ANTHROPOLOGY

AY 201 — Cultural Anthropology 3 cr.
The nature of culture and an analysis of the languages, economic organization, social groups, art, and religion in primitive societies. Three class periods.

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 (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour; 3 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 (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour; 3 studio hours.)

ART 103 — 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 (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour; 3 studio hours).

ART 104 — Design II 3 cr. (Evening: 2 cr.)
Prerequisite: Art 103 or consent of instructor. A continuation of ART 103. Six contact hours (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour; 3 studio hours.)

ART 118 — 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 class periods.

ART 203 — Art History I 3 cr.
A history and critical study of painting, sculpture, and architecture from prehistoric times to the Renaissance. Three class periods.

ART 204 — Art History II 3 cr.
Prerequisite: ART 203. A continuation of the history and criticism of art from the Renaissance to the present. Three class periods.

ART 205 — Painting I 3 cr.
Prerequisite: Art 102 or consent of instructor. A comprehensive analysis of painting techniques and contemporary approaches to still life, landscape, and figure compositions. Six contact hours (2 class hours; 4 studio hours).

ART 206 — Painting II 3 cr.
Prerequisite: ART 205. A continuation of ART 205 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 (2 class hours; 4 studio hours.)

ART 207 — Ceramics I 3 cr. (Evening: 2 cr.)
This course introduces the basic methods of ceramic production in hand building, wheel throwing, and glaze application. A unit in enameling
introduces the principles of applying vitreous enamels to metals. Six contact hours (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour, 3 studio hours).

**ART 208 — Ceramics II**
3 cr. (Evening: 2 cr.)
Prerequisite: ART 207. A continuation of the ceramic unit introduced in ART 207. Sculpture methods and procedures in clay will be included in this course. Creative forms in both pottery and sculpture will be emphasized. Six contact hours (2 class hours; 4 studio hours). (Evening: Four contact hours — 1 class hour; 3 studio hours.)

**ART 209 — Printmaking**
3 cr.
Prerequisite: Drawing 101. This course will introduce students to the methods of the Graphic Arts. Work will be undertaken in relief and Intaglio Printing. Six contact hours (1 class hour; 5 studio hours.) (Evening: 4 contact hours — 1 class hour; 3 studio hours.)

**BY 101 — Botany**
4 cr.
A study of the plant kingdom with emphasis on morphology, life cycles, phylogenetic advances, and economic importance. Emphasis will be placed on principles which are applicable to all forms of life. Three class periods and three laboratory hours.

**BY 105 — 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. Three class periods and three laboratory hours.

**BY 207 — Anatomy and Physiology**
4 cr.
A study of the gross morphology and chemistry of the human. Three class periods and two laboratory hours.

**BY 208 — Anatomy and Physiology of the Eye**
2 cr.
A study of the anatomy and physiology of the eye and its associated structures such as the lids, lacrimal apparatus, muscles and the orbit. Topics include: structure and function of the cornea, lens and retina;
refractive errors and their correction; accommodation and convergence; presbyopia and aphakia; common eye diseases, binocular vision and eye muscle imbalance. Prerequisite: PS 210 Principles of Optics I.

**BY 209 — Microbiology**
4 cr.
A study of protista, viruses, rickettsiae, and schizomycetes of medical and economic importance. Laboratory exercises will demonstrate bacteriological methodology using nonpathogenic forms. Three class periods and three laboratory hours.

**BY 225 — Comparative Anatomy**
4 cr.
Prerequisite: BY 105. A comprehensive survey of the anatomy of chordates with emphasis of study to be placed on the Amphioxus, Necturus, cat, and dogfish shark. All structural systems of each of these animals will be investigated from embryology to maturity. Three class periods and three laboratory hours.

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**BUSINESS ACCOUNTING**

**BAC 111 — General Accounting I**
3 cr.
Includes lectures, problems, and laboratory practices. This course parallels BAC 201. Emphasis is placed on forms, procedures, and practical applications. This is not designed for use in a four-year program in business. Three class periods.

**BAC 112 — General Accounting II**
3 cr.
Prerequisite: BAC 111. A continuation of BAC 111 with emphasis on various types of businesses and their financial statements. Three class periods.

**BAC 201 — Principles of Accounting I**
3 cr.
An introductory study of the underlying principles of double entry records; basic types of records and reports; accounting procedure and technique; inventories valuation and depreciation methods; the form and content of the balance sheet and the statement of profit and loss. Three class periods. (Formerly BAN 201.)

