: APM 160, BDP 171, MAT 120. 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.
- +BDP 291—Systems Development and Design** **3 cr.**
 Prerequisite: BDP 173. This course is designed to provide the student 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.
- +BDP 293—Advanced Assembly Language Programming** **3 cr.**
 Prerequisite: BDP 172. This course is an extension of BDP 172 Basic Assembly Language Programming. Topics include file labels, direct-access storage devices, modular concepts in programming, physical IOCS, macro definitions, subroutines, core dumps, program libraries, floating-point arithmetic, and efficient programming in virtual storage environments. Four contact hours.
- +BDP 295—PL/I Programming** **3 cr.**
 Prerequisite: BDP 172 and BDP 297. 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.
- +BDP 296—Advanced Computing and Programming Systems** **3 cr.**
 Prerequisite: BDP 297 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.

+BDP 297—Basic COBOL Programming **3 cr.**
Prerequisite: BDP 170 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.

+BDP 298—Advanced COBOL Programming **3 cr.**
Prerequisite: Basic COBOL Programming or equivalent experience. COBOL (Common Business Oriented Language) is the programming language designed to solve business problems. Students will solve moderately complex to 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.

BIO—BIOLOGY

***BIO 101—Life in Its Biological Environment** **3 cr.**
An introduction to biological structure, function processes, principles and concepts. This course is designed to fulfill the general education requirement. Three contact hours.

***BIO 102—Principles of Biology** **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.

***BIO 241—Microbiology** **4 cr.**
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.

***BIO 250—Marine Biology** **4 cr.**
Suggested prerequisites: Four hours of biology. Suggested background in high school chemistry and/or physics or Chemistry 101 or permission of instructor. 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.

+BIO 260—Ichthyology and Commercial Fishing **4 cr.**
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.

BLC—BLACK CULTURE

***BLC 210—Afro-American History and Culture to 1877**

3 cr.

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 man during the Revolutionary War, the development of slavery and the black man 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.

***BLC 220—Afro-American History and Culture from 1877**

3 cr.

A continuation of BLC 210 with special emphasis on present and future projected developments among black people. The black man 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.

BOT—BOTANY

***BOT 101—Botany**

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.

BUW—BUSINESS LAW

+BUW 260—Business Law

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.

+BUW 261—Business Law

3 cr.

Recommended prerequisite: BUW 260. The legal principles involving agency, commercial paper, bailments and sales are stressed. Three contact hours.

CGC—CARE AND GUIDANCE OF CHILDREN

+CGC 161—Child Growth and Development

3 cr.

This course is an introductory study of the physical, social, emotional, and mental development of the young child. The influence of cultural environment on development and individual differences in development are considered. Three contact hours.

+CGC 162—Child Growth and Development

3 cr.

Prerequisite: CGC 161. This course is designed to further the student's understanding of the physical, social, emotional, and mental development of the child six through twelve years of age. Guidance, behavior problems, feelings, attitudes, and values are discussed. Three contact hours.

+CGC 163—Introduction to Early Childhood Education

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, and job opportunities are also included. Three contact hours.

+ CGC 164—Overview of Early Childhood Curriculum I **3 cr.**
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.

+ CGC 169—Overview of Early Childhood Curriculum II **3 cr.**
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.

+ CGC 291—Observing and Recording Child Behavior **4 cr.**
Prerequisites: CGC 162 and 164. This course is designed to increase objectivity and proficiency in observing and interpreting children's behavior; in addition, to increase awareness of normal patterns of behavior. Observation facilities are provided for the study of young children. Six contact hours: two class hours; four laboratory hours.

+ CGC 292—Supervised Student Participation **6 cr.**
Prerequisite: CGC 291. This course is designed for participation, under qualified supervision, in the Child Care Laboratory. Ten contact hours: two class hours; eight laboratory hours.

CHE—CHEMISTRY

***CHE 100—Chemistry for Liberal Arts** **3 cr.**
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.

***CHE 101—Introductory Chemistry** **4 cr.**
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.

***CHE 102—Introductory Chemistry** **4 cr.**
Prerequisite: CHE 101 or equivalent. This course is a continuation of CHE 101 with an introduction to organic chemistry. Six contact hours: three class hours; one three-hour laboratory.

***CHE 110—General Chemistry and Qualitative Analysis** **4 cr.**
Prerequisite: One year of high school chemistry and two years of high school algebra or grade of C or better in CHE 102 or approval of instructor. 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, pre-medicine and pharmacy. Six contact hours: three class hours; one three-hour laboratory.

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; 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0217—Insurance Soliciting

This course is designed specifically for job entry training and includes an introduction to the field of property and casualty insurance. Successful completion of this course will authorize and otherwise qualify an individual to sit for the Florida Insurance Department examination for the license 4-20 as Solicitor. This is a seventeen-week course, meeting twice a week, three hours each night.

INS 0218—LUTC—Equities Marketing

The LUTC Equities Course offers the career life underwriter practical on-the-job training in the sale of equities (mutual funds and variable annuities). It is designed specifically for life agents whose companies offer equity products and who want to expand their markets and their skills to sell more of these products. It meets for twenty-six weeks, two and one-half hours per week.

INS 0220—CLU—Investments and Family Financial Management

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0222—CLU—Life Insurance Law and Company Operations

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0224—LUTC—Personal Insurance

This course is designed specifically for job entry training and includes a study of the value of life insurance; qualities of a successful life agent; the life agent's work, habits, self-discipline; self-evaluation; what life insurance is capable of providing; how to convert to commission dollars; the prestige of the life agent; programming; the keys to the sale. This is a twenty-six-week course, meeting one night a week for two and one-half hours.

INS 0225—LUTC—Business Insurance

This course is designed specifically for job entry 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; techniques used to acquaint business owners with the perils they face. This is a twenty-six week course, meeting one day or night a week for two and one-half hours.

INS 0226—LUTC—Disability Income Insurance

This course is designed specifically for job entry 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; overcoming objections. This is a twelve-week course, meeting one day a week for two and one-half hours.

INS 0228—CLU—Pension Planning

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0229—CLU—Economics

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0230—LOMA—Fundamentals of Life Insurance

This course is designed specifically for job entry 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 for job entry training and includes a study made of the different types of life insurance organizations, home offices and field office organization, mortality tables, premium calculation, risk selection, reinsurance, governmental regulation and taxation investments of life insurance companies, financial statements, and new ideas and planning in the business of life insurance. This is a fifteen-week course, meeting one night a week for three hours.

INS 0232—LOMA—Legal Aspects of Life Insurance

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one day a week for two and one-half hours.

INS 0233—LOMA—Life Insurance Accounting

This course is designed specifically for job entry training and includes a study of elementary commercial bookkeeping, classifications of transactions, insurance entries, investment operations, punched card data processing, fiscal period reporting. This is a fifteen-week course, meeting one night a week for two hours.

INS 0234—LOMA—Economics and Investments

This course is designed specifically for job entry training and includes a study of economics as a study, income and growth, financial organizations, money and banking, income distribution, investment and security purchasing and purpose. This is a fifteen-week course, meeting one night a week for two and one-half hours.

INS 0235—LOMA—Mathematics of Life Insurance

This course is designed specifically for job entry training and includes a study of life insurance mathematics, compound interest, relation of mathematics to annuities, how to calculate premiums, reserves, dividends, non-forfeiture values. This is a fifteen-week course, meeting one night a week for two and one-half hours.

INS 0236—LOMA—Office Administration—Agency and Home Office

This course is designed specifically for job entry training and includes a study of office organization, sales organization, office management, systems, data processing, office layout and personnel. This is a fifteen-week course, meeting one night a week for two and one-half hours.

INS 0237—LOMA—Advanced Life Insurance

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for two hours.

INS 0240—CLU—Advanced Estate Planning

This course is designed specifically for job entry 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) are covered, along with fact finding, analysis of facts, and presentation of a proposal. This course is designed for CLUs, CPAs, lawyers and trust officers. This is a twenty-week course, meeting one night a week for three hours.

INS 0241—CLU—Individual Life-Health Insurance

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0242—CLU—Group Insurance

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0243—CLU—Income-Estate, Gift Tax

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0244—CLU—Accounting and Finance

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0245—CLU—Business Insurance

This course is designed specifically for job entry training and includes a study of business uses of life and health insurance, 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0250—Fire Casualty Solicitors Lines Insurance

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The course is approved by the office of the Insurance Commissioner of the State of Florida. Approved material will be taught by insurance experts in all fields of fire and casualty lines and is designed to prepare students to sit for the state examination for the Solicitor License.

INS 0251—Casualty Insurance

This job entry training course is to prepare students to take the State Insurance Department's license examination. It is part of a 240-hour required course. The required one year of work experience with an agency or insurance company can be waived through successful completion of this course.

INS 0253—Fire Agent Allied Lines

Successful completion of this job entry training course certifies that the student has successfully met the educational requirements prescribed by the State Insurance Commissioner's office to sit for the state examination for a 2-20 Agent's License. The required one year of work experience with an agency or insurance company can be waived through successful completion of this course. This is a twenty-three week course, meeting twice a week for three hours.

INS 0255—CLU—Estate Planning

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

ISA—INDUSTRIAL SAFETY**ISA 0110—Occupational Safety and Health Hazards**

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It is a program for the education and training of employers and employees in the recognition, avoidance and prevention of unsafe and unhealthful working conditions, and in the effective means for preventing occupational injuries and illnesses.

ITA—ITALIAN LANGUAGE**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.

ITR—INTERNATIONAL TRADE**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—LAW ENFORCEMENT

LAE 0420—Small Arms

The handling, care, and use of firearms in police work to enable the law enforcement officer to compete with any situation where firearms are needed. Lectures are supplemented by an intensive range program in deliberate point and defense shooting. NOTE: This course is restricted to criminal justice personnel who are required by the Police Standards Act or their agency to successfully complete a course of this nature.

LAE 0421—Tests for Intoxication

This course is designed specifically for job entry training and 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.

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 0424—Police Administration and Supervision

This course is designed to provide the student with supervisory techniques and skills. In addition, decision making and administrative problems are discussed. NOTE: This course is restricted to criminal justice personnel who are eligible to qualify for pay incentive raises under the Police Standards Act.

LAE 0425—Weaponless Defense

Techniques and special methods of self-defense against individuals, both armed and unarmed. Come-alongs and techniques of minimizing resistance to arrest and detention. Demonstration and drill in non-injurious restraint of prisoners and mentally ill. NOTE: This course is restricted to criminal justice personnel who are required by the Police Standards Act to successfully complete a course of this nature.

LAE 0426—Law Enforcement—Crime Prevention

This course is designed specifically for job entry training and covers a variety of areas considered to be directly related to crime prevention. Areas such as evidence, criminal investigation, patrol procedures, traffic control, juvenile procedures, vice, patrol techniques, etc., are included.

LAE 0428—Law Enforcement—Crime Prevention

Course covers a variety of areas considered to be directly related to crime prevention. Areas such as evidence, criminal investigation, patrol procedures, traffic control, juvenile procedures, vice, patrol techniques, etc., are included. NOTE: This course is restricted to criminal justice personnel who are required by the Police Standards Act or their agency to successfully complete a course of this nature.

LAT—LATIN

LAT 0001—Latin I

This course is designed to develop a basic vocabulary, proper pronunciation, and correct grammatical patterns.

High School Cr. 1

LAW—LAW

LAW 0001—Law for the Layman

High School Cr. 1

The purpose of this course is to acquaint the layman with the various phases of law that affect his 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 layman.

LIS—LIBRARY SCIENCE

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—LITERATURE

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 Hebraic 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 Hebraic 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.

MAG—MARKETING

MAG 0010—Techniques of Market Research Interviewing

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The course will train individuals in proper techniques of Market Research Interviewing as a method of determining consumer demand for new or improved products.

MAM—MARKETING MANAGEMENT

MAM 0010—Business Management

This course is designed specifically for job entry training and 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—Establishing and Operating a New Business

This course is designed for new and/or prospective managers and/or owners of small businesses. Included in the course are units covering location determination, financing a new business, legal risks, personnel management, market research, and taxation.

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 0015—Occupational Safety for Supervisors

This course is designed as supplementary instruction for managers, supervisors, and foremen who are already employed in the field and are concerned with occupational safety. This is a ten-week course, meeting one night a week for three hours.

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. This is a ten-week course, meeting one night a week for three hours.

MAT—MATHEMATICS

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

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, 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, are 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.

MAY—MASONRY

MAY 0310—Brick and Blocklaying

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 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 of 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—MEDICAL ASSISTANT

MEA 0310—Medical Assisting

The medical assistant course 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. The course is one academic year with clinical practice in the physician's office.

MEW—METALWORKING

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.

MEW 0310—Steel Fabricator

This course is designed specifically for job entry training in layout, fabrication, erection or installation of steel plate to ¼" thickness, stainless steel and aluminum used in ship construction or fuel storage tank fabrication. Instruction and skill development in the use of hand and power tools and machines such as brake, forming rolls and bending and squaring shears, drafting and blueprint reading, related mathematics, layout and material cost estimating, welding, brazing, and flame cutting.

MEW 0312—Steel Fabricator

This course is designed for persons already employed in the field, for supplementary instruction. The student will learn the proper procedure in layout, fabrication, erection or installation of steel plate to ¼" thickness, stainless steel and aluminum used in ship construction or fuel storage tank fabrication. Instruction and skill development in the use of hand and power tools and machines such as brake, forming rolls and bending and squaring shears, drafting and blueprint reading, related mathematics, layout and material cost estimating, welding, brazing, and flame cutting.

MSH—MACHINE SHOP

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 his manipulative skills. This course is designed primarily for off-campus supplementary instruction.

MSH 0310—Machine Shop Work

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 operations of all machine tools, including lathes, milling machines, planers, shapers, and drill presses.

MSH 0312—Machine Shop Work

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It includes training in the construction and repair of all kinds of metal parts, tools, and machines, and in the operations of all machine tools, including lathes, milling machines, planers, shapers, and drill presses.

MSH 0314—Machinery Repair

This course is designed specifically for job entry training in the repair of all types of industrial and specialized power driven machinery.

MSH 0316—Machinery Repair

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in the repair of all types of industrial and specialized power driven machinery.

MUS—MUSIC

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 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 as he participates in community musical activities.

MUY—MUSICOLOGY

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.

NUA—NURSING ASSISTANCE, AIDE

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 is an eight-week course.

NUR—NURSING

NUR 0510—Seminar for Licensed Practical Nurses

Theory, practice and supplementary instruction to refresh, update, and enhance the knowledge and skills of Licensed Practical Nurses through individual and group experiences.

ORH—ORNAMENTAL HORTICULTURE

ORH 0001—Ornamental Horticulture

This is a basic introductory course designed to enable the individual who completes it to properly care for the plants normally found around the home. The material covered in the course will include the basic preparation of landscaping, propagation, fertilization and methods of cultivation necessary to maintain a beautiful yard and healthy, vigorous house plants.

***CHE 111—General Chemistry and Qualitative Analysis** 4 cr.
Prerequisite: Grade of C or better in CHE 110 or approval of instructor. This course is a continuation of CHE 110 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.

+CHE 208—Organic Chemistry for Home Economics 4 cr.
Prerequisite: CHE 101. A one semester course in the fundamentals of Organic Chemistry with emphasis on the chemistry related to foods, vitamins, fabrics, dyes, plastics as organic structural materials, pesticides, solvents, and other household or consumer products. Required for Home Economics Education majors. Six contact hours: three class hours; one three-hour laboratory.

***CHE 220—Organic Chemistry I** 4 cr.
Prerequisite: CHE 111 or equivalent or approval of instructor. 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.

***CHE 221—Organic Chemistry II** 4 cr.
Prerequisite: CHE 220. A continuation of CHE 220. Includes mechanisms of organic reactions, rearrangements, substitution reactions, carbohydrates and macromolecules. Six contact hours: three class hours; one three-hour laboratory.

CIN—CINEMATOGRAPHY

***CIN 101—Film as Art** 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.

CIT—CIVIL TECHNOLOGY

+CIT 180—Surveying 3 cr.
Prerequisite: APM 161, DTG 170. 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.

CLT—CLOTHING AND TEXTILES

+CLT 171—Basic Textiles 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.

ORI—ORIENTATION

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.

PDE—PAINTING AND DECORATING

PDE 0310—Painting and Decorating

This course is designed specifically for job entry training in the application of paint to house exteriors, sheds, and other structures, and painting and decorating interiors of buildings, mixing paints and color matching, scaffold erection, brush and spray gun cleaning, and paint removal.

PDE 0312—Painting and Decorating

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in the application of paint to house exteriors, sheds, and other structures, and painting and decorating interiors of buildings, mixing paints and color matching, scaffold erection, brush and spray gun cleaning, and paint removal.

PDE 0315—Painting and Decorating

This course is designed primarily for apprenticeship instruction and its contents will include training in the application of paint to house exteriors, sheds, and other structures, and painting and decorating interiors of buildings, mixing paints and color matching, scaffold erection, brush and spray gun cleaning, and paint removal.

PED—PHYSICAL EDUCATION

PED 0001—Introduction to Bridge

This course is designed specifically for those players who would like to achieve a better than average result when bidding or playing a hand of bridge. It includes principal fundamentals of bidding, hand-evaluations, and play-of-the cards.

PED 0002—Tennis

An introductory course covering the history, scoring, game strategy, and basic skills which include footwork, forehand and backhand drives, serve, volley, and lob.

PED 0003—Swimming and Lifesaving

This course includes teaching various styles of swimming, plus the teaching of non-swimmers. Lifesaving techniques will be taught to the advanced group of swimmers.

PED 0004—Modern Dance

This course includes general familiarization of the function of the body in coordinated motion; basic dance exercises and rhythmic patterns.

PED 0005—Belly Dancing

This course covers the fundamentals of belly dancing movements. Included are breathing exercises, hip lifts, stretching exercises, rib cage extension, belly roll, undulations, flutters, shimmies, and more, which condition the body for dance. By the end of the term the class will have ventured into veil and floor work.

PEL—PHYSICAL EDUCATION LEADERSHIP

PEL 0001—Tournament Chess

Supervised competitive games which promote creative thinking. This tournament chess course will provide the adult with a non-physical outlet for competitive social interaction. Class will include film strips and the study of the philosophy and strategy of various styles of play.

PET—PETROLEUM

PET 0010—Service Station Management

This course is designed specifically for job entry training for service station managers and owners. It covers the basic principles involved in this type of occupation. Items such as customer relations, accounting, servicing, and product control are discussed.

PHI—PHILOSOPHY

PHI 0001—Transcendental Meditation

Transcendental Meditation is a technique by which one can attain deepest relaxation at will in a few minutes. This course discusses transcendental meditation with reference to the development of full mental potential.

PHI 0002—Astrology

This twelve-week course is designed as a study of the basic principles leading toward an understanding of the reading and the making of personal astrological charts. The course is taught by a noted Jacksonville astrologer. A certificate is awarded on the completion of this class.

PHI 0003—Zen Buddhism

Lectures and group discussions on the Buddhist approach to self-realization; Zen development of self through understanding and controlling of the mind.