**BAC 202 — Principles of Accounting II**
3 cr.
Prerequisite: BAC 201. An introduction to the formation, liquidation, and dissolution of partnerships and corporations. Accounting for stocks and bonds. An introduction to job-order costing and standard costing; and financial statement analysis as an aid to management decision making. Three class periods. (Formerly BAN 202.)

**BAC 203 — Intermediate Accounting I**
3 cr.
Prerequisite: BAC 202. A continuation of the accounting principles involved in measuring income, expense, and the valuation of assets. Three class periods. (Formerly BAN 203.)

**BAC 204 — Intermediate Accounting II**
3 cr.
Prerequisite: BAC 203. Accounting for stockholders equity and stock transactions. Long-term liabilities, and investments in corporate securities. Attention is given to statements from incomplete data and the correction of errors. Three class periods. (Formerly BAN 204.)

**BAC 205 — Cost Accounting**
3 cr.
Prerequisite: BAC 202. 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 class periods.

**BAN 101 — Introduction to Business** 3 cr.
An introduction to business organization and procedure, enabling the student more intelligently to pursue advanced business courses and to choose a business career. Three class periods.

**BAN 125 — 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 class periods.

**BAN 225 — Business Law** 3 cr.
The basic principles of law as related to business are emphasized. Areas covered in detail are contracts, agency, personal property, bailments and negotiable instruments. Three class periods.

**BAN 226 — Business Law** 3 cr.
Prerequisite: BAN 225. The legal principles involving partnerships, corporations, sales, bankruptcy, trusts, and estates are stressed. Three class periods.

**DOC 101 — 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 relation and other correctional administrative functions. Three class periods.

**DOC 201 — 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 theory and in practical application. Three class periods.

**DOC 202 — 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 class periods.

**BDP 100 — Introduction to Data Processing** 3 cr.
An introduction to the field of data processing. Curriculum will include: history, scope and economic changes caused by data processing; the expectations and limitations of computers; a comparison of equipment normally found in data processing installations; and data processing as
a career. This course is intended for students who have had no prior experience in the field of data processing. Three class hours. (Formerly DP 100.)

**BDP 102 — Basic Computer Concepts**
3 cr.
Prerequisite: BDP 100 or consent of the Division Director. Basic principles of data processing to include an understanding of computer systems, collecting data, inputs, outputs, common language, unit recording equipment, and experience with data processing systems. Four contact hours (2 class hours; 2 laboratory hours). (Formerly DP 102.)

**BDP 106 — Data Processing Applications**
4 cr.
Prerequisite: BDP 100 or consent of the Division Director. This course will include: batch processing, large volume applications, flow chart template and detail flow charting, forms design, payroll applications, scheduling requirements and inventory applications. Five contact hours (3 class hours; 2 laboratory hours). (Formerly DP 106.)

**BDP 203 — Computer Programming I**
5 cr.
Prerequisite: BDP 102; BDP 106. This course will include: basic programming language, data representation (a) Binary (b) binary coded decimal (c) hexadecimal; instruction format-operation code and operand (address); special memory assignments (read, punch and print areas); Input-Output instructions; arithmetic instructions; logic instructions (decisions — yes or no); branching; control statements; switches; loading the program; assemblers and compilers; and practical problems. Six contact hours (4 class hours; 2 laboratory hours).
BDP 206 — Computer Programming II 5 cr.
Prerequisite: BDP 203. This course will include: advanced programming language; indexing; use of tables; loop control; instruction modification; library sub-routines; magnetic tape, disk and data cell usage; and program development. (Four class hours, two laboratory hours.)

BDP 209 — Systems Development and Design 4 cr.
Prerequisites: BDP 102; BDP 106. This course includes: the source document, source document controls, block diagramming, input requirements, internal processing, internal controls-balanced to source document controls, unprocessable records, output requirements (card or printed), output controls, and documentation. Five contact hours (3 class hours; 2 laboratory hours).

BDP 210 — Advanced Computing and Programming Systems 3 cr.
Prerequisites: BDP 206; BDP 209. This course will include: tape sorting and merging; data communications — central and remote stations; time and cost determinations; conversion costs and planning; auditing techniques; controlling the system; operating system; and Management Information System Concepts. Six contact hours (2 class hours; 4 laboratory hours).

BFI 210 — Principles of Finance 3 cr.
Prerequisite: BAN 101. The essentials of money, credit and banking; consumer and government income, spending and borrowing; essentials of money, credit and banking; consumer and government income, spending and borrowing; essentials of corporation finance. Discussion of the stock and bond markets and commodity futures trading. Three class periods.

BHM 101 — Introduction to Hospitality Management 3 cr.
This course is designed to introduce students to the hospitality industry and management of hotels, motels and restaurants. It is an orientation course designed to give the history, organization, problems and opportunities in the hotel/motel and restaurant industry. The course offers a study of the functions of departments, promotional and personnel functions of management, trends and developments in the industry today, and a study of techniques and procedures of modern management.

BHM 102 — Restaurant Operation 3 cr.
This course introduces the student to the various phases of restaurant operation to include 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. 3 class periods.

BHM 103 — Restaurant, Hotel/Motel Accounting and Auditing 3 cr.
This course explains accounting procedures used to control Hotel/Motel income and expenses, the transcript, daily report, journals, ledgers,
preparation of profit and loss statements and balance sheet, study of front office techniques and responsibilities, case study problems portraying transactions in a large hotel and motel and food revenue control and preparation of daily and monthly food reports along with use of accepted food control systems for large food service companies. 3 class periods.

**BHM 104 — 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. 3 class periods.

**BHM 201 — Internship** 3 cr.
Required 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.

**BHM 202 — Internship** 3 cr.
Prerequisite BHM 201. This course is an extension of BHM 201. 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.

**BHM 204 — Hospitality Management and Problems** 3 cr.
This course explores special management problems as found in hotels, motels, clubs, restaurants and related institutions. Use of community representatives and case studies with their alternate solutions will be discussed.

**BHM 207 — Customer-Personnel Relations** 1 cr.
This course studies the various successful techniques involved in establishing effective communications and functional relationships with the customer and personnel at all levels.

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**INSURANCE**

**BIN 116 — 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 costs will be presented. Three class periods. (Formerly INS 116.)

**BIN 117 — Principles of Fire and Allied Lines** 3 cr.
This course is an introduction to the four areas of fire, ocean marine and inland marine insurance and multiple-line coverages. 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. 3 class periods.
BIN 118 — Principles of Casualty Insurance & Surety Bonding 3 cr.
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. 3 class periods.

BIN 119 — 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. 3 class periods.

BIN 120 — Principles of Life 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 building losses. 3 class periods.

BIN 121 — 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. 3 class periods.

BIN 122 — 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. 3 class periods.

BIN 123 — 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. 3 class periods.

BIN 124 — 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. 3 class periods.

BIN 127 — 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. 3 class periods.
BIN 228 — 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. 3 class periods.

BIN 229 — 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 BIN 120 and BIN 124. 3 class periods.

BIN 230 — 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 BIN 118 and BIN 124. 3 class periods.

MANAGEMENT

BMG 211 — 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 class periods.

MARKETING

BMK 210 — Salesmanship 3 cr.
Prerequisite: BAN 101. 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 class periods.

BMK 213 — Principles of Marketing 3 cr.
Prerequisite: BAN 101. The study of matching products to 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 class periods. (Formerly MKG 213.)

BMK 214 — Marketing Practices 3 cr.
Prerequisite: BMK 213. A continuation of BMK 213. Emphasis is placed on the study of marketing problems of the manufacturers, wholesaler, retailer, and other marketing agencies. Three class periods.

BMK 221 — Advertising 3 cr.
Introduction to the field of retail advertising, its purposes, institutions and functions. Includes planning and advertising, local media and types of retail advertising.
BMK 222 — Sales Management
3 cr.
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. Prerequisites: BMK 213.

BMK 223 — 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.

BEN 101 — Beginning Typewriting
2 cr.
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 BEN 102 — Intermediate Typewriting.) Four contact hours (1 class hour; 3 laboratory hours).

BEN 102 — Intermediate Typewriting
2 cr.
Prerequisite: BEN 101 or one year of high school typewriting. Emphasizes speed building, improvement of basic techniques, production typing of letters, tabulation, reports, manuscripts, and office problems. Four contact hours (1 class hour; 3 laboratory hours).