PHS—PHYSICAL SCIENCE

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.

POR—PORTUGUESE LANGUAGE

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—POLITICAL SCIENCE

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 0003—Civics

High School Cr. 1

This course deals with the structure and function of government at the local, state, and national levels.

POS 0005—Americanism Vs. Communism

High School Cr. 1

An analysis of American Government, democratic principles and the basis of communism.

POS 0007—Current Affairs Education

Contemporary changes in education-law, curriculum, discipline, and motivation are presented in light of the social and economic forces that cause them.

PPF—PLUMBING AND PIPE FITTING

PPF 0310—Plumbing and Pipe Fitting

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, calking and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers, or foundations.

PPF 0312—Plumbing and Pipe Fitting

This course is designed as supplementary training for persons already employed in the field, or in a related field. The student will be trained in the assembly and installation of air, gas, water and waste-disposal systems, including the cutting, reaming, and threading of pipe, calking and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers, or foundations.

PPF 0315—Plumbing and Pipe Fitting

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, calking and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers, or foundations.

PRN—PRACTICAL NURSING

PRN 0310—Practical Nursing

This course is designed to prepare individuals to share in giving direct care to patients in the hospital, nursing home, or homes. Instruction includes a minimum of 1,300 hours offered within the academic year. Classes are admitted twice annually. A high school education and successfully passing an 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 take the State Board Test Pool Examination to qualify for licensure to practice as a Licensed Practical Nurse and to use the title of L.P.N.

PSY—PSYCHOLOGY

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 0005—Pre-Retirement/Retirement Education

A course designed to assist those already retired to live with retirement; or to prepare individuals approaching retirement for their quiet years. This course 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 and how to solve average problems in the family.

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 suicide prevention—identifying problems, recognizing, and responding to a crisis.

PSY 0010—Divorce—A New Challenge

A course designed to help divorced persons re-establish a good and rewarding life. Designed to help people avoid self-pity, wounded pride, guilt, distrust, and withdrawal.

PSY 0011—Assertive Training

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 empathetic, negative feelings and confrontive assertions.

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 developing more flexibility in their work habits, ways of behaving assertively rather than aggressively and ways of changing their self-image.

PSY 0015—Pre-Release Program for the Incarcerated

This pre-release program has been created to help the incarcerated with the transition from confinement to freedom. This program will provide the means for reintegrating the offender back into the community.

PSY 0020—Parapsychology I

Introductory course covering the history of parapsychology, what science is doing in the field, and learning about psychic faculties of clairvoyance, clairaudience. Discussions of the magnetic field called the "human aura," and instruction and practice in psychometry, which is a method of developing one's psychic faculties.

PSY 0021—Parapsychology II

A course designed for those who have successfully completed Parapsychology I or equivalent. Psychometry and meditation to achieve clairvoyant impressions will be emphasized.

PSY 0022—Introduction to Hypnosis

This is an introductory course presenting the basic concepts of hypnosis. The course will include such topics as the use of hypnosis, misconceptions and dangers of hypnosis, qualifications of subjects, and the psychology of suggestions.

PTR—PERSONNEL, TRAINING AND RELATED**PTR 0010—Career Development**

This course will teach specific skills, including job search technique, job interview technique, salary negotiation, resumé writing, to those seeking to reenter the job market and to those seeking to upgrade present positions. Designed to help participants discover and focus on their hidden skills.

PTY—PHOTOGRAPHY**PTY 0003—Photography and Photo-Finishing**

A basic study in making photographic negatives for making prints using student cameras and training in the developing, retouching, and mounting of photographic prints. All material is to be furnished by the student. This course is designed primarily for off-campus supplementary instruction. Four lab hours; two theory hours.

PTY 0310—Photography and Photo-Finishing

This course is designed specifically for job entry 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. Lab hours per week—four; Theory hours per week—two.

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. Lab hours per week—four; Theory hours per week—two.

QFO—QUANTITY FOOD**QFO 0310—Meat Cutting**

This course is designed specifically for job entry training and includes a study of the complete break-down of animal carcass and preparation of meat cuts for display and sale. This training is given on the job in actual market situations.

QFO 0312—Meat Cutting

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 involved in the complete break-down of animal carcass and preparation of meat cuts for display and sale. This training is given on the job in actual market situations.

RES—REAL ESTATE

RES 0210—Mortgage Broker—Mortgage Lending

This course is designed specifically for job entry training and offers an exposure to the principles and techniques of mortgage financing and brokerage operations and a background study of the Florida Mortgage Brokerage Act. This is a ten-week class, meeting one night a week for three hours.

RES 0211—Real Estate Principles and Practices

This course is designed specifically for job entry 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 him by the Florida Real Estate Commission. Classes are available one day a week for fifteen weeks, three hours per class. This course, when successfully completed, fills the educational requirement enabling an individual to apply for the real estate salesman's State examination.

RES 0212—Real Estate Law

This course is designed specifically for job entry training and to give the student full legal, detailed expositions of every aspect of modern real estate transactions. It not only provides one with expert analysis of every type of real estate transaction, but describes all the new trends and developments. This is a ten-week class, meeting one night a week for three hours.

RES 0213—Real Estate Sales Promotion

This course is designed specifically for job entry training and covers all phases of the various ethical techniques used in selling real estate. Fundamental concepts concerning human relationships and various methods used in advertising and promoting the sale of real estate are included. This is a fifteen-week course, meeting one night a week for three hours.

RES 0214—Real Estate Appraisal

This course is designed specifically for job entry training and 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 also designed to give the experienced real estate man a basic knowledge of appraisal fundamentals. This is a fifteen-week course, meeting one night a week for three hours.

RES 0215—Real Estate License Law

This course is designed specifically for job entry training and prepares the student for the Florida Real Estate License Examination for salesmen, and as a reference text for Real Estate Principles and Practices. It gives the background of the law regarding the Florida Real Estate Commission and goes on to explain the operation, requirements, and procedure of the real estate office. RES 0211, Real Estate Principles and Practices, is a prerequisite for this course. This is a fifteen-week course, meeting one night a week for three hours.

ROO—ROOFING

ROO 0314—Roofing

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. It includes training in applying all types of finished roofs to buildings and other covered structures.

ROO 0315—Roofing

This course is designed primarily for apprenticeship instruction and its contents will include training in applying all types of finished roofs to buildings and other covered structures.

RTV—RADIO/TELEVISION

RTV 0310—Electronics, Radio & TV

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 0312—Electronics, Radio & TV

This course is designed as supplementary training for persons already employed in the field, or in a related field. The student will receive training in the 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.

RUS—RUSSIAN LANGUAGE

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.

SAM—SUPERVISORY AND ADMINISTRATIVE MANAGEMENT

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. Covers the job of supervision, human relations, job advancements, and the development of other supervisory skills.

SEO—SECURITY OFFICERS

SEO 0210—Basic Security Officers Training Course

This course is designed specifically for job entry 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—SHEET METAL

SHM 0310—Sheet Metal

This course is designed specifically for job entry training in fabricating, assembling, altering, repairing, and installing sheet metal articles and equipment.

SHM 0312—Sheet Metal

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in fabricating, assembling, altering, repairing, and installing sheet metal articles and equipment.

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.

SLD—SPECIAL LEARNING DISABILITIES; EDUCATION**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—SOCIOLOGY**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 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. Short courses in 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 may be offered. Implications of current social, scientific, economic, and political developments on the older citizen are studied.

SOC 0010—Life Planning Workshop

The Life Planning Workshop is designed to involve the individual in the process of influencing one's own future. The individual is actively engaged in the processes of self-identification and group interaction, and the activities are designed to assist one in assessing oneself into the future. The past is used only as an explanation of where a person is now, not an excuse.

SOC 0011—Opening Doors For Women—Exploring Options

A seminar designed to help women examine the direction in which their lives are moving. Discussion and experiences will center around personal values, definition of various roles, common problems and conflicts, and the process of decision making.

SOP—SOCIAL PSYCHOLOGY**SOP 0001—Human Relations**

A down-to-earth review of modern concepts in human relations including allocation of time, motivation, communication, and emotional stability.

SOP 0002—Leadership Training

To develop skills in group or community leadership. Techniques of group work and group dynamics, effective speaking, and how to conduct meetings.

SPA—SPANISH LANGUAGE**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—SPEECH**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.

SPE 0002—Language Development and Treatment of Language Disorders

Designed for parents of children with speech difficulties. Course includes language development, language disorders, and the prevention and/or remediation of language disorders. This is a twelve-week course, meeting one night a week for one hour.

SSS—SOCIAL SCIENCES**SSS 0001—Social Studies****High School Cr. 1**

Course will include areas of U.S. History, World History, Americanism Vs. Communism, Civics, and Problems of American Democracy. It is designed to fulfill requirements of high school level social studies program.

STO—SURGICAL TECHNICIAN, OPERATING**STO 0310—Surgical Technician**

This course is designed to prepare students in nine 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 of maintenance of sterile and unsterile supplies.

STS—STENOGRAPHIC, SECRETARIAL, AND RELATED

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 in 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.

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 for job entry training. 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 0111—Basic Business Shorthand

High School Cr. 1

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 0115—Advanced Shorthand & Transcription

High School Cr. 1

This course is designed to integrate shorthand, English, and typewriting skills and to develop the student's ability in producing transcripts.

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 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.

+CLT 172—Basic Clothing Construction

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.

#CLT 174—Advanced Textiles

3 cr.

Prerequisite: CLT 171. 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.

#CLT 175—Tailoring I

3 cr.

Prerequisite: CLT 172 or the equivalent. This course is designed for the student who is interested in creating individual fashions which meet his own 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.

COM—CREATIVE WRITING

***COM 202—Introduction to Broadcasting**

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.

***COM 207—Imaginative Writing**

3 cr.

Prerequisite: ENG 102 or recommendation of an instructor in communications or humanities. 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.

COR—CORRECTIONS

+COR 160—Administration of Correctional Institutions

3 cr.

Emphasis is placed on the principles of administration in the correctional setting including budgeting and financial control, recruitment and development of staff, administrative decision-making, public relations and other correctional functions. Three contact hours.

+COR 161—Introduction to Corrections

3 cr.

An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. History and philosophy, career oriented. Three contact hours.

+COR 260—Introduction to Behavior Modification

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. Corrections oriented. Three contact hours.

STS 0135—CPS Review Course

A 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.

TPF—TEXTILE PRODUCTION AND FABRICATION

TPF 0003—Garment Making, Commercial

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in the commercial design, pattern cutting, and making of any kind of clothing.

TPF 0310—Tailoring

This course is designed specifically for job entry training in commercial tailoring of garments such as suits, topcoats, overcoats, and dress clothes, or performing the more difficult hand and machine sewing tasks involved in alterations.

TPF 0312—Tailoring

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in commercial tailoring of garments such as suits, topcoats, overcoats, and dress clothes, or performing the more difficult hand and machine sewing tasks involved in alterations.

TRA—TRANSPORTATION

TRA 0210—Traffic Management Rates I

This course is designed specifically for job entry training and is a general introduction to the transportation field, 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. This is a fifteen-week course, meeting one night a week for three hours.

TRA 0211—Traffic Management Rates II

This course is designed specifically for job entry training and includes an 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. This is a fifteen-week course, meeting one night a week for three hours.

TRA 0212—Traffic Management Rates III

This course is designed specifically for job entry training and includes through routes and through rates; application of arbitraries and differentials; advanced milling in transit; import and export traffic; technical tariff and rate interpretation; advanced claim adjustments; and rate and classification committee procedure. This is a fifteen-week course, meeting one night a week for three hours.

TRA 0213—Traffic Management Rates IV

This course is designed specifically for job entry training and includes a general discussion of the construction and application of the Interstate Commerce Act and practice before the Interstate Commerce Commission. This is a fifteen-week course, meeting one night a week for three hours.

TRA 0214—Economics of Transportation

This course is designed specifically for job entry training and 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. This is a fifteen-week course, meeting one night a week for three hours.

TRA 0215—Rate Clerk

This course is designed specifically for job entry training. The student will study 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.

TRA 0216—Interstate Commerce Law Practice

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. This course is designed specifically for job entry training and directs one toward preparation for the ICC Practitioner exam. This is a one-year course, meeting one night a week for three hours.

TYG—TYPEWRITING

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.

TYG 0110—Basic Typewriting

A course in typewriting for business use. It is designed specifically for job entry training to assist students in acquiring mastery of the keyboard and in developing the ability to type personal and business letters accurately and in good form.

TYG 0111—Basic Typewriting**High School Cr. 1**

A course in typewriting for business use. It is designed to assist students in acquiring mastery of the keyboard and in developing 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 0114—Advanced Typewriting**High School Cr. 1**

This course is designed 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.

UPH—UPHOLSTERING

UPH 0310—Upholstering

This course is designed specifically for job entry training in installing, arranging, and securing springs, padding, and covering materials such as cloth or leather to frames of overstuffed chairs, davenports, and stationary seats, including automobile seats.

UPH 0312—Upholstering

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in installing, arranging, and securing springs, padding, and covering materials such as cloth or leather to frames of overstuffed chairs, davenports, and stationary seats, including automobile seats.

UPH 0314—Automobile Trim and Upholstery

This course is designed specifically for job entry training in all aspects of automotive interior trim and upholstery, including seats, gaskets, header, and door panels. Installing, repairing, arranging, and securing springs, filler, padding and covering material; pattern-making; cutting, sewing, trimming, cushion filling, tufting and buttoning.

UPH 0316—Automotive Trim and Upholstery

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 all aspects of automotive interior trim and upholstery, including seats, gaskets, header, and door panels. Installing, repairing, arranging, and securing springs, filler, padding and covering material; pattern-making; cutting, sewing, trimming, cushion filling, tufting and buttoning.

WAC—WAREHOUSE CLERK

WAC 0310—Warehouse Clerk

This course is designed specifically for job entry training and includes instruction and training in receiving, storing, issuing, shipping, requisitioning, and accounting for stores of materials. Assigning locations and space of items, including verification of quality, identification, condition, and value. The physical handling of items, including binning, picking and stacking, and counting. Preparing or committing stocks for shipment, inventory stock, replenishing depleted items, filling orders, and issuing tools, equipment, or materials to workers.

WEL—WELDING AND CUTTING

WEL 0310—Welding

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 0312—Welding

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive 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.

WOC—WOODWORKING

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.

WOC 0103—Cabinet and Furniture Making

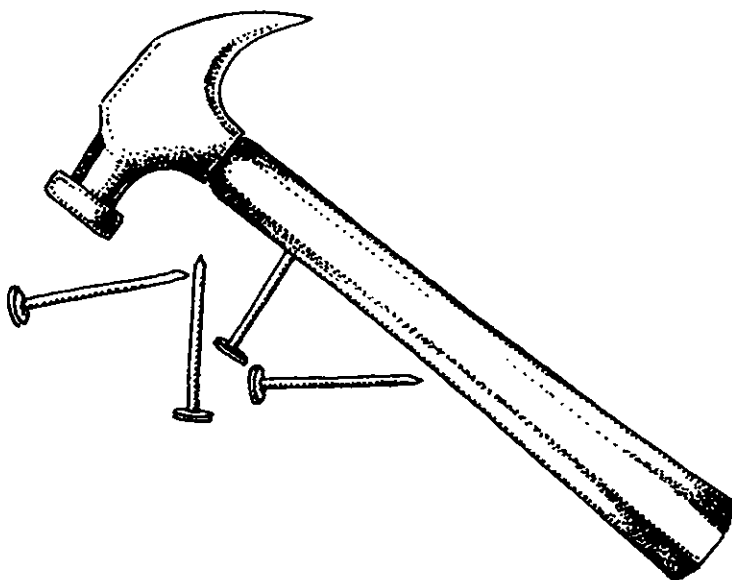
This course is designed as supplementary instruction for persons already employed in the field or in a related field. The student will receive cabinetmaking and furniture making training in hand carpentry necessary to cut, shape and assemble furniture, fixtures, cabinets, doors and window frames, and finish interior woodwork.

WOC 0310—Cabinetmaking & Millwork

This course is designed specifically for job entry training in the use of cabinetmaking machines to build various cabinets, furniture, counters, architectural moldings, etc.

WOC 0312—Cabinetmaking & Millwork

This course is designed as supplementary instruction for persons already employed in the field or in a related field. The student will receive training in the use of cabinet-making machines to build various cabinets, furniture, counters, architectural molding, etc.



+COR 265—Introduction to Special Problems in Corrections **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. Analysis of contemporary correctional problems. Three contact hours.

+COR 280—Correctional Custody, Jails and Detention **3 cr.**
The duties and functions of the correctional officer, supervision of prisoners, discipline in a correctional institution, security, correctional treatment programs and the handling of unusual prisoners are discussed and studied in practical application. Three contact hours.

+COR 281—Probation, Pardons and Parole **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.

+COR 285—Introduction to Contemporary Practices in Corrections **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.

COS—COMMUNICATIONS

***COS 205—Writing for Mass Communications** **3 cr.**
Prerequisite: ENG 100 or 101. 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.

DEA—DENTAL ASSISTING

#DEA 170—Preclinical Orientation **2 cr.**
This course identifies and orients the various areas in the dental specialties. A knowledge of equipment and installations, and the basic maintenance and care of equipment and instruments. A knowledge of chairside assisting. A knowledge of the name, design, and use 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. The ability to properly maintain a clear operating field. The ability to prepare properly all impression materials and make such available to the dentist. A knowledge of types moulds, and shades of artificial teeth. Three contact hours.

#DEA 171—Introduction to Practice **1 cr.**
This course presents the objectives, responsibilities, and scope of service of the dental assistant in practice. A working knowledge of dental terminology. A knowledge of the Code of Ethics for dental assistants and the laws which govern the practice of dentistry. An understanding of the functions of other auxiliary dental personnel and their legal limitations. A knowledge of general housekeeping duties. One contact hour.

- #DEA 174—Dental Materials and Laboratory** **2 cr.**
 A series of lecture-demonstrations designed to acquaint the dental assistant student with the nomenclature, characteristics, 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. Three contact hours.
- #DEA 176—Science for Dental Assistants** **2 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. Sterilization and Disinfection—An understanding of the types and uses of sterilizing agents used in the dental office and the ability to operate and maintain all types of sterilizers. 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 to combat emergency situations which may occur. Three contact hours.
- #DEA 195—Dental Radiology** **2 cr.**
 This course is designed to acquaint the student with the nature, physical behavior, biological effects, methods of control, safety precautions and the techniques for exposing, processing, and mounting x-rays. Laboratory procedures will include the application of these techniques in clinical practice. Three contact hours.
- #DEA 290—Clinical Practice I** **2 cr.**
 Clinical chairside assisting. Ten contact hours.
- #DEA 291—Clinical Practice II** **2 cr.**
 Continuation of DEA 290. Ten contact hours.
- #DEA 295—Office Management** **2 cr.**
 The ability to maintain an immaculate condition in all areas of the office. The ability to receive and dismiss patients. An understanding of behavior patterns of people, parental attitudes. The ability to make appointments and maintain appointment books. Communications (telephone calls, patients and personal, new patients and emergencies, patients with a grievance, salesmen, etc.) The ability to keep financial records. The ability to maintain an efficient recall and patient record file. The ability to keep books and records for tax purposes. The ability to do banking. The ability to write business letters. The ability to purchase and maintain supplies. Three contact hours.
- #DEA 296—Clinical Practice III** **2 cr.**
 Continuation of DEA 291. Fourteen contact hours.
- #DEA 297—Clinical Practice IV** **3 cr.**
 Extern program. Twenty contact hours.