BEN 105 — Beginning Shorthand
3 cr.
Prerequisite or corequisite: BEN 101. 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 BEN 106 — Intermediate Shorthand.) Four contact hours (2 class hours; 2 laboratory hours).

BEN 106 — Intermediate Shorthand
3 cr.
Prerequisite: BEN 105 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 BEN 205 — Advanced Shorthand.) Three class periods.

BEN 127 — Office Applications
2 cr.
Prerequisite: BEN 102 or equivalent. Classroom practice in the use of the standard systems of filing. Practical experience with duplicating machines, transcribing machines, Executive and Selectric typewriters, and periphery office equipment. This course is designed to teach valuable office skills to those students who do not plan to become secretaries, as well as to secretarial students. Four contact hours (1 class hour; 3 laboratory hours).

BEN 129 — Calculating Machines
2 cr.
Development of skill in the operation of adding machines and rotary and key-driven calculators. Content of the course is selected from standard practice materials. Four contact hours (1 class hour; 3 laboratory hours).

BEN 202 — Advanced Typewriting
2 cr.
Prerequisite: BEN 102. A continuation of basic skills in speed and accuracy with emphasis on production typing including the various
business forms, tabulations, and reports. Four contact hours (1 class hour; 3 laboratory hours).

**BEN 205 — Advanced Shorthand** 3 cr.
Prerequisite: BEN 206 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 class periods.

**BEN 206 — Dictation and Transcription** 3 cr.
Prerequisite: BEN 205. Accelerated dictation and transcription. Finished products emphasized. Three class periods.

**BEN 207 — Medical Shorthand** 3 cr.
Prerequisite: BEN 106. Shorthand theory and dictation of medical nature. Medical vocabulary and spelling emphasized. Routine work of medical offices examined. Three class periods.

**BEN 209 — Legal Shorthand** 3 cr.
Prerequisite: BEN 106. Shorthand theory and dictation of legal nature. Legal vocabulary and spelling emphasized. Routine work of legal offices examined. Three class periods.

**BEN 215 — Business Communications** 3 cr.
Prerequisite: EH 101, or consent of instructor, and the ability to type-write. A study of effective business communication and a brief review of grammar, punctuation, and vocabulary. Extensive practice will be given in business letter writing. Three class periods.

**BEN 217 — Secretarial Practices** 3 cr.
Prerequisites: BEN 106 and BEN 102. 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 class periods.

**CHEMISTRY**

**CY 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, and for those in a two-year nursing program. Three class periods and one three-hour laboratory.

**CY 102 — Introductory Chemistry** 4 cr.
Prerequisite: CY 101. This course is a continuation of CY 101 with an introduction to organic chemistry. Three class periods and one three-hour laboratory.

**CY 103 — General Chemistry and Qualitative Analysis** 4 cr.
Prerequisite: Grade of "C" or better in CY 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, and coordination chemistry. 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-medical, pharmacy, and a four-year nursing program. Three class periods and one three-hour laboratory.

**CY 104 — General Chemistry and Qualitative Analysis**
4 cr.
Prerequisite: Grade of "C" or better in CY 103 or approval of instructor. This course is a continuation of CY 103 and will stress chemical equilibrium, chemical kinetics, electro-chemistry, 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 of communications. Three class periods and one three-hour laboratory.

**CY 201 — Organic Chemistry**
4 cr.
Prerequisite: CY 104. A unified course in organic chemistry designed to provide the student with a knowledge of aliphatic and aromatic carbon compounds, their nomenclature, structure, classification, derivatives and general reactions. Three class periods and one three-hour laboratory.

**CY 202 — Organic Chemistry**
4 cr.
Prerequisite: CY 201. A continuation of CY 201, including study of amines, amino acids and proteins, organic acids, carbohydrates and heterocyclic compounds. Three class periods and one three-hour laboratory.

**CD 101 — Child Growth and Development**
4 cr.
Introductory study of the physical, social, emotional, and mental development of the young (preschool) child. The influence of cultural environment on development is considered. Individual differences in development are also considered. (4 contact hours).