DEH—DENTAL HYGIENE

- #DEH 160—Principles of Dental Hygiene** **4 cr.**
 A composite course designed to introduce the first year students to the content of the dental hygiene curriculum, relation of the course to the practice of dental hygiene, to include first aid with emphasis on the treatment of dental office emergencies, personal hygiene, history and ethics of the professions, terminology, introduction to library facilities and their use and a basic pre-clinical introduction to instruments. Eight contact hours: two class periods; six lab hours.

#DEH 164—Dental Health Education**3 cr.**

Methods are employed of organizing community and school dental health programs and the role and the responsibility of the dental hygienist in the community. In addition to the community and school programs, the student gains an appreciation of dental health education on an individual and group basis, and is taught the use of training aids, charts, graphs, posters and models as a means of teaching dental health. Three contact hours.

#DEH 165—Dental Anatomy**3 cr.**

This course covers the anatomy, nomenclature, arrangement, and minute structures of the human dentition and all supporting structures plus a detailed macroscopic study of deciduous and permanent teeth. In addition, emphasis is placed on organs, tissues and muscles of mastication and speech, and proper correction of abnormal oral conditions. Supplemental laboratory studies may include sketching, modeling and carving, plus the use of articulated plaster models for orientation. Four contact hours: two lecture periods; one two-hour lab.

#DEH 166—Radiology**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. The course will include the evaluation technique and the filing of dental radiographs. Four contact hours: two hours lecture; one two-hour laboratory.

#DEH 167—Dental Materials**3 cr.**

This course is designed to familiarize the dental hygiene student with the properties of the various materials used in dentistry with reference to the restorative and laboratory aspects of patient treatment. In addition, the role of the dental hygienist and her exposure to the manipulation and preparation of various dental materials as part of the dental health team is covered. Five contact hours: two hours lecture; one three-hour laboratory.

#DEH 168—Dental Hygiene I**5 cr.**

A continuation of the Principles of Dental Hygiene with a more detailed study of all elements included plus training in the use of instruments in scaling and polishing techniques and removal of simulated deposits and accretions on the teeth of manikins. The course further includes sterilization techniques, proper tooth brushing and home care, dental health education, use of models, slides, photos, posters and dividing the class into pairs to perform oral prophylactic procedures in a clinical situation. The course will also cover dental and medical emergencies. Ten contact hours: two class periods; two four-hour labs.

#DEH 169—Dental Hygiene II**5 cr.**

A continuation of Dental Hygiene I with more detailed training on the manikin heads and student partners to include more refined use of dental instruments in scaling and polishing, dividing into pairs to practice on each other in clinical situations and preparatory training for chairside assisting. Near the end of the term the students will be introduced to their first clinical patients. Ten contact hours: two lectures; two four-hour labs.

#DEH 281—Clinical Dental Hygiene I**4 cr.**

A clinical continuation plus a practical application of the lessons learned in Dental Hygiene I and II. Clinical applications are taught. Care and use of equipment, instruments, records, examination and charting plus actual experience in providing patient services. A careful analysis and patient education are included with a practical application of some dental assisting procedures. Twelve contact hours.

#DEH 282—Clinical Dental Hygiene II**4 cr.**

A continuation of DEH 281 with greater emphasis on tact and management of patients, individual responsibility, achievement and responsibility toward the public, the profession and dentistry in general. Some of the time will be spent in various clinics, hospitals, institutions, schools, public health centers, etc., with special emphasis on the role of the dental hygienist in community dental health. Twelve contact hours.

#DEH 283—Periodontics **2 cr.**
This course is designed to give the student a detailed understanding and knowledge of the basic factors involved in periodontal pathology and its etiology, anatomy and physiology of the periodontium, techniques of instrumentation and treatment and prevention of periodontal disease. Two contact hours.

#DEH 284—Dental Hygiene Seminar I **1 cr.**
A continuous presentation of the sciences underlying the Clinical Dental Hygiene Courses in the curriculum, providing a more comprehensive content coverage including discussion of essential subjects related to Dental Hygiene. One contact hour.

#DEH 285—Community Dental Health **2 cr.**
A study of the oral health problems of a group of people not normally seen as patients. Students will pre-survey a group, plan an approach to the group, assemble resources, deliver dental health material and resurvey the group within a specific time after the initial presentation. Four contact hours: one class hour; three laboratory hours.

#DEH 286—Dental Hygiene Seminar II **1 cr.**
A continuous presentation of the sciences underlying the Clinical Dental Hygiene courses in the curriculum, providing a more comprehensive content coverage including discussion of essential subjects related to Dental Hygiene. One contact hour.

#DEH 287—Oral Histology and Embryology **2 cr.**
Course designed to give the student a detailed understanding and knowledge of the dental mechanism and supporting structures through histology. The context incorporates the study of the embryonic development of the face and the dental mechanism and normal progression cellular development on a histology level. Four contact hours: one class hour; three laboratory hours.

#DEH 288—Pharmacology **2 cr.**
This course is designed to give the student a detailed understanding and knowledge of the basic factors involved in the field of pharmacology for the dental hygienist and the application of this field to the therapy of specific oral and dental disease. Two contact hours.

#DEH 289—Oral Pathology **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 systemic physiology of the body. Two contact hours.

DRA—DRAMATIC ARTS

***DRA 101—Introduction to Theatre** **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.

***DRA 221—Drama Practicum** **1 cr.**
Planning and execution of production functions; scene construction and painting, props, costuming, lighting and other full technical responsibilities. Three contact hours.

DTG—DRAFTING

+DTG 160—Mechanical and Electrical Drafting

3 cr.

Prerequisite: DTG 170. Suggested corequisite: DTG 171. 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.

+DTG 170—Engineering Drawing

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.

+DTG 171—Descriptive Geometry

3 cr.

Prerequisite: DTG 170. Theory and practice in solving graphic problems involving point, line, and space relationships. Six contact hours: two class hours; four laboratory hours.

+DTG 280—Architectural Drafting

3 cr.

Prerequisite: DTG 170. 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.

+DTG 281—Civil Drafting

3 cr.

Prerequisite: DTG 170. 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.

+DTG 282—Industrial Design

3 cr.

Prerequisite or corequisite: DTG 171. 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.

ECO—ECONOMICS

*ECO 210—Principles of Economics

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 211—Principles of Economics

3 cr.

Prerequisite: ECO 210 or consent of instructor. 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.

*ECO 220—Foundations of the American Economy

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.

ECY—ECOLOGY

- *ECY 201—The Ecological Crisis** **3 cr.**
An interdisciplinary analysis of man's 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.

EDU—EDUCATION

- *EDU 101—Introduction to Education** **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.

ELS—ELECTRONICS

- #ELS 270—Computer Concepts** **3 cr.**
Introduction to the computer with emphasis on the computer as a tool in the solution of engineering problems. An overview of the computers in production and fabricating processes. Fundamentals of machine programming using the mini-computer. Prerequisite: APM 160 or consent of director. Three contact hours.

- #ELS 280—Computer Logic Circuits** **3 cr.**
A study of computer circuits and systems, gates, counters, binary numbers, codes and code conversion counters, arithmetic operations, and digital measuring instruments. Four contact hours.

EME—EMERGENCY MEDICAL TECHNOLOGY

- #EME 160—Basic Emergency Medical Technology** **6 cr.**
This course is designed to serve as a basic guide for Emergency Medical Technicians. It provides an introduction to EME 170. On successful completion of this course one is qualified to take the State Registry Examination for EMT-A administered by the Health Department. Eight contact hours.

- #EME 170—Fundamentals of Emergency Medical Care** **6 cr.**
This course is designed to provide Basic Emergency Medical Care Training to conform with guidelines provided by the American Medical Association and the American Association of Junior Colleges and adopted by the State of Florida for Emergency Medical Technicians. Eight contact hours.

ENG—ENGLISH

- *ENG 100—Introduction to Communications** **3 cr.**
An introductory course in the communications skills of speaking, listening, writing and analytical reading. Three contact hours.

***ENG 101—English Composition**

3 cr.

A comprehensive course which embodies the fundamentals of effective expression, with emphasis on expository writing, logical and imaginative thinking, and reading for understanding and appreciation. Three contact hours.

***ENG 102—English Composition**

3 cr.

Prerequisite: ENG 101. A continuation of ENG 101, this course includes study and practice in research writing. Three contact hours.

***ENG 161—Developmental Reading**

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. Three contact hours.

FAR—FAMILY RELATIONS

+FAR 111—Dynamics of Modern Living

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.

FCR—FINANCE AND CREDIT

#FCR 163—Analyzing Financial Statements

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.

#FCR 168—Financing Business Enterprise

3 cr.

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 his corporation. It is recommended that AAC 160, General Accounting I, or AAC 260, Principles of Accounting I, or equivalent, be taken prior to enrolling for FCR 168. Three contact hours.

+FCR 181—Principles of Bank Operation

3 cr.

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his 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.

#FCR 182—The Banking Starter Series**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.

#FCR 184—Bank Letters and Reports**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.

#FCR 240—Personal Finance**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.

+FCR 260—Principles of Finance**3 cr.**

Prerequisites: APM 141, AAC 160 or AAC 260, or consent of instructor. 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; financial management. Three contact hours.

#FCR 262—Bank Investments**3 cr.**

Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this 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. Three contact hours.

#FCR 263—Bank Public Relations and Marketing**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.

#FCR 264—Credit Administration**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.

#FCR 265—Home Mortgage Lending**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.

#FCR 266—Installment Credit**3 cr.**

In this course, the techniques of installment lending are presented concisely. 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 aspect of installment lending. Three contact hours.

#FCR 267—International Banking**3 cr.**

The text is an introduction to a vast field for those working in international departments, as well as for those involved in the domestic activities of their banks. The essential objective of this course is to present the basic framework and fundamentals of international banking, how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, and how money is changed from one currency to another. Three contact hours.

#FCR 268—Savings and Time Deposits**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.

#FCR 269—Trust Functions and Services**3 cr.**

This course 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. Three contact hours.

#FCR 281—Money and Banking**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 his knowledge to his 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 FCR 181—Principles of Bank Operation—be taken prior to enrolling for FCR 281. Three contact hours.

#FCR 283—Bank Management**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.

FIF—FIREFIGHTING**+FIF 160—Introduction to Fire Science****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; survey of professional fire protection career opportunities. Three contact hours.

- + FIF 161—Fire Company Organization and Procedures** **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.
- + FIF 162—Fire Operations** **3 cr.**
The structure and function of battalion and company as components of municipal organizations; duties and responsibilities of the company officer. Three contact hours.
- + FIF 163—Fundamentals of Fire Prevention** **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; coordination with other governmental agencies. Three contact hours.
- + FIF 260—Fire Investigation** **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; reports and records. Three contact hours.
- + FIF 261—Fire Codes and Building Construction** **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.
- + FIF 263—Explosive and Toxic Hazardous Materials** **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.
- + FIF 264—Fire Fighting Equipment and Apparatus** **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.
- + FIF 265—Rescue Practices** **3 cr.**
Instruction is given in life saving practices pertaining to the fire company. Training for rescuator 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.
- + FIF 266—Flammable Hazardous Materials** **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.
- + FIF 267—Fire Fighting Tactics and Strategy** **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.

FMC—FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL

+FMC 171—Office Applications **2 cr.**
Prerequisite: TYG 175 or consent of instructor. Classroom practice in the use of standard systems of filing. Practical experience with duplicating machines, transcribing machines, Executive and Selectric typewriters, and periphery office equipment. The course is designed to teach valuable office skills. Three contact hours: one class hour; two laboratory hours.

+FMC 173—Calculating Machines **2 cr.**
Development of skill in the operation of the ten-key adding machines, rotary, printing calculators, and electronic calculators. Content of the course is selected from realistic business forms and problems. Three contact hours: one class hour; two laboratory hours.

FMD—FOREMANSHIP, SUPERVISION, AND MANAGEMENT DEVELOPMENT

+FMD 281—Industrial Supervision **3 cr.**
The purpose of this course is to prepare the student for his role in the world of work as he assumes responsibilities leading toward supervisory positions and management. Three contact hours.

FRE—FRENCH LANGUAGE

***FRE 101—Beginning French I** **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 102—Beginning French II** **3 cr.**
Prerequisite: FRE 101 or equivalent. A continuation of FRE 101. Four contact hours: three class hours; one laboratory hour.

***FRE 210—Intermediate French I** **3 cr.**
Prerequisite: FRE 102 or equivalent. Reading from modern and classic French authors, grammar review, and conversation. Four contact hours: three class hours; one laboratory hour.

***FRE 211—Intermediate French II** **3 cr.**
Prerequisite: FRE 210 or equivalent. A continuation of FRE 210. Four contact hours: three class hours; one laboratory hour.

FSM—FOOD SERVICES AND MANAGEMENT

#FSM 141—Food Service Supervision I **3 cr.**
A course combining lecture with supervised, evaluated work experience to provide the minimum food service management training required under PL 100-29-15. The student will develop leadership ability in directing work activities of others in the food service department. Ten contact hours: three hours lecture; seven hours supervised work experience.

- #FSM 142—Food Service Supervision II** **3 cr.**
A continuation of Food Service Supervision I. Ten contact hours: three hours lecture; seven hours supervised work experience.
- #FSM 144—Child Nutrition** **3 cr.**
A study of the nutritional needs of infants and children and the effects of food nutrients on growth and development up to age eighteen (18). Includes dietary modifications for childhood diseases. FSM 162 is prerequisite. Three contact hours.
- #FSM 160—Orientation to Food Service** **2 cr.**
A course designed to introduce the student to the food service component of the hospitality industry, institutions and health care facilities. The fields, professions, roles and relationships. Two contact hours.
- +FSM 162—Human Nutrition (Nutrition I)** **3 cr.**
An introduction to the dietary needs of the human body, recommended dietary allowances, and food labeling standards. The study of nutrients and their utilization in normal *nutrition throughout the life cycle*. Three contact hours.
- #FSM 163—Diet Therapy (Nutrition II)** **3 cr.**
A more 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. Course is closely related to practices of local hospitals. Prerequisite FSM 162. Three contact hours.
- #FSM 164—Food Service Equipment** **3 cr.**
An analysis of factors in the selection, purchase, and placement of equipment for quantity food production and service to promote efficiency of operation. Three contact hours.
- #FSM 165—Food Accounting and Cost Control** **3 cr.**
A study of the policies and procedures involved in accounting in the food service industry and the methods used for controlling food and other costs. Three contact hours.
- #FSM 167—Food Service in Nursing Homes** **3 cr.**
A study of food service operations in homes for the aged. Emphasis will be placed on therapeutic nutrition, meal planning, food purchasing and storage; selection, use, and care of equipment, basic principles of food preparation and service, sanitation and safety. Management, supervision, and communication skills will be emphasized. Three contact hours.
- #FSM 168—Menu Planning** **2 cr.**
A study of the menu pattern, its form, wording, balance in nutrition, variety, and methods of preparation. Menu item costing, saleability and acceptability. Two contact hours.
- #FSM 169—Food and Beverage Purchasing** **3 cr.**
Food and beverage sources, grades and standards; criteria for selection and purchase including estimates of quantity; receiving and storage; development of standard and writing specifications. Three contact hours.
- #FSM 172—Sanitation and Safety** **2 cr.**
A study of the scientific rationale for sanitary practices enforced for group protection in hospitality, institutional and food service facilities. Safety regulations and practices for the protection of employee and patron. Two contact hours.
- +FSM 270—Basic Food Preparation** **4 cr.**
Basic principles and techniques of food preparation and service. Cooking methods emphasize retention of nutritive values. Five contact hours: Three hours lecture; two hours laboratory.

#FSM 271—Practicum I **3 cr.**
A course designed to permit the student to acquire experience in the actual operation of the area of food service in which he desires to specialize. Twenty contact hours.

#FSM 273—Practicum II **3 cr.**
Continuation of Practicum I. Twenty contact hours.

#FSM 282—Supervision and Management **3 cr.**
A study of the principles of management, particularly as they apply to the food service industry. Students will be taught the role of the supervisor or manager in organizing and directing the work of his employees and his responsibility for planning and coordinating their activities. Three contact hours.

#FSM 284—Food Merchandising **3 cr.**
A study of proper food merchandising methods, food display techniques, effective menu presentations, promotion programs, public relations and effective atmosphere. Three contact hours.

#FSM 285—Advanced Nutrition **3 cr.**
An advanced nutrition course designed to give updated scientific nutrition information and products, programs, and services affecting its application in the community. A basic nutrition course is prerequisite. Three contact hours.

#FSM 286—Seminar I **1 cr.**
Identification, discussion, and problem solving related to actual work experiences. One contact hour.

#FSM 287—Seminar II **1 cr.**
Continuation of Seminar I. One contact hour.

#FSM 291—Quantity Food Production **3 cr.**
Prerequisite: Basic Food Preparation. Principles of quantity food preparation and service for cafeterias, restaurants, and institutions. Major emphasis on work responsibility including equipment use and care, standardized recipes, portion control, work plans and schedules. Five contact hours: Two hours lecture; three hours laboratory.

#FSM 292—Areas of Specialization **3 cr.**
A course designed to permit the student to acquire experience in the actual operation of the area of food service in which he desires to specialize. The class time is spent reviewing principles learned in prerequisite courses as they pertain to the area of specialization, as well as discussion of the problems as they occur in the actual operation. Three contact hours.

GEO—GEOGRAPHY

***GEO 110—World Geography** **3 cr.**
An introductory course dealing with man's relationship to his 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.

***GEO 220—Conservation of Resources** **3 cr.**
A survey of natural and human resources of the world. Special emphasis will be placed in 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—GERMAN LANGUAGE

- *GER 101—Beginning German I** **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: three class hours; one laboratory hour.
- *GER 102—Beginning German II** **3 cr.**
Prerequisite: GER 101 or equivalent. A continuation of GER 101. Four contact hours: three class hours; one laboratory hour.
- *GER 210—Intermediate German I** **3 cr.**
Prerequisite: GER 102 or equivalent. Reading from standard German authors; careful review of grammar, conversation, and composition. Four contact hours.
- *GER 211—Intermediate German II** **3 cr.**
Prerequisite: GER 210 or equivalent. A continuation of GER 210. Four contact hours.

GEY—GEOLOGY

- *GEY 101—Introduction to Physical Geology** **3 cr.**
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.
- *GEY 121—Historical Geology** **3 cr.**
A study of the geologic history of the earth dealing with the major physical events as recorded in rock formations and with the constant evolving changes in animals and plants through time. Three contact hours.

GME—GENERAL MERCHANDISE

- +GME 161—Salesmanship** **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.
- #GME 173—Retail Practicum** **4 cr.**
Occupational experiences are provided with cooperating businesses. Twenty contact hours per week.
- #GME 174—Retail Practicum** **4 cr.**
A continuation of GME 173. Twenty contact hours per week.
- #GME 175—Sales Promotion** **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.

- #GME 176—Retail Merchandising** 4 cr.
The functions of the merchandising department, inventory control systems, stock turnover, the buying functions, and sales promotions are covered. Also covered are appliances, furniture, household accessories, and other display techniques. Three contact hours.
- #GME 262—Wholesaling** 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.
- #GME 274—Retail Practicum** 4 cr.
A continuation of GME 283. Twenty contact hours.
- #GME 281—Marketing Practices** 3 cr.
Prerequisite: MAG 162. A continuation of MAG 162. Emphasis is placed on the study of marketing problems of the manufacturers, wholesaler, retailer, and other marketing agencies. Three contact hours.
- #GME 283—Retail Practicum** 4 cr.
A continuation of GME 174. Twenty contact hours.

GRA—GRAPHIC ARTS

- #GRA 121—Theory of Printing Processes** 5 cr.
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), lock-up and letterpress press operation, cold type and photo typesetting and mechanical art preparation are included in the course. Five contact hours.
- #GRA 122—Theory of Lithographic Processes** 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.
- #GRA 123—Layout and Design** 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.
- #GRA 124—Graphic Arts Estimating** 2 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. Two contact hours.
- #GRA 131—Printing Processes—Laboratory** 4 cr.
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 phototype-setting, and mechanical art preparation are included in the course. Eight contact hours.
- #GRA 132—Lithographic Processes Laboratory** 4 cr.
A laboratory course designed to give an introduction to an experience in the basic skills of three major processes of the Lithography Industry. Negative stripping and platemaking, process camera operation, offset press operation, and related bindery functions are included in the course. Eight contact hours.

#GRA 231—Hand and Machine Composition and Form Makeup **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.

#GRA 232—Letterpress Press Operation and Lockup **3 cr.**

A laboratory course designed to teach the basic techniques of setting up, operating and maintaining the platen press, the automatic platen press, and the automatic cylinder press. Six contact hours.

#GRA 233—Cold Type Typesetting and Pasteup **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 ruled forms, are included in the course. Six contact hours.

#GRA 234—Camera Operation and Film Processing **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.

#GRA 235—Negative Stripping and Offset Platemaking **3 cr.**

A laboratory course designed to teach the basic technique of opaqueing and stripping up offset negatives for proper press position, separation for color, and to expose and develop offset press plates. Six contact hours.

#GRA 236—Offset Press Operation **3 cr.**

A laboratory course designed to develop the basic techniques of setting up, operating, and maintaining duplicator and offset presses in the 10 × 15, 11 × 17, and 14 × 20 inch ranges. Six contact hours.

#GRA 237—Practicum **6 cr.**

The student will be assigned to a business-industrial setting in a local printing or trade-related firm. Here he will be engaged in the performance of his printing specialty duties, functioning under normal production conditions. This course will be directed by the instructor. Eighteen contact hours.

#GRA 251—Advanced Composition and Makeup **6 cr.**

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. Prerequisite: GRA 231. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

#GRA 252—Advanced Letterpress Operation and Lockup **6 cr.**

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 increased productivity. Prerequisite: GRA 232. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

#GRA 253—Advanced Cold Type Typesetting and Pasteup **6 cr.**

Prerequisite: GRA 233. 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. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

#GRA 254—Advanced Camera Operation and Film Processing 6 cr.
Prerequisite: GRA 234. An advanced laboratory course designed to provide for skill development in the operating 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. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

#GRA 255—Advanced Stripping and Offset Platemaking 6 cr.
Prerequisite: GRA 235. 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. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

#GRA 256—Advanced Offset Press Operation 6 cr.
Prerequisite: GRA 236. 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. Sixteen contact hours: one hour lecture; fifteen hours laboratory.

HEN—HEALTH EDUCATION

***HEN 107—Personal and Community Health** 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.

***HEN 110—Standard First Aid** 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.

***HEN 215—Standard First Aid & Personal Safety** 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.

HIS—HISTORY

***HIS 101—Western Civilization** 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.

***HIS 102—Western Civilization** 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.

***HIS 193—Honors Survey of History** **3 cr.**

Prerequisite: Outstanding performance in HIS 101, 102, 204, or 205. 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.

***HIS 204—United States History** **3 cr.**

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.

***HIS 205—United States History** **3 cr.**

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.

***HIS 211—History of the Far East** **3 cr.**

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

***HIS 212—History of the Americas** **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.

***HIS 254—History of Florida** **3 cr.**

History of Florida with emphasis on the explorations, U.S. acquisitions, Convention of St. Joseph, Civil War and Reconstruction, and Florida's rapid growth in the 20th Century. Three contact hours.

HOL—HOTEL AND LODGING

#HOL 161—Introduction to Hospitality Management **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.

#HOL 162—Restaurant Operation **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.

#HOL 164—Hotel/Motel Operation **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.

#HOL 165—Front Office Management-Hotel/Motel **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 his primary responsibility of selling rooms and serving guests. Three contact hours.

#HOL 166—Apartment Management**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.

#HOL 264—Food and Beverage Control**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 actual food and beverage cost, establishment and calculation of standards, production, planning and special control. Three contact hours.

#HOL 267—Customer-Personnel Relations**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.

#HOL 271—Internship**3 cr.**

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.

#HOL 272—Internship**3 cr.**

Prerequisite: HOL 271. This course is an extension of HOL 271. 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.

HUM—HUMANITIES

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

HUM 182—183 Overseas Study*8 cr.**

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 man. Will fulfill General Education requirements for Humanities. Eight contact hours for the two courses.

HUM 203—Western Humanities I*3 cr.**

Prerequisite: ENG 100 or 101. 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 204—Western Humanities II*3 cr.**

Prerequisite: ENG 100 or 101. 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 205—Western Humanities III** **3 cr.**

Prerequisite: ENG 100 or 101. 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 213—International Understanding I—The Mediterranean** **3 cr.**

Prerequisite: ENG 100 or permission of instructor. Life and man's 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 214—International Understanding II—Northern Europe** **3 cr.**

Prerequisite: ENG 100 or permission of instructor. Life and man's 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 215—American Understanding** **3 cr.**

Prerequisite: ENG 100 or 101. Life and man's creative expressions in the Americas as surveyed through the media of visual arts, music, literature, philosophy and social history. Three contact hours.

***HUM 216—International Understanding III—Asia** **3 cr.**

Prerequisite: ENG 100 or 101. Asian cultures and their creative expressions as surveyed through the media of visual arts, music, literature, and philosophic thought. Three contact hours.

***HUM 217—International Understanding IV—Latin America** **3 cr.**

Prerequisite: ENG 100 or permission of instructor. Life in the Latin American countries surveyed from its beginning to the present. Man's 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 282—Fine Arts Field Trip** **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 to 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.

IAE—INDUSTRIAL ATOMIC ENERGY

#IAE 101—X-Ray Technology I **3 cr.**

Corequisite: APM 160, IEL 164. 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.

#IAE 202—X-Ray Technology II **3 cr.**

Prerequisite: IAE 101, IEL 165. 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.

#IAE 203—X-Ray Technology III

3 cr.

Prerequisite: IAE 202; Corequisite: IEL 285. A study of the structure of matter, radioisotopes, medical applications, instrumentation, sources of error in counting, radioisotopical scanning, physics of radiation protection, safety measures, permissible dosage, radiation hygiene, artificial radioactivity, techniques of application and building requirements. Six contact hours.

#IAE 204—X-Ray Technology IV

3 cr.

Prerequisite: IAE 203; Corequisite: IEL 286. 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. Three contact hours.

#IAE 205—X-Ray Technology V

3 cr.

Prerequisite: IAE 204; Corequisite: IEL 287. 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. Six contact hours.

IDS—INTERDISCIPLINARY STUDIES

***IDS 140—Interdisciplinary Studies Seminar**

1 cr.

The IDS seminar provides a structured opportunity for students and instructors 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.

***IDS 145—Study Skill Development**

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 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.

***IDS 150—Dynamics of Behavior**

3 cr.

Theory and practice in solving problems of inter-personal relations and self-development through group and individual experiences. Three contact hours.

***IDS 151—Career Planning**

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 his individual aptitudes, abilities, values, and attitudes. Self-assessment instruments as well as small group discussions may be used. One contact hour.

IEL—INDUSTRIAL ELECTRICITY

+IEL 160—Fundamentals of General Electricity

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.

+IEL 163—Electrical Controls **3 cr.**
Prerequisite: IEL 165. The study of the operation of motors, generators, relays, and controlling systems involved in their operation and protection. Also included will be the coverage of the protection and stability of these systems. Three contact hours.

+IEL 164—D/C Theory and Circuits **3 cr.**
Corequisite: APM 160. A study of the basic nature of electricity, direct current circuits, batteries, measuring instruments, magnetism inductance and capacitance. Laboratory sessions are devoted to the application of acquired theory with emphasis on the proper use of modern electronics equipment. Four contact hours.

+IEL 165—A/C Theory and Circuits **3 cr.**
Prerequisite: APM 161. A study of sinusoidal waveforms and the analysis of steady-state electrical circuits. Topical units of instruction include reactance, impedance, resonant circuits, transformer action and coupled networks. A laboratory course designed to reinforce the student's understanding of important theoretical concepts. Four contact hours.

+IEL 283—Advanced Electronic Circuit Analysis **3 cr.**
Prerequisite: IEL 165. 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. Three contact hours.

+IEL 285—Electronics I **3 cr.**
Prerequisite: IEL 165. An introductory course covering the principles of operation of semi-conductor (solid-state) devices and circuits. Major emphasis is on PN junction theory, junction diodes, tunnel diodes, and photoelectric devices. Four contact hours.

+IEL 286—Electronics II **3 cr.**
Prerequisite: IEL 285. Major emphasis is placed on bipolar transistors and transistor amplifiers. Graphical and piecewise linear analysis of transistor circuits, T and h parameters and hybrid linear models. Four contact hours.

#IEL 287—Electronics III **3 cr.**
Prerequisite: IEL 286. Introduction to solid state digital circuits and the diode and transistor as logic gates and switching devices. Course includes flip-flop, signal generating circuits, comparator circuits, frequency dividers, and associated digital circuits. Four contact hours.

+IEL 288—Semiconductor Circuit Design **3 cr.**
Prerequisite: IEL 286. 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.

INR—INTERNATIONAL RELATIONS

***INR 230—International Relations** **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.

INS—INSURANCE

+INS 161—Principles of Insurance

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 Center prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).

+INS 162—Principles of Fire and Allied Lines

3 cr.

Prerequisite: INS 161. 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 Center prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).

+INS 163—Principles of Casualty Insurance and Surety Bonding

3 cr.

Prerequisite: INS 161. 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; miscellaneous casualty coverages. Three contact hours. (This course as taught on the Fred H. Kent Center prepares the student for the Solicitor's Examination. As taught on the South Campus, it prepares the student for the IIA Insurance Certificate).

+INS 164—Principles of Life Insurance I

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; it constitutes a general survey of the major kinds of personal insurance coverages available. Three contact hours.

#INS 165—Principles of Property Insurance Adjusting I

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; estimating business losses. Three contact hours.

#INS 166—Marketing Principles of Life and Health Insurance

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.

#INS 167—Principles of Health Insurance

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.

#INS 168—Principles of Insurance and Liability Claim Adjusting

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.

#INS 181—Life Company Operations **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.

#INS 183—Legal Aspects of Life Insurance **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.

#INS 281—Life Insurance Accounting **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.

#INS 282—Property Insurance Adjusting **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 INS 165 and INS 168. Three contact hours.

#INS 283—Liability Insurance Adjusting **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 INS 163 and INS 168. Three contact hours.

INT—INHALATION THERAPY

#INT 120—Fundamentals of Inhalation Therapy **3 cr.**
An introductory course covering basic respiratory therapy equipment, medical gases, gas therapy, and the respiratory therapy department. Three contact hours.

#INT 121—Introduction to Respiratory Care **4 cr.**
Humidity, aerosol, and IPPB therapy are discussed along with palpation, auscultation, and percussion of the chest. Cardiopulmonary resuscitation is briefly reviewed and resuscitation equipment is examined extensively, along with sterilization and microbiology as it relates to this equipment. Five contact hours.

#INT 125—Cardiopulmonary Anatomy and Physiology **3 cr.**
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.

#INT 126—Arterial Blood Gases and Pulmonary Function Studies **4 cr.**
Prerequisite: INT 125 or permission of instructor. This course is designed to give an in depth understanding of the acid-base balance of the body and arterial blood gas sampling and analysis. The course also includes an investigation into pulmonary testing and an introduction to the use of pulmonary function testing equipment. Seven contact hours.

#INT 127—Respiratory Therapy Advanced Equipment **3 cr.**
Prerequisite: INT 125 or permission of instructor. This course introduces the student to artificial mechanical ventilation; classification of ventilators; analysis, operation, and maintenance of mechanical ventilators; indications, contraindications, and side effects of mechanical ventilators and modes of ventilation. Four contact hours.

#INT 209—Selected Studies in Respiratory Technology **6 cr.**
Prerequisite: INT 125 or permission of instructor. This course covers newer trends in Respiratory Care including monitoring the critically ill patient, and the correlation of disease entities with therapeutic techniques. Additionally, the rehabilitation and home care of respiratory patients is covered. Fourteen contact hours.

#INT 220—Pulmonary Pathology **3 cr.**
Prerequisite: INT 125 or permission of instructor. Pulmonary pathology gives an in depth study of the more common diseases of the cardiopulmonary system including their etiology, pathophysiology, clinical picture and treatment. Five contact hours.

#INT 221—Pediatric Respiratory Therapy **4 cr.**
Prerequisite: INT 125 or permission of instructor. This course investigates fetal, neonatal, and pediatric differences in cardiopulmonary anatomy and physiology; pediatric ventilators, and equipment; and adaptations of techniques to pediatric patients. Six contact hours.

#INT 225—Respiratory Therapy Department Management **2 cr.**
Prerequisite: INT 125 or permission of instructor. This course entails investigation of management and supervisory procedures; accounts, budgets, supplies, spatial arrangements; medical-legal problems and in-service education programs. Two contact hours.

#INT 226—Pharmacology for the Respiratory Therapist **2 cr.**
Prerequisite: INT 125 or permission of instructor. 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.

#INT 291—Respiratory Therapy Clinical Applications **2 cr.**
Prerequisite: INT 125 or permission of instructor. This course will allow the respiratory therapy student to be introduced into the hospital departments and situations in which he may be expected to perform the procedures applicable to this point in his education. The performance of these procedures will be closely supervised. Twelve contact hours.

#INT 292—Intensive Care Practicum for Respiratory Therapy **4 cr.**
Prerequisite: INT 125 or permission of instructor. Students will learn to function in critical and intensive care units and in a pulmonary function testing laboratory. There will be a one month rotation through an intensive care unit, and a pulmonary function laboratory, and a neonatal intensive care unit under close supervision. Thirty-one contact hours.

ISA—INDUSTRIAL SAFETY

#ISA 170—Industrial Safety **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.

JOU—JOURNALISM

***JOU 101—Introduction to Journalism** **3 cr.**
Prerequisite: Ability to use typewriter. 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. Five contact hours.

LAE—LAW ENFORCEMENT

- +LAE 160—Introduction to Criminal Justice** **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.
- +LAE 161—Police Organization and Administration** **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.
- +LAE 162—Police Operations** **3 cr.**
Principles of organization and administration as applied to operations units. Patrol functions; traffic administration; criminal investigation; intelligence and vice units; juvenile units; coordination and consolidation of police services, etc. Three contact hours.
- +LAE 163—Introduction to Criminal Behavior** **3 cr.**
A basic study of the nature and peculiarities of human behavior in direct relationship to crime and delinquency. Three contact hours.
- +LAE 260—Constitutional Law—Criminal Law I** **3 cr.**
The study of the nature, sources, and types of criminal law. Studies in the United States Constitution, Federal Statutes, and case law interpreting the United States Constitution and Federal Statutes. Three contact hours.
- +LAE 262—Introduction to Criminalistics** **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.
- +LAE 264—Police Supervision** **3 cr.**
Techniques and theory of police supervision; problems of policy and procedure; instructional and disciplinary methods; motivation; supervisory investigations and reports. Performance rating. Three contact hours.
- +LAE 265—Seminar in Police Problems** **3 cr.**
Prerequisite: Satisfactory completion of nine hours of Criminal Justice Education courses. Research, writing, and discussion of selected subject areas including foreign police agencies, industrial and retail security, and duties of various governmental regulatory agencies. Analysis of contemporary law enforcement problems. Three contact hours.
- +LAE 266—Evidence** **3 cr.**
Study and evaluation of evidence and proof; kinds, degrees, and admissibility, competence, and weight; specifically deals with rules of evidence and procedure of particular import at the operational level in law enforcement. Three contact hours.
- +LAE 267—Juvenile Delinquency** **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.
- +LAE 280—State and Local Law—Criminal Law II** **3 cr.**
Studies in the State Constitution and the Statutory and Case Law of the State of Florida. Three contact hours.

+LAE 281—Criminal Investigation**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.

LAS—LEGAL ASSISTANT**#LAS 122—Laws of Domestic Relations****3 cr.**

This course involves the study of such topics as divorce, separation, custody, legitimacy, adoption, name change, guardianship, support, court procedures, separation agreements, etc. Three contact hours.

#LAS 123—Introduction to Legal Technology**3 cr.**

This course provides overview of training and purpose of Legal Assistants. It will explain role of lawyer and legal assistant 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. Those interested in legal assistant training are candidates for this course. Three contact hours.

#LAS 124—Legal Writing and Research**3 cr.**

Prerequisite: LAS 123 or consent of instructor. 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. Student will also learn how to write legal memoranda and briefs for both trial and appellate work. This course is recommended for those interested in legal assistant training and with some experience in the legal field. Three contact hours.

#LAS 125—Litigation**3 cr.**

Prerequisite: LAS 123 or consent of instructor. 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 briefs, etc., will be studied. This course is recommended for those interested in legal assistant training. Three contact hours.

LIS—LIBRARY SCIENCE***LIS 201—Use of Books and Libraries****1 cr.**

Organization of 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—LITERATURE***LIT 210—English Literature****3 cr.**

Prerequisite: ENG 102 or consent of LIT 210 instructor. 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.

***LIT 211—English Literature** **3 cr.**
Prerequisite: ENG 102 or consent of LIT 211 instructor. 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.

***LIT 220—American Literature** **3 cr.**
Prerequisite: ENG 102 or consent of LIT 220 instructor. A critical study of selections from American Literature: Colonial period to the late 19th century. Three contact hours.

***LIT 221—American Literature** **3 cr.**
Prerequisite: ENG 102 or consent of LIT 221 instructor. A critical study of selections from American Literature: late 19th century to the present. Three contact hours.