**CD 102 — Advanced Child Growth and Development**
4 cr.
Prerequisite: CD 101. Course designed to further the student's understanding of the physical, social, emotional, and mental development of the school age child up to preadolescence. Child guidance and behavior problems are considered. Feelings, attitudes, and values are discussed. (4 contact hours)

**CD 103 — Art for Young Children**
2 cr.
An introduction to a wide variety of art suitable for use with young children. Course is designed to help the student understand the importance of art media in enriching opportunities for children. Lectures and demonstrations are combined with workshops where practical experience may be obtained. (2 contact hours)

**CD 104 — The Child and Parent in the Community**
2 cr.
Course designed to help student gain an understanding of the importance of good working relationships with adults, including parents, community leaders and members and employers; in addition to establishing connections for effective use of community resources. (2 contact hours)
CD 106 — Music for Young Children 3 cr.
Intended for students who plan to work with preschool children. The course deals with basic skills needed to involve children in simple music activities. Simple instruments such as autoharp and rhythm instruments will be used. Singing, records, and other materials for group activities will be presented. (3 contact hours.)

CD 107 — Literature for Young Children 3 cr.
Course designed to acquaint the student with various forms of children’s literature, to know literature available specifically for the young child, and to be able to select quality literature appropriate for different age groups. Authors and illustrators of children’s books are also discussed. (3 contact hours.)

CD 110 — Principles of Preschool Education 3 cr.
An introductory course intended to acquaint the student with the basic principles involved with teaching the younger child. The course will include, also, working with parents and the role of the kindergarten and day care center.

CD 111 — Overview of Preschool Curriculum 3 cr.
Prerequisite: CD 110. Course designed to acquaint the student with the basic principles involved in guiding the preschool child in the areas of art, music, science, mathematics, language development, and social and emotional development.

CD 201 — Observing and Recording Child Behavior 3 cr.
Prerequisite: CD 102. Course designed to increase objectivity and proficiency in observing and interpreting children’s behavior; in addition, to increase awareness of normative patterns of behavior. Lecture and observation facilities are provided for study of young children. (1 contact hour, 4 laboratory)

CD 202 — Teaching of Elementary Games 2 cr.
An introduction to a variety of games and activities within the physical capabilities of the young child. Actual participation of the student will give an understanding of the coordination needed by the child. (1 contact hour, 1 laboratory)

CD 203 — Science for Young Children 2 cr.
An introduction to a variety of science media for use with young children. Emphasis is placed on ways to use creative activities to stimulate learning experiences for children. (2 contact hours.)

CD 204 — Education of the Culturally Deprived Child 2 cr.
Designed to give an understanding of the environment which fosters cultural deprivation. The course will give the basic principles that must be used to teach the deprived child. (2 contact hours.)

CD 205 — Supervised Student Participation 4 cr.
Prerequisite: CD 201. Course designed for participation under qualified supervision in the child care laboratory. (1 contact hour; 6 laboratory)

CD 206 — New Mathematics for Young Children 2 cr.
An introduction to the newer mathematics as applied to pre-school children. Will present number concepts, principles and properties of the rational number system as applied in the kindergarten. (2 contact hours.)
TEC 201 — Surveying 3 cr.
Prerequisite: TEG 102. 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 (2 class hours; 2 laboratory hours).

TEC 202 — Building Construction 3 cr.
Prerequisite: TEC 101, TEM 101. 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 (2 class hours; 2 laboratory hours.)

DA 110 — 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. (3 contact hours.)

DA 111 — 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. (1 contact hour.)

DA 112 — Dental Anatomy and Physiology 2 cr.
An introduction to anatomy of the head, histology, physiology and occlusion, with special emphasis on anatomy of the teeth and surrounding tissues. The laboratory portion includes drawings of each tooth from central incisor through the second molar on one side for the maxillary and mandibular arches, and the occlusal aspect of the maxillary and mandibular first molars. (3 contact hours.)

DA 113 — Sciences for Dental Assistants 5 cr.
Diet and Nutrition (as pertaining to dental health). The ability to classify foods. A knowledge of each of the essential nutrients. A knowledge of dietary habits which have an effect on the influence of dental caries. A knowledge of the most effective methods of controlling dental caries.
Bacteriology. A knowledge of the fundamental principles by which common diseases are transmitted. (5 contact hours.)
DA 114 — Dental Materials 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. (3 contact hours)

DA 116 — 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. (3 contact hours)

DA 120 — Clinical Practice I 2 cr.
Clinical chairside assisting. (10 contact hours)