***LIT 238—Children's Literature** **3 cr.**
Chronological survey of literature for children ages one—twelve; organized by format, subject, reading and interest levels. Reading; selection and evaluation of materials; sources of materials; use of materials with children. Three contact hours.

***LIT 240—Great Ideas in World Literature** **3 cr.**
Prerequisite: ENG 102 or consent of LIT 240 instructor. A critical study of selections of ancient, medieval, and early Renaissance literature. Three contact hours.

***LIT 241—Great Ideas in World Literature** **3 cr.**
Prerequisite: ENG 102 or consent of LIT 241 instructor. A critical study of selections of literature from the middle Renaissance period through the twentieth century. Three contact hours.

***LIT 242—Afro-American Literature** **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.

***LIT 243—The Bible as Literature** **3 cr.**
A study of the development of the Bible in both its natural and its supernatural aspects, its influence on literature and mankind. Emphasis on the Bible's role in the modern world. Three contact hours.

MAG—MARKETING

+ MAG 162—Principles of Marketing **3 cr.**
Prerequisite: SAM 160. 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.

MAM—MARKETING MANAGEMENT

#MAM 282—Sales Management **3 cr.**
Prerequisite: MAG 162. 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.

#MAM 284—Principles of Purchasing I **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.

#MAM 285—Principles of Purchasing II **3 cr.**
A continuation of MAM 284 with emphasis on quality assurance, price analysis, planning and forecasting, and buying capital equipment. Three contact hours.

MAT—MATHEMATICS

***MAT 101—College Mathematics** **3 cr.**
Prerequisite: Reasonable competence in arithmetic skills normally acquired by high school graduates. This course is designed for the General Education mathematics requirement. Emphasis is on concepts with manipulation as a tool to reinforce these concepts. The topics include mathematical logic, set symbolism and terminology, number bases, modular arithmetic, introduction to algebra and probability, and a thorough development of the real number system. Three contact hours.

***MAT 111—Introductory Analysis** **4 cr.**
Prerequisite: High achievement in four years of academic high school mathematics and departmental approval. This course is designed to provide the student with a unified and substantial approach to the logical structure of mathematics. MAT 111 aims to introduce the student to more advanced topics with the hope of encouraging further study and reading in this direction. Four contact hours.

***MAT 119—Beginning Algebra** **3 cr.**
Prerequisite: Reasonable competence in arithmetic skills normally acquired by high school graduates. A modern first course in algebra for students who have never had algebra or whose level of proficiency does not meet the standard for MAT 120, intermediate algebra or physical science. The emphasis is on fundamental concepts and structure with manipulation as a tool for reinforcement. The content of the course will include those concepts, topics, and laws of elementary algebra necessary to insure success in subsequent courses. Three contact hours.

***MAT 120—Intermediate Algebra** **3 cr.**
Prerequisite: MAT 119, with recommendation of instructor or at least one year of high school algebra and departmental approval. This course is designed to prepare students wishing to enter MAT 121 who have an inadequate or antiquated background in high school algebra. Topics include an introduction to the mathematics of sets; the complex number system; linear, fractional, radical and quadratic equations and inequalities, relations and functions and their graphical representation. Three contact hours.

***MAT 121—College Algebra** **3 cr.**
Prerequisite: MAT 120 with a grade of C or better; or two years of high school algebra and departmental approval. Techniques of algebra are studied with the emphasis on exact vocabulary. An analysis of the real number system is introduced to increase the depth of understanding algebra. Topics include linear and quadratic functions; systems of equations; inequalities; logarithms; induction. This course is intended for students who need more preparation for trigonometry and the calculus. No credit will be given for this course after credit has already been received in MAT 124 or the equivalent. Three contact hours.

***MAT 122—College Trigonometry** **3 cr.**
Prerequisite: MAT 121 or departmental approval. This course treats trigonometric functions as functions of real numbers with trigonometric functions of angles and vectors. It includes identities, inverse circular functions, solutions of trigonometric equations, complex numbers, and solutions of triangles. No credit will be given for this course after credit has already been received in MAT 124, or the equivalent. Three contact hours.

- *MAT 124—College Algebra and Trigonometry** 4 cr.
Prerequisite: MAT 120 or the equivalent and departmental approval. (High school trigonometry recommended.) This is an accelerated course for the well-prepared student. The course content is consistent with that of MAT 121, College Algebra, and MAT 122, College Trigonometry. The concept of functions is the basis for the integration of the two, with the trigonometric functions developed as functions of real variables. No credit will be given for this course after credit has already been received in either MAT 121 or MAT 122, or the equivalent. Four contact hours.
- *MAT 131—Calculus with Analytic Geometry I** 4 cr.
Prerequisite: MAT 122 or MAT 124 or two years of high school algebra, one year of plane geometry, one-half year trigonometry, and a high score on the mathematics test with departmental approval. 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.
- *MAT 151—Elementary Statistics** 3 cr.
Prerequisite: MAT 121 or departmental approval. This introductory course will include the following topics: probability, random variables and probability distributions, binomial distribution, normal distribution, statistical inference, linear regression and correlation, variance and inference from small samples. The derivations of properties and the foundations and unity of concepts will be emphasized. Three contact hours.
- *MAT 161—Computer-Oriented Mathematics** 3 cr.
Prerequisite: MAT 121 or equivalent. 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.
- *MAT 204—Modern Math for Teachers** 3 cr.
An in-service course designed to acquaint teachers with modern topics in mathematics. No prior knowledge of mathematics will be assumed and many topics of modern mathematics concepts will be presented, including set theory, structures of systems of numeration, properties of numbers, operations in bases other than ten, geometry and introduction to probability. Three contact hours.
- *MAT 232—Calculus with Analytic Geometry II** 4 cr.
Prerequisite: MAT 131 or its equivalent. 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.
- *MAT 233—Calculus with Analytic Geometry III** 4 cr.
Prerequisite: MAT 232 or its equivalent. 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.
- *MAT 242—Differential Equations** 3 cr.
Prerequisite: MAT 233. 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.

MET—METEOROLOGY

***MET 101—Meteorology**

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.

MEY—METALLURGY

+MEY 160—Engineering Materials and Processes

4 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. Five contact hours: three class hours; two laboratory hours.

MLT—MEDICAL LABORATORY TECHNOLOGY

+MLT 172—Immunology

3 cr.

Corequisite: APM 160. This course is designed to insure that the student develops basic competencies in the theories, principles, and technical procedures in serology and immunohematology. Emphasis is on blood banking and its role in the delivery of health care services. Four contact hours.

+MLT 173—Hematology

6 cr.

This course is designed to introduce the role of medical laboratory technology in the delivery of health care services. Given instruction in the basic concepts, competencies, and skills in haematology, the learner will perform haematologic techniques to achieve professional accuracy and precision. Eight contact hours.

+MLT 174—Medical Microbiology

6 cr.

This course is designed to introduce the role of medical microbiology in clinical diagnosis. Given instruction in the basic concepts, competencies, and skills of medical bacteriology, medical parasitology, medical mycology, and urinalysis, the learner will perform microbiological techniques and urinalysis to achieve professional accuracy and precision. Eight contact hours.

+MLT 179—Introduction to Health Technology

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 basic instrumentation, the student will practice the manipulative skills of medical laboratory technology. Four contact hours.

+MLT 293—Clinical Chemistry

6 cr.

This course is designed to introduce clinical chemical instrumentation and techniques. Given instruction in the basic concepts and competencies of clinical chemistry the learner will develop the technical competencies applicable to the chemical analysis of body fluids to achieve professional accuracy and precision. Eight contact hours.

+ MLT 294—Principles of Clinical Instrumentation **5 cr.**
Given instruction in the principles of analytical methodology and the principles of clinical instrumentation, the learner will relate this information to the clinical phase of his educational experience to achieve professional accuracy and precision. Five contact hours.

+ MLT 295—Clinical Practicum I **9 cr.**
This course is designed to provide the learner directed clinical experience. Given the facilities of the clinical laboratories of Jacksonville Hospitals' Education Program, the learner will perform medical laboratory techniques with accuracy and precision. The clinical phase of his educational experiences is coordinated by the Medical Technology Faculty of the College. This includes supervision, scheduling, and evaluation of students. Twenty-seven contact hours.

+ MLT 296—Clinical Diagnosis **5 cr.**
This course is designed to correlate the clinical laboratory aspects of the medical laboratory's role in the delivery of health care. Given instruction in the clinical aspects of disease and the normal values of the constituents of body fluids, the learner will recognize abnormal values and learn to judge the reliability of his performance in the laboratory by applying quality control. Five contact hours.

+ MLT 297—Clinical Practicum II **12 cr.**
This course is designed to provide the learner advanced directed clinical experience. Given the facilities of the clinical laboratories of Jacksonville Hospitals' Education Program, the learner will perform medical laboratory techniques with accuracy and precision. The clinical phase is coordinated by the Medical Technology Faculty of the College. This includes supervision, scheduling, and evaluation of students. Thirty-five contact hours.

MTY—MECHANICAL TECHNOLOGY

+ MTY 280—Elements of Applied Energy **3 cr.**
Prerequisite: APM 161, MEY 160. 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.

+ MTY 281—Engineering Mechanics **4 cr.**
Prerequisite: APM 161, MEY 160. 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. Five contact hours.

+ MTY 285—Fluid Mechanics **3 cr.**
Prerequisite: APM 161, MEY 160. 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.

MUS—MUSIC

APPLIED MUSIC—Depending on the availability of qualified staff, private instruction is offered in piano, voice, organ and orchestral instruments. All music majors must have a solo performing medium in order to complete any music degree program. One of the following designations must be selected depending on the specific area of musical study the student elects.

SECONDARY INSTRUMENT—MUS 140 A-Y/ 240 A-Y

These applied music courses carry one hour credit for one half-hour lesson per week. These courses are for the music student needing to gain proficiency on an instrument other than his major or principal.

PRINCIPAL INSTRUMENT—MUS 150 A-Y/ 250 A-Y

These applied music courses carry two hours credit for two half-hour lessons per week. These courses are for the student who is planning to major in any area of music except applied. (e.g. music education, music therapy, etc.)

MAJOR INSTRUMENT—MUS 160 A-Y/ 260 A-Y

These applied music courses carry three hours credit for two half-hour lessons per week. These courses are for the student who is planning to major in applied music. (i.e. performance)

Any student enrolling in these courses must audition for placement and receive permission from the instructor before registration.

The instrument designations are as follows:

A. Piano	M. Flute
B. Voice	N. Clarinet
C. Violin	P. Oboe
D. Viola	Q. Bassoon
E. Cello	R. Percussion
F. String Bass	S. Organ
G. Trumpet	T. Saxophone
H. Trombone	U. Classical Guitar
J. Baritone	X. Other
K. Tuba	Y. French Horn

***MUS 012—Applied Music I—Principal Instrument**

2 cr.

Prerequisite: Placement by audition before the music faculty. Two half-hour lessons, or one hour lesson per week. (See note concerning Applied Music above.)

- *MUS 013—Applied Music II—Principal Instrument** **2 cr.**
 Prerequisite: MUS 012. Two half-hour lessons, or one lesson per week. (See note concerning Applied Music above.)
- *MUS 016—Introduction to Music Theory** **3 cr.**
 A course designed for students whose background and Theory Placement Test scores indicate further preparation is needed for MUS 112. Includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing, dictation, and keyboard skills. Three contact hours.
- *MUS 105—Student Recital** **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.
- *MUS 112—Music Theory I** **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.
- *MUS 113—Music Theory II** **4 cr.**
 Prerequisite: MUS 112 or permission of instructor. A continuation of MUS 112. A basic course including music terminology, notation, harmony, melody, rhythm, and form. Sight singing and ear training included. Five contact hours: three class hours; two laboratory hours.
- *MUS 116—Introduction to Electronic Music** **2 cr.**
 Prerequisite: Approval of instructor. A beginning course in the history and practice of electronic music including laboratory work with tape recorders and synthesizers. Three contact hours.
- *MUS 118—Basic Choral Conducting** **2 cr.**
 Prerequisite: MUS 112 and/or consent of instructor. Provides the student with an introduction to basic techniques used in directing choral rehearsals and performances. Three contact hours.
- *MUS 119—Basic Piano Pedagogy I** **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.
- *MUS 120—Class Strings** **1 cr.**
 Teaches basic performance skills on violin, viola, violin-cello, or double bass. Open to music majors. Two laboratory hours.
- *MUS 121—Class Woodwinds** **1 cr.**
 Teaches basic performance skills on clarinet or flute. Open to music majors. Two laboratory hours.
- *MUS 122—Class Brass** **1 cr.**
 Teaches basic performance skills on trumpet or trombone. Open to music majors. Two laboratory hours.
- *MUS 123—Class Percussion** **1 cr.**
 Teaches basic performance skills on percussion instruments with emphasis on rudimentary snare drumming. Open to music majors. Two laboratory hours.

- *MUS 130—Class Voice I** 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 laboratory hours.
- *MUS 131—Class Voice II** 1 cr.
Prerequisite: MUS 130 or equivalent. A continuation of MUS 130. Two laboratory hours.
- *MUS 132—Class Piano I** 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 laboratory hours.
- *MUS 133—Class Piano II** 1 cr.
Prerequisite: MUS 132 or equivalent. A continuation of MUS 132. Three laboratory hours.
- *MUS 134—Class Guitar I** 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 laboratory hours.
- *MUS 135—Class Guitar II** 1 cr.
Prerequisite: MUS 134. A continuation of MUS 134, perfecting and advancing skills learned therein. Two laboratory hours.
- *MUS 140—Applied Music I, Secondary Instrument** 1 cr.
One half-hour lesson per week. (See note concerning Applied Music.)
- *MUS 141—Applied Music II, Secondary Instrument** 1 cr.
One half-hour lesson per week. (See note concerning Applied Music.)
- *MUS 150—Applied Music I, Principal Instrument** 2 cr.
Two half-hour lessons per week. (See note concerning Applied Music.)
- *MUS 151—Applied Music II, Principal Instrument** 2 cr.
Two half-hour lessons per week. (See note concerning Applied Music.)
- *MUS 160—Applied Music I, Major Instrument** 3 cr.
Prerequisite: Placement by audition before the music faculty. Two half-hour lessons or one hour lesson per week. (See note concerning Applied Music.)
- *MUS 161—Applied Music II, Major Instrument** 3 cr.
Prerequisite: MUS 160 or equivalent. Two half-hour lessons or one hour lesson per week. (See note concerning Applied Music.)
- *MUS 162—Symphonic Band** 1 cr.
Open to all students of the College with permission of the instructor. 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. Six rehearsal periods.
- *MUS 163—Jazz-Rock Ensemble** 1 cr.
Prerequisite: Permission of the director. The repertoire includes various styles from jazz and popular literature. May be selected for credit each semester. Three rehearsal periods.

- *MUS 164—College Chorus** **1 cr.**
 Choral organization open to all college students. Many styles of choral music are included in the repertoires. Can be elected for credit each semester. Three rehearsal periods.
- *MUS 165—Community Chorus—Jacksonville Concert Chorale** **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, or non-college credit under Adult Education. Two-hour rehearsal period.
- *MUS 166—Music Workshop** **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. One major production each term. Three rehearsal hours.
- *MUS 167—Community Orchestra** **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 also be taken as a non-college credit Adult Education course. Two-hour rehearsal period.
- *MUS 171—College Chorale** **1 cr.**
 Prerequisite: Permission of director. Before entering course: Previous choral experience and/or audition with instructor. The repertoire of the College Chorale includes the more difficult sacred and secular compositions, accompanied and unaccompanied. Can be elected for credit each semester. Five rehearsal periods.
- *MUS 172—String Ensemble** **1 cr.**
 Prerequisite: Permission of the instructor. 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. Three rehearsal periods.
- *MUS 212—Music Theory III** **4 cr.**
 Prerequisite: MUS 113 or permission of instructor. 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.
- *MUS 213—Music Theory IV** **4 cr.**
 Prerequisite: MUS 212 or permission of instructor. 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.
- *MUS 216—Keyboard Harmony** **1 cr.**
 Prerequisite: MUS 213 or permission of instructor. Development of skills at the piano. Emphasis upon harmonization of melodies, modulation, transposition, and improvisation. Required of all music majors. Two laboratory hours.
- *MUS 217—Keyboard Harmony** **1 cr.**
 Prerequisite: MUS 216 or equivalent. A continuation of MUS 216. Two laboratory hours.
- *MUS 219—Basic Piano Pedagogy II** **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.

- *MUS 230—Class Voice III** **1 cr.**
Prerequisite: MUS 131 or equivalent. 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.
- *MUS 231—Class Voice IV** **1 cr.**
Prerequisite: MUS 230 or equivalent. A continuation of MUS 230. Two contact hours.
- *MUS 232—Class Piano III** **1 cr.**
Prerequisite: MUS 133 or equivalent. A continuation of MUS 133. Two laboratory hours.
- *MUS 233—Class Piano IV** **1 cr.**
Prerequisite: MUS 232 or equivalent. A continuation of MUS 232. Two laboratory hours.
- *MUS 234—Class Guitar III** **1 cr.**
Prerequisite: MUS 135. A continuation of MUS 135, perfecting and advancing skills learned therein. Two laboratory hours.
- *MUS 235—Class Guitar IV** **1 cr.**
Prerequisite: MUS 234. A continuation of MUS 234, perfecting and advancing skills learned therein. Two laboratory hours.
- *MUS 240—Applied Music III, Secondary Instrument** **1 cr.**
Prerequisite: MUS 141 or equivalent. One half-hour lesson per week. (See note concerning Applied Music.)
- *MUS 241—Applied Music IV, Secondary Instrument** **1 cr.**
Prerequisite: MUS 240 or equivalent. One half-hour lesson per week. (See note concerning Applied Music.)
- *MUS 250—Applied Music III, Principal Instrument** **2 cr.**
Prerequisite: MUS 151 or equivalent. Two half-hour lessons per week. (See note concerning Applied Music.)
- *MUS 251—Applied Music IV, Principal Instrument** **2 cr.**
Prerequisite: MUS 250 or equivalent. Two half-hour lessons per week. (See note concerning Applied Music.)
- *MUS 260—Applied Music III, Major Instrument** **3 cr.**
Prerequisite: MUS 161 or equivalent. Two half-hour lessons or one hour lesson per week. (See note concerning Applied Music.)
- *MUS 261—Applied Music IV, Major Instrument** **3 cr.**
Prerequisite: MUS 260 or equivalent. Two half-hour lessons, or one hour lesson per week. (See note concerning Applied Music.)

MUY—MUSICOLOGY

- *MUY 101—Music Appreciation** **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.
- *MUY 211—Survey of Music History** **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.

NUR—NURSING

#NUR 175—Nursing Process I

8 cr.

Corequisite: ANA 215. A study of the principles and techniques that form the foundation for all subsequent nursing courses. The four basic steps of the nursing process are assessing, planning, implementing, and evaluating the effects of nursing care to patients in all age groups. Content includes instruction in the problem-solving process, interpersonal relationships, mental health concepts, asepsis, nutrition, body mechanics, hygienic practices, pharmacology, administration of drugs, and nursing history. Sixteen contact hours: four class periods and twelve laboratory hours scheduled on campus, in community hospitals, or in other health agencies.

#NUR 176—Nursing Process II

8 cr.

Prerequisite: NUR 175, ANA 215; Corequisite: ANA 216, PSY 241. Study of the physical and psychological needs of patients in all age groups. Emphasis is placed on the essential knowledge, understandings, and skills necessary to the nursing care of patients with medical or surgical conditions. 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 periods; twelve hours of laboratory practice on campus, in community hospitals and other health agencies.

#NUR 293—Nursing Process III

9 cr.

Prerequisite: ANA 215 and 216, NUR 175 and 176, PSY 241; Corequisite: BIO 241. This course is designed to study the physiological and psychological health problems of the family from infancy to old age. Content includes *family planning, care of the mother and infant, and exploration of community resources*. Emphasis is placed upon meeting the needs of patients with psychosocial problems in community health and general hospital settings. Communication skills are stressed and utilized as the chief nursing tool for intervention when dealing with deviant behavioral patterns, rehabilitating and assisting individuals to find desirable coping methods. Nineteen contact hours: four class periods; fifteen hours of laboratory practice.

#NUR 294—Nursing Process IV

9 cr.

Prerequisites: BIO 241, NUR 293. A continuation of the study of the physical and psychological nursing problems of patients from infancy to old age. The family-centered approach is used in learning the skills needed to care for sick children. The four basic steps of the nursing process will be applied to the major health problems. Emphasis is placed on medical emergencies, concepts of coronary care, problems of ventilation, rehabilitation, and community resources. Nineteen contact hours: four class hours; fifteen hours of laboratory practice in community health agencies.

#NUR 299—Critical Care Seminar

4 cr.

A course of study to be offered, upon demand, for people involved in the care of acutely ill patients in high risk areas. The content of the course will be in more depth and scope than the preparation in basic nursing programs. Topics to be covered include Emergency Department Nursing (NUR 29B), Coronary Care (NUR 29A), Medical and Surgical Intensive Care, Crisis Intervention, Recovery Room Nursing, Neonatal Intensive Care and Systematic Planning and Evaluation of Patient Care. Eight contact hours.

OCE—OCEANOGRAPHY

+OCE 201—Introductory Oceanography

4 cr.

An introductory, comprehensive treatment of physical, chemical and geological aspects of our oceans. Six contact hours.

+OCE 261—The Theory and Technology of Marine Field Sampling **3 cr.**

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. Four contact hours.

+OCE 262—Marine Instrumentation **3 cr.**

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.

OCO—OCCUPATIONAL ORIENTATION

***OCO 100—Cooperative Education Seminar** **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.

***OCO 101—Cooperative Education Work Experience I** **3 cr.**

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

***OCO 201—Cooperative Education Work Experience II** **3 cr.**

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

PED—PHYSICAL EDUCATION

***PED 101—Archery** **1 cr.**

The introduction of the basic skills and fundamental techniques with tournament practice. Two contact hours.

***PED 102—Beginning Badminton** **1 cr.**

Course work is designed to cover history, scoring, basic skills, game strategy and appropriate class tournaments. Two contact hours.

***PED 104—Advanced Basketball** **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.

***PED 106—Beginning Bowling** **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. Activity fee for facility, \$10.00. Two contact hours.

- *PED 112—Beginning Golf** **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. Activity fee for facility, \$10.00. Two contact hours.
- *PED 113—Rebound Tumbling** **1 cr.**
 The fundamental techniques of basic stunts, skills, and stunt combinations. Course content stresses safety procedures and includes mat and mini-tramp tumbling activities. Two contact hours.
- *PED 114—Handball and Paddle-Racquet Ball** **1 cr.**
 A course designed to teach the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours.
- *PED 117—Beginning Tennis** **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.
- *PED 118—Intermediate Tennis** **1 cr.**
 Designed for the student who has acquired the basic skills and strategy of tennis and desires to improve his tennis game. Two contact hours.
- *PED 119—Track Events** **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.
- *PED 120—Archery-Volleyball** **1 cr.**
 The introduction of the basic skills and fundamental techniques with game or tournament practice in two equal units. Two contact hours.
- *PED 122—Beginning Wrestling** **1 cr.**
 The introduction of the basic takedowns, escapes, reversals, counters, breakdowns and pinning holds. Two contact hours.
- *PED 124—Circuit Training** **1 cr.**
 A planned fitness training program to increase muscular strength and endurance through a planned series of exercises. Two contact hours.
- *PED 131—Beginning Swimming** **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.
- *PED 132—Intermediate Swimming** **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 drown-proofing. Two contact hours.
- *PED 135—Life Saving** **1 cr.**
 A course designed to provide the student with the knowledge and skills to save his own life or the life of another in the event of an emergency. Prerequisites: (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, (5) float motionless for one minute. Two contact hours.

- + PED 139—Navigation and Small Boat Handling** **3 cr.**
 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.
- + PED 141—Underwater Diving Skills (SCUBA)** **3 cr.**
 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.
- *PED 142—Karate and Self-Defense** **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.
- *PED 145—Physical Conditioning for Women** **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.
- *PED 157—Folk Dance** **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.
- *PED 158—Recreational Dance** **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.
- *PED 159—Softball-Soccer** **1 cr.**
 Softball will introduce the advanced skills and strategy with a background knowledge and appreciation of the history and rules of the game. The soccer unit will consist of fundamental skills and techniques, game play, and rule interpretations. Two contact hours.
- *PED 160—Recreational Games** **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, croquet, etc. Two contact hours.
- *PED 161—Angling** **1 cr.**
 The course is designed to introduce the skills, techniques, and knowledge of fishing for sport. The College's lakes will afford practice in fly, bait, and spin casting. Two contact hours.
- *PED 162—Introduction to Recreational Activities** **1 cr.**
 A course designed to acquaint the student with the variety of recreational activities available in the community. Guest expert lecturers in activities such as scuba and skin diving, surfing, equitation, hunting, judo, riflery, water skiing, and ice-skating will discuss the fundamental skills and techniques equated with enjoyable participation. Two contact hours.
- *PED 220—Advanced Volleyball** **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.

***PED 242—Intermediate Karate & Self Defense** **1 cr.**

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—PED 142. 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.

PEL—PHYSICAL EDUCATION LEADERSHIP

***PEL 200—Introduction to Physical Education** **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.

***PEL 220—Sports Officiating** **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.

PHI—PHILOSOPHY

***PHI 201—Introduction to Philosophy** **3 cr.**

An introduction to philosophical issues organized, for the most part, on a 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 210—Introduction to Logic** **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 240—Introduction to Moral and Political Philosophy** **3 cr.**

A survey of the efforts made by philosophers to comprehend that portion of man's 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.

PHS—PHYSICAL SCIENCE

***PHS 101—Physical Science** **3 cr.**

It is presumed that the student will have a working knowledge of arithmetic and its extension to basic algebraic formulas found in physical science; otherwise, it is suggested that the student complete MAT 119 or its equivalent. It is also suggested that the student take PHS 102 first. No prerequisites. 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.

***PHS 102—Earth and Space Science** **3 cr.**

No prerequisites for PHS 102. 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.

***PHS 287—Science Institute for Elementary Teachers** **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.

PHY—PHYSICS

***PHY 100—Physics for Liberal Arts** **3 cr.**

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 man's physical environment as applied to mechanics, electricity and magnetism and modern physics. Three contact hours.

***PHY 201—General Physics I** **4 cr.**

Prerequisite: MAT 121, College Algebra or equivalent. Corequisite: MAT 124, Trigonometry or equivalent. 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 202—General Physics II** **4 cr.**

Prerequisite: PHY 201. A continuation of PHY 201. 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 201. Six contact hours: three class hours; one three-hour laboratory.

***PHY 210—Physics I with Calculus** **4 cr.**

Prerequisite: MAT 124—College Algebra and Geometry and Calculus I or equivalent. 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 211—Physics II with Calculus** **4 cr.**

Prerequisite: PHY 210. This course is a continuation of PHY 210. 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 210. Six contact hours: three class hours; one three-hour laboratory.

POS—POLITICAL SCIENCE

***POS 204—American Federal Government** **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 205—State and Local Government** **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.

***POS 220—Introduction to Comparative Government** **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.

PSY—PSYCHOLOGY

***PSY 111—General Psychology** **3 cr.**
An analysis of human behavior by the study of the adaption of the individual to his physical and social environment. Three contact hours.

***PSY 214—Educational Psychology** **3 cr.**
Prerequisite: PSY 111 or consent of instructor. 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.

***PSY 241—Human Growth and Development** **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.

***PSY 242—Child Psychology** **3 cr.**
Prerequisite: PSY 111. 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.

***PSY 243—Adolescent Psychology** **3 cr.**
Prerequisite: PSY 111. Development in the adolescent years with emphasis on psychological problems. Three contact hours.

REL—RELIGION

***REL 201—World Religions** **3 cr.**
A comparative study of world religions, including Hinduism, Buddhism, Taoism, Confucianism, Shinto, Islam, Judaism, and Christianity. Three contact hours.

***REL 210—Religious Thought in the Old Testament** **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 211—Religious Thought in the New Testament** **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.

REM—RECREATIONAL MANAGEMENT

***REM 210—Camp Counseling**

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. Activity fee, \$10.00. Three contact hours and two overnight camping trips. The American Camping Association Advanced Campcraft certification is earned upon successful completion of the course.

RES—REAL ESTATE

+RES 161—Real Estate Principles and Practices

3 cr.

The basic purpose of this course is to provide the student with a broad acquaintance within the framework of real estate and to expose him to the wide ranging nature of the field. The course is not designed to prepare the student completely for the state licensing examination. Successful completion of the course is required by the Florida Real Estate Commission before application can be made to sit for the state examination for licensed real estate salesmen. Three contact hours.

#RES 162—Real Estate License Law

3 cr.

Prerequisite: RES 161. This course covers a detailed explanation and outline of Florida Real Estate Law as contained in the Florida Real Estate Handbook. Operation, requirements and procedures of the real estate office are discussed. With RES 161, this course prepares the student for the Florida State examination to be a registered real estate salesman. Three contact hours.

#RES 163—Real Estate Appraisal

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 man a basic knowledge of appraisal fundamentals. Three contact hours.

#RES 164—Real Estate Sales

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 your real estate opportunities. Three contact hours.

#RES 281—Real Estate Law

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.

#RES 283—Mortgage Broker in Mortgage Lending

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 to prepare 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.

RUS—RUSSIAN LANGUAGE

***RUS 101—Beginning Russian I**

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: three class hours; one laboratory hour.

***RUS 102—Beginning Russian II** **3 cr.**
Prerequisite: RUS 101 or equivalent. A continuation of RUS 101. Four contact hours: three class hours; one laboratory hour.

***RUS 210—Intermediate Russian I** **3 cr.**
Prerequisite: RUS 102 or equivalent. Reading from standard Russian authors, careful review of grammar, conversation, and composition. Four contact hours.

***RUS 211—Intermediate Russian II** **3 cr.**
Prerequisite: RUS 210 or equivalent. A continuation of RUS 210. Four contact hours.

SAM—SUPERVISORY AND ADMINISTRATIVE MANAGEMENT

+SAM 160—Introduction to Business **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.

+SAM 250—Principles of Management **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.

+SAM 251—Personnel Management **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.

SLD—SPECIAL LEARNING DISABILITIES, EDUCATION

+SLD 101—Introduction to Exceptional Child Education **3 cr.**
An introductory course surveying the characteristics and needs of exceptional children. Three contact hours.

SOC—SOCIOLOGY

***SOC 201—Introductory Sociology** **3 cr.**
A study of sociological concepts, theories, and methods; social groups, processes, and change. Three contact hours.

***SOC 210—Social Problems** **3 cr.**
Prerequisite: SOC 201. A consideration of major social problems which affect individuals and groups in industrial societies, with attention to American society. Three contact hours.

***SOC 220—Marriage and Family** **3 cr.**
A study of mate selection, courtship, marriage and child rearing, with special attention to the contemporary American family. Three contact hours.

SOP—SOCIAL PSYCHOLOGY

***SOP 110—Human Relations**

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.

SPA—SPANISH LANGUAGE

***SPA 101—Beginning Spanish I**

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.

***SPA 102—Beginning Spanish II**

3 cr.

Prerequisite: SPA 101 or equivalent. A continuation of SPA 101. Four contact hours: three class hours; one laboratory hour.

***SPA 210—Intermediate Spanish I**

3 cr.

Prerequisite: SPA 102 or equivalent. 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.

***SPA 211—Intermediate Spanish II**

3 cr.

Prerequisite: SPA 210 or equivalent. A continuation of SPA 210. Four contact hours: three class hours; one laboratory hour.

SPE—SPEECH

***SPE 110—Fundamentals of Speech**

3 cr.

The first course in speech is designed to give each student the opportunity to study and to practice the principles and methods of oral communication while he participates as a speaker and as a listener. Three contact hours.

***SPE 233—Intercollegiate Debate**

1 cr.

Prerequisite: Consent of instructor. Analysis of proposition of fact, policy and definition; library research methods, formal debate structure and participation in intercollegiate debate. Three contact hours.

***SPE 236—Argumentation and Debate**

3 cr.

Emphasis will be on 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.

***SPE 240—Discussion**

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.

***SPE 250—Oral Interpretation**

3 cr.

Prerequisite: SPE 110 or consent of instructor. 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.

SSS—SOCIAL SCIENCES

***SSS 101—Origins of American Society**

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.

***SSS 102—Origins of American Society**

3 cr.

A continuation of SSS 101 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.

STS—STENOGRAPHIC, SECRETARIAL AND RELATED

+STS 171—Beginning Shorthand

3 cr.

Prerequisite or corequisite: TYG 174. A beginning course in the principles of Gregg with some dictation and transcription practice. (Students who have had one year of high school shorthand should enroll in STS 172, Intermediate Shorthand.) Three contact hours: one class hour; two laboratory hours.

+STS 172—Intermediate Shorthand **3 cr.**

Prerequisite: STS 171 or one year of high school shorthand (Gregg). A continuation of Beginning Shorthand with increased practice in dictation and transcription. (Students who have satisfactorily completed two years of high school shorthand should enroll in STS 290, Advanced Shorthand.) Three contact hours.

+STS 290—Advanced Shorthand **3 cr.**

Prerequisite: STS 172 or two years of high school shorthand. This course reviews Gregg shorthand theory and develops the ability to take dictation and transcribe rapidly and accurately. Three contact hours.

+STS 291—Dictation and Transcription **3 cr.**

Prerequisite: STS 290. Accelerated dictation and transcription. Finished products are emphasized. Three contact hours.

#STS 292—Secretarial Practices **3 cr.**

Prerequisite: STS 172 and TYG 175. This course is designed to increase efficiency in secretarial procedures and practices. Skills in preparing office forms and use of secretarial reference books are developed. Three contact hours.

+STS 295—Legal Shorthand **3 cr.**

Prerequisite: STS 172. 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.

#STS 296—Medical Terminology **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 to use of medical dictionaries, manuals, and pharmaceutical references. Two contact hours.

STT—STRUCTURAL TECHNOLOGY

+STT 282—Testing and Strength of Materials **4 cr.**

Prerequisite: MTY 281. 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. Five contact hours: three class hours; two laboratory hours.

+STT 284—Fabrication Processes **3 cr.**

Prerequisite: MTY 281. Analysis of the methods and materials involved in the assembly of machines and structures. The study includes evaluation of the specifications and standards, stress analysis, quality control, material properties and engineering principles involved. Four contact hours: two class hours; two laboratory hours.

TER—TECHNICAL REPORTING

+TER 281—Technical Report Writing **3 cr.**

Prerequisite: ENG 101. A course of study in the proper arrangements, format, and analysis of technical data, specifications, and findings for presentation in report form. Methods and techniques for display of raw data by use of graphs and charts are emphasized. Three contact hours.

TRA—TRANSPORTATION

#TRA 160—Principles of Transportation **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 161—Transportation and Traffic Management I **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 162—Transportation and Traffic Management II **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 163—Carrier Liability and Claims **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 164—Independent Study of Transportation **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 his findings after a careful study and research into an area of personal interest. Acceptable thesis procedures must be used. The course has no prerequisites.

#TRA 165—Commercial Motor Transportation **3 cr.**
General introduction into commercial motor operations, highway and highway financing, equipment, types of operations, financing motor carriers, labor relations, terminal operation, claims, insurance, classification, rates, regulation of motor carriers, commission policy, intercity passenger operations, urban mass transit, and economics of commercial motor transportation. Three contact hours.

#TRA 167—Rate Clerk **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 168—Material Handling **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 263—Transportation and Traffic Management III **3 cr.**
Through routes and through rates; application of arbitraries 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 264—Transportation and Traffic Management IV **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 265—Interstate Commerce Law and Practice **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 266—Economics of Transportation **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 267—Transportation Management and Theory **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 prospective. Three contact hours.

#TRA 281—Interstate Commerce Act-I **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 282—Interstate Commerce Act-II **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, regulations. Three contact hours.

#TRA 283—Interstate Commerce Act-III **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, report of the commission. Three contact hours.

#TRA 284—Interstate Commerce Act-IV **3 cr.**
Continuation of Interstate Commerce Act-III. Topics include: review of previous material, measure of damages, statutory authority, evidence to prove damage, discrimination, issuance and preparation of the student's personal application to take the Practitioner Examination. Three contact hours.

TYG—TYPEWRITING

+ TYG 162—Beginning Typewriting I **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.

+TYG 174—Beginning Typewriting II

3 cr.

Prerequisite: TYG 162 or consent of the instructor. 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 TYG 175, Intermediate Typewriting.) Three contact hours: one class hour; two laboratory hours.

+TYG 175—Intermediate Typewriting

3 cr.

Prerequisite: TYG 174 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.

+TYG 285—Advanced Typewriting

3 cr.

Prerequisite: TYG 175. A continuation of basic skills in speed and accuracy with emphasis on production typing, including the various business forms, tabulation, and reports. Three contact hours.

ZOO—ZOOLOGY

***ZOO 101—General Zoology**

4 cr.

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.



NON-COLLEGE CREDIT COURSE DESCRIPTIONS

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.

AAC—ACCOUNTING AND COMPUTING

AAC 0001—Bookkeeping

High School Cr. 1

An introductory course of basic principles, concepts, and knowledge required for practical bookkeeping in everyday living.

AAC 0003—Personal Income Tax Seminar

This seminar is designed to inform individuals of changes in the income tax laws.

AAC 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 0110—Basic Bookkeeping

A course designed to prepare the student for employment as a bookkeeper or clerk. Includes principles and techniques involved in bookkeeping for a business office.

AAC 0120—Basic Accounting

A course designed 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 to prepare student for job entry skills.

AAC 0121—Basic Accounting

High School Cr. 1

A course designed 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.

ABF—AUTO BODY AND FENDER

ABF 0110—Auto Body Repair

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 0112—Auto Body Repair

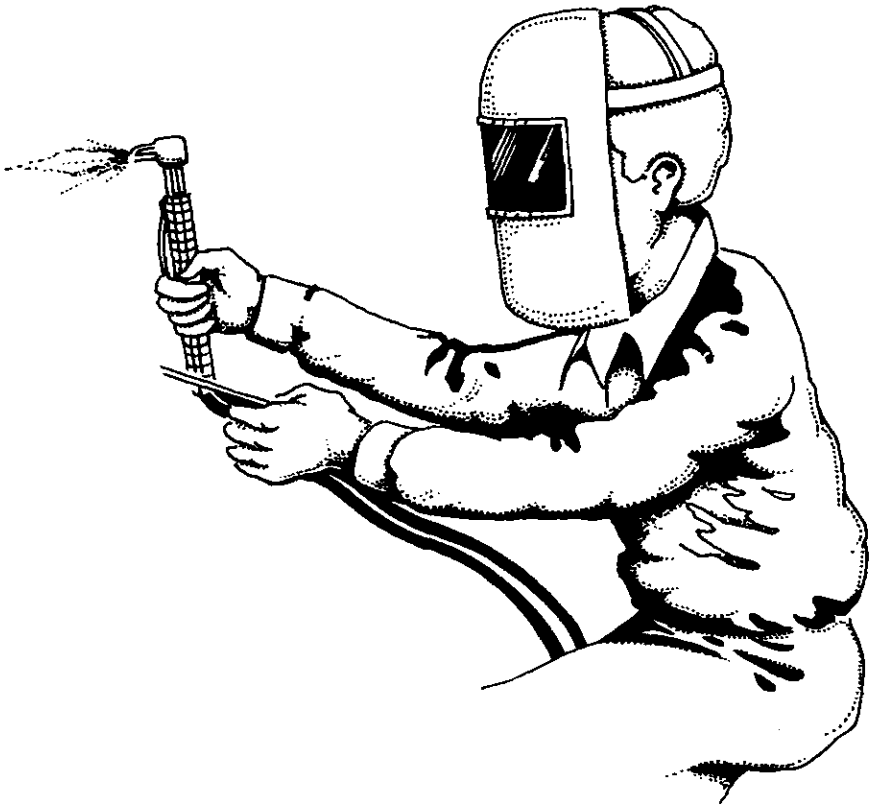
This course is designed for persons already employed in the field or in a related field, for supplementary instruction. The student will learn the proper procedure in the repair and replacement of damaged automobile body parts, including the removal of dents, glass installation, body painting and refinishing, and upholstery.

AIC—AIR CONDITIONING**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 0310—Air Conditioning, Refrigeration, and Heating

This course is designed specifically for job entry training and will instruct the student in the proper procedure to install and service commercial and residential air conditioning systems; to compute heat gain and heat loss on buildings for summer and winter air conditioning; to engineer and fabricate air handling duct systems and electronic and mechanical air filtration systems; 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 0312—Air Conditioning, Refrigeration and Heating

This course is designed for persons already employed in the field or in a related field for supplementary instruction. The student will learn the proper procedures to install and service commercial and residential air conditioning systems; to compute heat gain and heat loss on buildings for summer and winter air conditioning; to engineer and fabricate air handling duct systems and electronic and mechanical air filtration systems; 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 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 engineer and fabricate air handling duct systems and electronic and mechanical air filtration systems; 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.

AIO—AIRCRAFT OPERATIONS**AIO 0010—Aviation Ground School—Private Pilot**

This course is designed for entry-level training and to prepare students for the FAA Private Pilot's Written Examination.

AIO 0012—Commercial Pilot, Ground School

This course is designed for persons already employed in the field, or in a related field for supplementary instruction in preparation for the FAA Commercial Pilot's Written Examination.

AIO 0014—Aviation Ground School—Instrument Rating

This course is designed for persons already employed in the field, or in a related field for supplementary instruction in preparation for the FAA Instrument Rating Written Examination.

ANA—ANATOMY**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 sub-cellular level to the whole organism.

APC—APPLIED COMMUNICATIONS**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 0221—Water & Sewage Plant

Related Communication Training in communications in preparation for the Water & Sewage Plant Operator's License Examination. For persons already employed in the field.

APD—APPLIED DESIGN**APD 0001—Ceramics**

This course introduces the basic methods of ceramic production in hand building and glaze application. Kiln stacking and firing also included.

APM—APPLIED MATHEMATICS**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.

APM 0231—Tool and Die Math

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The student will learn applied mathematics necessary for precise machine shop work.

APS—APPLIED SCIENCE**APS 0222—Water & Sewage Plant—Related Chemistry**

This course 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 for persons already employed in the field.

ARR—APPLIANCE REPAIR**ARR 0310—Major Appliance Repair**

This course is designed specifically for job entry training and includes instruction in trade mathematics, basic electricity, soldering, bracing, and use of shop tools and equipment. A general overall course will be taught in this field similar to the requirements of industry.

ARR 0311—Major Appliance Repair

This course is designed for persons already employed in the field or in a related field for supplementary instruction. The student will be instructed in trade mathematics, basic electricity, soldering, bracing, and use of shop tools and equipment. A general overall course will be taught in this field similar to the requirements of industry.

ART—ART**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 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.

AUE—AUTOMOTIVE (DISTRIBUTIVE)**AUE 0010—Automobile Sales**

This course is designed to prepare individuals for employment as automobile salesmen. The course includes sales techniques, prospecting, qualifying, insurance coverage, auto financing, closing sales, and owner follow-up.

AUM—AUTOMOTIVE MECHANICS**AUM 0110—Emission Control Mechanic**

This four-hour seminar for persons already employed in the field deals with the control of automobile pollutants. It includes a study of the internal combustion engine, its polluting factors, and control techniques for carbon monoxide, nitrogen oxide, and hydrocarbon emissions from automobile engines.

AUM 0310—Automotive Mechanic

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 0312—Automotive Mechanic

This course is designed for persons already employed in the field or in a related field for supplementary instruction. The student will be instructed in the repair of passenger automobiles and light delivery trucks, including engines, transmissions, clutches, carburetors, ignition systems, chassis, bodies, and power operated equipment.

BCN—BUILDING CONSTRUCTION AND MAINTENANCE

BCN 0010—Building Maintenance

Training in all phases of repair and maintenance of building fixtures and furnishings, including building interior, tile, linoleum, plastic, terrazzo, wood floors, rugs, paint and wall coverings. Instruction and skill development in the use of hand and power tools for basic maintenance and repair to plumbing, electrical, wood, metal and masonry fixtures and furnishings. This course is designed primarily for off-campus supplementary instruction.

BCN 0310—Building Maintenance Mechanic

This course is designed specifically for job entry training in all phases of repair and maintenance of building fixtures and furnishings, including building interior, tile, linoleum, plastic, terrazzo, wood floors, rugs, paint and wall coverings. Instruction and skill development in the use of hand and power tools for basic maintenance and repair to plumbing, electrical, wood, metal and masonry fixtures and furnishings.

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. Program lasts four years, meets two nights a week from 7 to 10 pm.

BDP—BUSINESS DATA PROCESSING SYSTEMS

BDP 0010—Keypunch

A skill course designed for persons already employed in a related field 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 IBM 082 sorter. Prerequisite is a typing speed of thirty-five (35) words per minute or better.

BDP 0011—Keypunch

High School Cr. 1

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 thirty-five (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.

BIO—BIOLOGY

BIO 0001—General Biology

High School Cr. 1

A study of the origin, development, structure, functions, and distribution of plants and animal life.

BLC—BLACK CULTURE

BLC 0001—Afro-American History

High School Cr. 1

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.

BLR—BLUEPRINT READING

BLR 0310—Blueprint Reading

This course is designed specifically for job entry training in the reading and interpretation of blueprints and architectural drawings, and from such designs computes labor, material and equipment costs for construction work.

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 computes labor, material and equipment costs for construction work.

BLR 0314—Tool and Die Blueprint Reading

This course is designed for persons already employed in the field or in a related field, to supplement their training in the reading and interpretation of blueprints used in precise machine shop work.

BUS—GENERAL BUSINESS

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.

CAP—CARPENTRY

CAP 0310—Carpentry

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 0312—Carpentry

This course is designed as supplementary instruction for persons already employed in the field. The student will receive proper instruction 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 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, floor-laying, form building, scaffold construction, stair-building, and other similar types of woodwork.

CCL—COIN COLLECTING

CCL 0002—Introduction to Numismatics

The course is designed as an introduction to coin collecting, or numismatics. It is planned to assist the novice in starting and building a coin collection in an organized, economically sound and practical manner. The new collector will be given opportunity to acquire an appreciation for the beauty, history and events surrounding the coinage of the United States as well as of foreign countries.

CED—CONSUMER EDUCATION

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.

CED 0010—Consumer Buying

This course, designed as supplementary instruction, includes a study of the economic position of the individual consumer and the family, agencies and organizations designed to render assistance with buying problems, grading and standardization of food materials, fabrics, clothing and household equipment, informative labeling and legislation affecting family buying.

CEQ—CONSTRUCTION EQUIPMENT

CEQ 0110—Operating Engineering

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will be trained in the maintenance and operation of selected power construction equipment ranging from air compressors to steam shovels.

CEQ 0115—Operating Engineering

This course is designed primarily for apprenticeship instruction and its contents will include proper procedure in the maintenance and operation of selected power construction equipment ranging from air compressors to steam shovels.

CFI—COMMERCIAL FISHERY

CFI 0110—Commercial Fishing

This course is designed as supplementary instruction for persons already employed in the field. The student will learn the proper procedure necessary in the construction and repair of commercial cast nets, drop net and seine and their usage.

CGC—CARE AND GUIDANCE OF CHILDREN

CGC 0010—Child Growth & Development

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 which is designed as supplementary instruction for persons already employed in the field or in a related field.

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.



CHA—COMMUNITY HEALTH AIDE

CHA 0001—Drug Prevention and Treatment Counseling Training Seminar

Specifically prepared course for drug prevention and abuse counselors and other personnel to upgrade their professional skills. Topics include: current perspectives in drug abuse, human relations skills, and drug treatment methods.

CHE—CHEMISTRY

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.

CHI—CHINESE LANGUAGE

CHI 0001—Chinese

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 Chinese.

CLT—CLOTHING & TEXTILES

CLT 0010—Textiles

A consumer oriented approach to textiles for apparel and home furnishings with emphasis on currently used fibers, fabric construction, finishes, and maintenance. This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The content includes selection of patterns and fabrics that are compatible and selection of proper linings, underlinings, and interfacings. Fabric swatches will be available for handling and testing.

CLT 0110—Sewing for Children

This course is designed as supplementary instruction for persons already employed in the field, or in a related field, to provide opportunities for the acquisition of knowledge of fibers, special finishes and fabrics suitable for infants' and children's wear. Instructional activities include pattern selection and alteration, fabric selection, and construction of clothing for children, age six months through pre-teen. Special emphasis is also placed on the renovation of children's garments.

CLT 0111—Sewing for Selling

This course is designed as supplementary instruction for the individual or group wanting to develop skill in making articles for selling in gift shops or consignment, at church bazaars, self selling, or to use for gifts.

CLT 0113—Creative Needlecraft

This course is designed for students who are already employed in the field, or in a related field, and who wish to become proficient in one or more of the following needle crafts: crewel embroidery, crocheting, knitting, needlepoint, and quilting, following instructions concerning materials, equipment, designs, and techniques. Students work toward mastering the skills involved by doing individual projects.

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 persons already employed in the field, or in a related field. 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 simple garment, and selection of suitable accessories.

CLT 0313—Advanced Clothing Construction

This course is designed as supplementary instruction 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.

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.

CLT 0315—Basic Sewing

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. Instruction includes consumer education; use and care of the sewing machine; selection and use of hand sewing and cutting equipment; selecting and preparing fabric for use in projects to be made; making projects including basic sewing techniques; use and care of pressing equipment; selecting and using easy-to-sew patterns; making a garment using sewing techniques; simple clothing alterations; discussion of basic wardrobe requirements; good grooming and personal appearance.

CLT 0316—Advanced Sewing

This course is designed as supplementary instruction for persons already employed in the field and interested in continuing to use basic sewing techniques and learning additional details in making and altering clothes. It includes: use of more difficult patterns; individualizing accessories; alteration of ready made clothes; re-styling garments; psychological effect of clothing; dressing for the occasion; foundation garments; care of clothes; redesigning one’s wardrobe; and consumer education as related to clothing.

CLT 0317—Couture Sewing

This course is designed as supplementary instruction for students who have acquired superior sewing skills and are interested in making couture type garments. Included in the course is an in depth study of couture methods of grain perfect garments, construction, fit and finishing techniques.

CLT 0319—Couture Sewing**High School Cr. 1**

This course is designed for students who have acquired superior sewing skills and are interested in making couture type garments. Included in the course is an in depth study of couture methods of grain perfect garments, construction, fit and finishing techniques.

CMP—CLOTHING MANAGEMENT, PRODUCTION, SERVICES**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 and 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 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 0510—Intermediate Clothing Construction

This course is designed as supplementary instruction 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 0511—Boutique Sewing

Course work includes supplementary techniques and skills in constructing custom made clothing. Student will acquire skills which will enable her/him to become self-employed. Prerequisites: Basic and Advanced Clothing Construction and a tailoring course.

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 and 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 woolens and other fabrics in making a tailored coat or suit. This 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. Student should acquire skills which will enable him/her 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.

COA—COMMERCIAL ART**COA 0110—Commercial Art**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction in commercial and advertising art. Special consideration is given to: theories of layout, lettering, correlative ideas, drawing and composition, use of color, materials, methods and techniques, and work attitudes.

COP—COMMUNITY PREPAREDNESS**COP 0001—Community Emergency Preparation**

Courses of instruction designed to prepare individuals for rendering essential community services on a voluntary basis in time of serious emergency or disaster.

COR—CORRECTIONS**COR 0410—Correctional Problems and Solutions**

The student will be introduced to present day correctional problems and will participate in the development of solutions in conjunction with instructors. This course is designed as supplementary instruction for persons already employed in the field.

COR 0412—Techniques of Institutional Crises Intervention

This is a basic course designed to upgrade in-service personnel in techniques of communicating with inmates. The primary objective would be dealing effectively with crises involving mentally ill persons, alcoholics, drug addicts, etc. Also, listening actively, non-verbal communicating, and studying various techniques of immediate problem solving will be included in this course.

COR 0414—Problems and Solutions of Probation and Parole

The student will be introduced to present day problems in probation and parole supervision and will participate in solutions as directed by instructor. This course is designed as supplementary instruction for persons already employed in the field or in a related field.

COR 0415—Effective Report Writing

The purpose of this course is to study the proper arrangement, format, and analysis of criminal justice data employed in record keeping and the presentation of findings in report form. Emphasis is placed on the effective implementation and use of standard forms. This course is designed as supplementary instruction for persons already employed in the field or in a related field.

COR 0416—Introduction to the Juvenile Justice System

A general overview of the Division of Youth Services is given including techniques of intake, probation and aftercare. The student will survey courtroom procedures, record keeping, counseling techniques, decision making, the use of resources and general practices. Note: This course is restricted to in-service criminal justice personnel.

COR 0417—Counseling Techniques In Corrections

This course is designed for in-service correctional personnel. The student will examine the role (roles) of the counselor in counseling. The student-counselor will explore his/her values and feelings as a counselor, and professional ethics will be discussed. Course is limited to in-service criminal justice personnel.

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.

COY—COSMETOLOGY**COY 0310—Cosmetology**

This course is designed specifically for job entry training in all of the services available including hair cutting, shampooing, tinting, and styling, manicuring and pedicuring, scalp treatment and facial makeup and massage. Training prepares the pupil for the Florida State Board of Cosmetology examination for cosmetologists. Students are required to furnish their own kits, uniforms, and books.

DEA—DENTAL ASSISTING

DEA 0910—Dental Assisting Seminar

This seminar is designed specifically for job entry training in the skills and procedures needed by Dental Assistants and Dental Hygienists.

DEA 0912—Dental Assisting Seminar

This seminar is designed as supplementary instruction to upgrade skills of Dental Assistants and Dental Hygienists.

DIM—DIESEL MECHANIC

DIM 0310—Diesel Mechanic

This course is designed specifically for job entry training in maintenance and repair of diesel engines used on trucks, railroads, boats, and large construction machinery and in power plants.

DIM 0314—Truck Mechanic

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.

DRA—DRAMATIC ARTS

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.

DRA 0003—Art of the Amateur Magician

Emphasis will be placed on tricks and feats "of magic" which can be performed for the entertainment of friends or which can be used as an icebreaker for strangers.

DRT—GENERAL SHDP, DRAFTING

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, 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.

DRT 0103—General Shop, Drafting II

High School Cr. 1

A second course in drafting in which students specialize in one of the major areas of drafting such as mechanical, architectural, or engineering work. This course presents advanced study of the theory of shape and size description and the geometry of drawing, and provides extensive opportunities for practicing the development and reproduction of working drawings.

DTG—DRAFTING

DTG 0310—Drafting

This course is designed specifically for job entry training 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.

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.

ECO—ECONOMICS

ECO 0001—Economics, How to Get A Job

This course offers insight into the student's abilities, limitations, interests, aptitudes, and personal traits; it shows student how to set job goals and how to achieve them.

ECO 0002—Family Finance

This is a non-vocational course designed to assist adults in developing mathematical abilities along the lines needed for the solution of day-to-day problems involving their personal business affairs. It involves primarily a study of budgeting, banking, computation of interest, income tax preparation, installment buying, insurance, wages and related business activities of the lay citizen.

ECY—ECOLOGY

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 basics 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.

EFL—ENGLISH AS A FOREIGN LANGUAGE

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.

ELS—ELECTRONICS

ELS 0110—Basic Electronics

This course is designed specifically for job entry training in the installation, maintenance, and repair of electronically controlled and operated distribution systems used in industry and commercial businesses.

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 0116—Radio Communications

This course is designed specifically for job entry training in the receiving and sending of messages by radio, radiotelephone, radiotelegraph, and other electronic transmission equipment.

ELS 0117—Radio Communications

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The student will receive training in the receiving and sending of messages by radio, radiotelephone, radiotelegraph, and other electronic transmission equipment.

ELS 0310—Industrial Electronics

Designed to prepare a person for full-time employment in the industrial electronics field. Included in the course is theory, trouble shooting, testing, and safety precautions.

ELS 0312—Industrial Electronics

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. Instruction will include theory, trouble shooting, testing, and safety precautions.

ELS 0314—Marine Electricity

This course is designed to prepare a person for job entry and full-time employment in Marine Electricity; includes theory, trouble shooting, testing, safety precautions, and good work habits.

ELS 0316—Marine Electricity

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. The instruction will include theory, trouble shooting, testing, safety precautions, and good work habits.

EME—EMERGENCY MEDICAL TECHNOLOGY

EME 0010—Basic Emergency Care

Approved 81-hour Department of Transportation course for persons already employed in the field, and not interested in college credit.

EME 0011—Basic Review Emergency Care

Twenty (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.

ENG—ENGLISH

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 graduate, to assist him in making an easier adjustment to the college environment. The course is offered in two parts: speed reading and college guidance.

ENG 0009—Letter Writing

A course designed to improve an individual's ability to construct a clear and concise letter.

ENR—ENGINE REPAIR

ENR 0003—Gasoline Engine Mechanic

Training in the inspection and repair of the mechanical equipment of gasoline powered engines (other than automobile and truck), including motor testing, carburetor and 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 0310—Gasoline Engine Mechanic

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 and 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 0312—Gasoline Engine Mechanic

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 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, replacing and grinding; and replacing broken or damaged parts.

ERE—ENGINEERING RELATED

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.

ESY—SAFETY EDUCATION

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

Courses in safety education, designed to cover the principles of individual, home, and public safety.

FAR—FAMILY RELATIONS

FAR 0006—Family Relationships

This course, designed for supplementary instruction, 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 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.

FCR—FINANCE AND CREDIT

FCR 0410—Credit Administration

This course, designed for executive job entry level training, 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0411—Investments

Because the bank's needs for primary reserves and loanable funds limit the funds available for investment, this course describes the nature of such funds and how their uses are determined. It also analyzes, at a job entry level, 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. This is a fifteen-week course, meeting one night a week for three hours.

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 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, he is given suggestions to aid him in developing his speaking ability in such situations as conferences, panel discussions, radio, and television. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0413—Investments, Securities

This course is designed to help the student prepare for job entry and 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. This is a fifteen-week course, meeting one night a week for three hours.

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 for job entry training. This is a twelve-week course, meeting one night a week for three hours.

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 for job entry training. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0422—Bank Home Mortgage Loan

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. This course is designed specifically for job entry training. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0423—Commercial Law and Banking

This course, designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0424—Economics of Banking

This course sets forth the current principles explaining how our economic system operates and is designed specifically for job entry training. 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0425—Bank Accounting

This course is designed specifically for job entry training and 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0426—Trust Function Services

This course is designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0430—Banking Psychology

This course is designed specifically for job entry training for students in business and technical fields. 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. This is a fifteen-week course, meeting one night a week for three hours.

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 specifically designed for job entry training. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0432—Banking Principles

This course is specifically designed for job entry training and presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0433—Money and Banking

This course is designed specifically for job entry training. It stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by the banking student to apply his knowledge to his 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0434—Bank Management

This course presents new trends which have emerged in the philosophy and practice outlined and provides new and experienced bankers with a working knowledge of bank management. It is designed specifically for job entry training. Since case study is becoming well established as an effective management learning technique, the text introduces the use of cases as a new element. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0435—Bank Letters and Reports

This course is designed specifically as job entry training for bank officers, supervisors, and other 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. This is a fifteen-week course, meeting one night a week for three hours.

FCR 0436—Banking, Installment Credit

This course is specifically designed for job entry training and concisely presents the techniques of installment lending. Emphasis is placed on establishing the credit, obtaining and checking information, servicing the loan, 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. This is a fifteen-week course, meeting one night a week for three hours.

FIF—FIREFIGHTING**FIF 0411—Fire Fighters Leadership Course**

This course is designed to provide fire service officers with leadership techniques and skills. This course will include leadership types, responsibility of leadership, fire fighting tactics, etc. 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 firefighters.

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. 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. 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. Course is limited to in-service fire fighting personnel.

FMC—FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL

FMC 0310—Office Practice

High School Cr. 1

A course of study consisting of filing, ten-key adding machine, key driven and electronic calculator, duplicating (spirits and mimeograph), and basic record keeping.

FMC 0311—Office Practice

This course is designed specifically for job entry training. Instruction includes filing, ten-key adding machine, key driven and electronic calculator, duplicating (spirits 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 0314—Office Machines

High School Cr. 1

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.

FMD—FOREMANSHIP, SUPERVISION, AND MANAGEMENT DEVELOPMENT

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; timekeeping, 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.

FOD—FOOD DISTRIBUTION

FOD 0010—Grocery Merchandising

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The course includes organized subject matter and learning experiences related to the variety of sales and sales-supporting tasks performed by employees and management in establishments primarily engaged in selling a general or commodity line of food products at wholesale. This is a sixty-hour course, meeting each day for two and a half hours.

FDD 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 for job entry training.

FON—FOODS AND NUTRITION**FON 0001—Food For You**

This course is designed as supplementary instruction and will be adapted to the needs of the people enrolled. It will emphasize consumer education throughout each unit. Flexibility and adjustment to group needs as the course progresses will be considered.

FON 0002—Nutrition

This course includes a study of the elementary principles of nutrition, the relation of food selection to health, and development of ways to improve poor dietary practices. Consideration will be given to the food needs of senior citizens, young children, the convalescent, and the nutritional needs of all members of the family, and is designed as supplementary instruction. Attention is given to planning and preparing family meals which may be easily adapted to the special needs of the individual.

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. Sixty hours.

FON 0101—Gourmet Foods

This course includes the preparation and service of exotic and unusual foods. It is designed as supplementary instruction for persons working in a related field.

FON 0102—Short Cuts in Meal Preparation

This course is designed as supplementary instruction for persons working in a related field. It includes the preparation of well-balanced quick meals through the use of mixes, packaged, and frozen foods. Emphasis will be given to the selection, use, and care of small kitchen appliances.

FON 0103—Meal Management—Microwave Cooking

This course is designed to include principles of microwave cooking. Students will acquire skill in meal management to include menu planning, budgeting, purchasing, storage, and preparation of foods with the microwave oven. Also included will be techniques of freezing and thawing relative to use with microwave. The learning environment will include instructor's demonstrations, visual aids, and student participation in food preparation. Consumer education will be an important aspect of this course, which is designed as supplementary instruction.

FON 0104—Diet Therapy

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, cholesterol. This course is designed as supplementary instruction for persons working in a related field.

FON 0105—Elegant Entertaining

This course is designed as supplementary instruction to make entertaining a happy adventure. Topics to be included are styles of meal service and table setting; table decorations and appointments; planning menus for buffets, teas, open house, cocktail parties, brunches, luncheons, dessert parties, barbecue and formal dinners; and tips and ideas to make entertaining fun.

FRE—FRENCH LANGUAGE**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.

FSE—FOOD SERVICES (DISTRIBUTIVE)**FSE 0010—Hostess Training**

This course, designed as supplementary instruction for restaurant personnel, covers the proper way to handle goods, dress, how to take orders, placing of orders, seating and arrangements, dining room service, and ways to make customers' meals pleasant.

FSE 0011—Food Service Management

This course is designed as supplementary instruction for those persons serving in a managerial or supervisory capacity in the food service industry. It includes such phases as, but is not limited to, food purchasing, food costs accounting, food control, food checking, and food sales and services.

FSM—FOOD SERVICES AND MANAGEMENT**FSM 0003—Cake Decorating, Basic**

This course is designed to develop skills in construction of cake decorations, borders and covers, and creation of novelty and seasonal decorations. Concepts of management, consumer education, sanitation, and safety are taught as they relate to instruction. Materials will be supplied by the student. This course is designed primarily for off-campus supplementary instruction.

FSM 0310—Cake Decorating

This course is designed as supplementary instruction for persons working in a related field and includes techniques and experiences in baking and cake decorating of all types such as wedding and party cakes and pastries for special occasions.

FSM 0311—Advanced Cake Decorating

Prerequisite: FSM 0310, Cake Decorating. This course is designed as supplementary instruction for persons working in a related field and includes specialized techniques in cake decorating. Skills developed are: making fancy ornaments and designs; making creations in sugar; and making forms in chocolate.

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. Sixty hours.

FSM 0313—Catering

This course includes a basic knowledge of all types of foods for special occasions. Included will be the planning, preparation, and service of hors d'œuvres, buffet foods, fruits and vegetable garnishes, petits fours, glazes, and molds. The current methods and techniques of party food preparation and catering will be taught as supplementary instruction for persons already employed in the field, or in a related field.

FSM 0314—Supervised Food Service Worker

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. 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 preparing 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; organizes work in relation to work space and within time limitations. Suggested hours of training—450.

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, homes for the aging. Suggested hours of training—Ninety hours class work and thirty-six weeks evaluated work experience.

FSM 0316—Equipment Use and Care

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 use school lunchroom equipment in the easiest, safest, and most effective way, to properly care for equipment, and to appreciate the value of good equipment as an aid in providing superior food. Participants learn simple repair techniques and preventive maintenance, cleaning methods, and record keeping as it relates to equipment. Thirty to sixty hours.

FSM 0318—Supervised Food Service Worker**High School Cr. 1**

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 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 preparing 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; organizes work in relation to work space and within time limitations. Suggested hours of training—450.

FSM 0510—Advanced Foods

This course is designed as supplementary instruction 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. Sixty hours.

FSM 0512—Accounting and Reporting

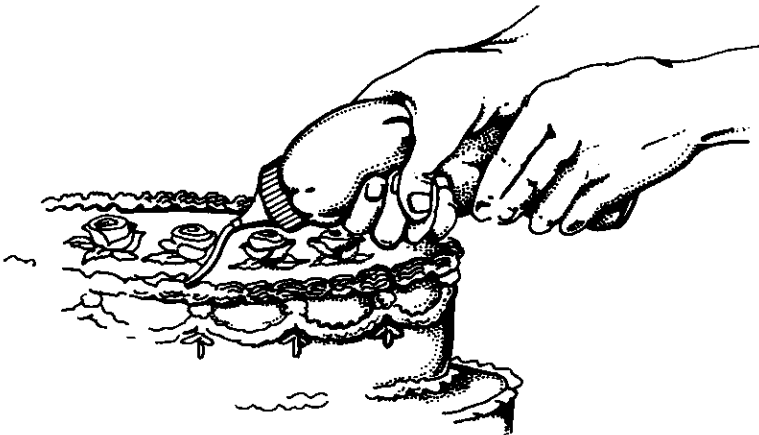
This course is designed to teach food service managers and accountants the principles involved in recording and reporting the activities of any quantity food service business. It includes a study of what constitutes a sound record keeping and reporting system, and provides daily practice in maintaining 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, 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. Sixty hours.



GEO—GEOGRAPHY

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—GERMAN LANGUAGE

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.

GEY—GEOLOGY

GEY 0001—Geology

High School Cr. 1

Geology is the study of the crust of the earth including the bottom of the oceans and paleoclimatology. The Geology student is to develop an understanding of earth materials and how these materials are changed and modified through the action of natural forces over a period of time.

GME—GENERAL MERCHANDISE

GME 0010—Merchandising and Buying

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. It deals principally with training for personnel specializing in merchandising and buying. The functions of the merchandising department, inventory control system, stock turnover, buying functions, and sales promotion are covered. This is a ten-week course, meeting one night a week for three hours.

GME 0011—Route Selling

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 to secure good public relations for a firm, knowing its product, traffic safety, and methods of promoting additional business. This is a ten-week course, meeting one night a week for three hours.

GME 0012—Principles of Retailing

This course, designed as supplementary instruction for persons already employed in the field, shows the organization and operation of a retail merchandising business. Included are basic coverage of sales, service, sales promotion and advertising, credit and accounting, and administration department. Also, basic coverage is given to such topics as channels of distribution, store financing, personnel problems, and operating statements. This is a ten-week course, meeting one night a week for three hours.

GME 0014—Techniques of Selling

This is a basic selling course designed as supplementary instruction for persons already employed in a related field. It covers the sequences that go into making a sale. Course content includes selling in various fields such as retailing, direct and wholesaling areas, and an analysis of the buyer-focused theory of selling. The use of visual aids augments classroom activities, and the student has an opportunity to practice selling in the classroom. This is a ten-week course, meeting one night a week for three hours.

GMR—RETAIL TRADE

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. The program is a ninety-hour training course with classes both morning and evenings.

GRA—GRAPHIC ARTS

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.

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.

GRA 0312—Printing

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 involved in offset camera, platemaking, stripping, and small offset presses; letterpress composing, bindery and letterpress printing, including hand fed and automatic presses.

HEE—HOME ECONOMICS EDUCATION

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—HOME EQUIPMENT AND FURNISHING

HEF 0003—Flower Arranging

This course is designed for the person interested in creating floral arrangements for the home. Floral designs suitable for use in special occasions and for holidays through the year may be constructed from materials supplied by the student. This course is designed primarily for off-campus supplementary instruction.

HEF 0101—Slipcover Construction

Course work includes instruction 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 persons already employed in the field, or in a related field, 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 judgement 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 liveable 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 liveable 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 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; however, intensive study could develop job entry level skills. Total—forty-eight hours.

HEF 0311—Furniture Recovering

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The student will learn the proper procedure necessary in the recovering of furniture. Instruction includes selection of tools, equipment, and material, planning and preparing the proper coverings for panels, trimmings, skirts, ruffles and cushions. Students will supply their own tools, fabrics, materials, and all other supplies.

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. Total—ninety-six hours.

HEF 0314—Floral Design

This course includes procedures for wiring and taping flowers, simple bouquets, hospital and home arrangements, funeral sprays, and simple corsages. Students will experiment with party decorations, centerpieces and wedding bouquets. Some emphasis will be given to the use and care of plant decoration and designs made with artificial flowers. The techniques and skills presented in this course are 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. Techniques of making bows is included in this thirty-six hour course.

HEF 0315—Advanced Floral Design

This course is designed as supplementary instruction for persons already employed in the field, or in a related field. This course includes instruction in advanced techniques of floral design. Also included are procedures necessary to the successful operation of a floral shop; however, intensive study could develop job entry level skills. This is a forty-five hour course.

HEN—HEALTH EDUCATION**HEN 0001—Personal Health & Hygiene**

A course designed to provide information and experience to enable individuals to protect and maintain their health, with emphasis on good physical conditioning.

HEN 0002—Personal Safety

The course is designed to provide skills and knowledge 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 mothers-to-be in the early months of pregnancy. The course will cover exercises, physical fitness, nutrition, and baby care.

HEN 0008—Yoga

This course brings to the student an ancient and unique method for acquiring and maintaining dynamic health of mind and body. It offers simple, natural techniques for releasing tension, building energy, regulating body functions, promoting complete relaxation, and reversing the aging process.

HIS—HISTORY**HIS 0001—History****High School Cr. 1**

History is offered to meet the needs of adult students in special areas significant in the development of our civilization.

HIS 0002—Citizenship Education for Foreign Born**High School Cr. 1**

This course is designed to acquaint prospective citizens with United States History, the Constitution and its historic background, the organization of local, state, and federal governments; to promote understanding and appreciation for ideals, privileges and responsibilities of democratic citizenship; and to prepare individuals for the examination administered by immigration and naturalization authorities.

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 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 present.

HMG—HOMEMAKING (COMPREHENSIVE)**HMG 0001—Vocational Homemaking**

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The course includes home management problems, delegation of responsibilities, and action to take in emergencies.

HOF—HOUSING AND HOME FURNISHING**HOF 0001—Household Care, Repair, and Maintenance**

The 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 combatting 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.

HOL—HOTEL AND LODGING**HOL 0010—Hotel-Motel Management**

This course is designed specifically for job entry training for persons not pursuing a degree program. Includes supervision of employees, organization, catering and sales departments, and front office procedures.

HOL 0012—Apartment Management

This course is designed specifically for job entry training and covers all aspects of apartment management. It includes such topics as manager qualifications, selling apartment living, social and recreational activities within the apartment, lease agreements, terminations and collections, record keeping, security, maintenance and repair. This is a ten-week course, meeting one night a week for three hours.

HOL 0014—Apartment Management

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The course will cover all aspects of apartment management. It includes such topics as manager qualifications, selling apartment living, social and recreational activities within the apartment, lease agreements, terminations and collections, record keeping, security, maintenance and repair. This is a ten-week course, meeting one night a week for three hours.

HOL 0016—Hotel-Motel Front Office Procedures

This course is designed specifically for job entry training for persons not pursuing a degree program. Provides training in the use of posting machines and in all procedures for registering and rooming guests, recording charges and credits, checkouts, and performing the night audit.

HOL 0018—Executive Housekeeping

This course is designed specifically for job entry training. The course will develop leadership and organizational ability for supervisory personnel responsible for maintaining an establishment in a clean, orderly, and attractive manner. It includes the basic technical knowledge essential to the position.

HOL 0020—Introduction to Hospitality Management

This course is designed specifically for job entry training. It traces the growth and development of the lodging industry from early times to modern skyscraper hotels and highway motels; the organization of hotel operations; opportunities and future trends. A survey course for persons considering hotel-motel-management as a career. Six to eight-week course.

HOM—HOME MANAGEMENT**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.

HOM 0002—Clothing Selection & Care

This course is designed as supplementary instruction. It includes a study of fibers, fabrics, and special finishes, informative labeling of fabrics for home sewing and for ready-to-wear garments and characteristics of well made garments and accessories. Included also are the factors involved in selecting clothing accessories for individuals and family members to provide pleasing appearance, good design, color and appropriateness to age and occasion will be discussed. A study will be made of the care and upkeep of family clothing through laundering, repairing, and storing, and demonstrations will be given of simple alterations which are needed for better fit of ready-made garments.

HSM—HEALTH SERVICES MANAGEMENT**HSM 0310—Unit Clerk**

This course is designed to prepare a non-professional worker with clerical and receptionist duties of the nursing unit under the supervision of the charge nurse on the unit.

HUM—HUMANITIES

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.

HUM 0003—Introduction to Antiques

A course designed to introduce the individual to the different styles of relics and furniture of former periods.

IDS—INTERDISCIPLINARY STUDIES

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.

IEL—INDUSTRIAL ELECTRICITY

IEL 0110—Electric Code

This course is designed for persons already employed in the field, or in a related field, for supplementary instruction. The course will prepare apprentice electricians to pass the electric code examination, and includes types of electric wire sizes, meters, electrical equipment, and materials.

IEL 0310—Construction Electricity

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 0312—Construction Electricity

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 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 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.

**INM—INSTITUTIONAL AND HOME
MANAGEMENT & SUPPORTING SERVICES****INM 0010—Homemaker's Assistant**

This course is designed specifically for job entry training and the student works under the direction of the homemaker; performs basic housekeeping duties of cleaning all rooms through use and care of manual and electrical equipment, and appropriate use of cleaning materials; does simple laundering; prepares and serves family meals; takes care of children during mother's absence; takes telephone messages and meets people at the door; and meets ordinary emergencies which may arise during homemaker's absence. Suggested hours of training—300.

INS—INSURANCE**INS 0210—Principles of Insurance**

This course designed specifically for job entry 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. This is a fifteen-week course, meeting one night a week for three hours.

INS 0212—Principles of Casualty Insurance & Surety Bonding

This course is designed for persons already employed in the field, as supplementary training. It 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, miscellaneous casualty coverages. This is a fifteen-week course, meeting one night a week for three hours.

INS 0213—Principles of Insurance Adjusting

This course is specifically designed for job entry training. It includes 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; estimating business losses. This is a sixteen-week course, meeting one night a week for three hours.

INS 0215—Marketing Principles of Life and Health Insurance

This course is designed for persons already employed in the field, as supplementary training. It is a new approach toward the life and health insurance industry, its products, the market potential, and the industry as a selling career. This is a fifteen-week course, meeting one night a week for three hours.