DA 121 — Sterilization and Anesthesia 2 cr.
An understanding of the types and uses of sterilizing agents used in the dental office. A knowledge of the various methods of sterilization and the effective limits of the various methods. The ability to operate effectively and maintain all types of sterilizers. The ability to sterilize dental instruments and parts of the equipment making physical contact with the patient. The ability to prepare surgical trays for surgery, endodontics, and periodontics. A knowledge of types of local anesthetics employed for various operative procedures. The ability to prepare syringes in an acceptable sterile technique. A knowledge of patient behavior with a local or under general anesthesia. A knowledge of pre and post-operative medication. (3 contact hours)

DA 122 — Clinical Practice II 2 cr.
Continuation of DA 121. (10 contact hours)

DA 123 — Office Management 1 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. (1 contact hour)

DA 124 — Clinical Practice III 3 cr.
Continuation of DA 122. (20 contact hours)

DA 125 — Clinical Practice IV 4 cr.
Intern Program (25 contact hours)

TED 102 — Mechanical and Electrical Drafting 3 cr.
Prerequisite: EG 101. Suggested corequisite: EG 102. 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 (2 class hours; 4 laboratory hours).
TED 201 — Architectural Drafting 3 cr.
Prerequisite: EG 101. 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 (2 class hours; 4 laboratory hours).

TED 203 — Civil Drafting 3 cr.
Prerequisite: EG 101. 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 (2 class hours; 4 laboratory hours).

TED 204 — Industrial Design 3 cr.
Prerequisite or corequisite: EG 102. 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 (2 class hours; 4 laboratory hours).

TED 206 — Advanced Drafting 3 cr.
Corequisite: TED 204. A course designed to give the student advanced theory and practice in his specialized area of drafting: mechanical, civil, or architectural. Six contact hours. (2 class hours; 4 laboratory hours).

TED 221 — Electrical and Electronic Drafting 3 cr.
Prerequisite: TEE 101. A course designed to give the student following the electronic technology program practice and theory in developing a set of electronic drawings. Six contact hours (2 class hours; 4 laboratory hours).

ES 201 — Principles of Economics 3 cr.
Microeconomics. The foundations of economic analysis; theory of economic growth and stabilization; monetary theory; international trade and economic development. Three class periods.

ES 202 — Principles of Economics 3 cr.
Prerequisite: ES 201 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 class periods.

EN 105 — Introduction of 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 class periods.
ELECTRICAL AND ELECTRONIC TECHNOLOGY

TEE 100 — 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. Corequisite TEG 101. Three class
periods.

TEE 101 — D.C. Theory and Circuits  5 cr.
Prerequisite or corequisite: TEG 101. A study of the basic theory of
electricity; direct current circuits, resistance, batteries, meters, mag-
netsmagnetism, electromagnetism, inductance, and capacitance. Laboratory
sessions will be devoted to applications of the theory acquired in
lectures. Six contact hours (4 class hours; 3 laboratory hours).
(Formerly ET 101.)

TEE 102 — A.C. Theory and Circuits  5 cr.
Prerequisites: TEE 101 and TEG 101. Prerequisite or corequisite: TEG
102. The study of the development and analysis of sinusoidal current
and voltages, and the study of reactance, impedance networks, reso-
nance, power, transformer action and coupled circuits. Laboratory ses-
sions are correlated to emphasize practical application of the appro-
priate theoretical consideration. Six contact hours (4 class hours;
2 laboratory hours.) (Formerly ET 102.)

TEE 105 — Electrical Controls  3 cr.
Prerequisite TEE 102. The study of the operation of motors, generators,
relays, and controlling systems involved in their operation and pro-
tection. Also included will be the coverage of the protection and
stability of these systems. Three class periods. (Formerly ET 105.)

TEE 201 — Electronics I  5 cr.
Prerequisite: TEE 102. Physical principles of vacuum tubes and semi-
conductors. A study of limiters and clamp circuits, rectifiers, power
supplied, voltage doublers, amplifiers and oscillators. Laboratory ses-
sions are devoted to building and testing the various circuits designed
and studied in the theory session. Six contact hours (4 class hours;
2 laboratory hours.) (Formerly ET 201.)

TEE 203 — Electronics II  5 cr.
Prerequisite: TEE 201. A study of radio frequency amplifiers, modu-
lators, demodulators, detectors and electronic systems. Laboratory ses-
sions are devoted to building and testing various circuits designed
and studied in the theory session. Six contact hours (4 class hours;
2 laboratory hours.) (Formerly ET 203.)

TEE 204 — Industrial Electronics  5 cr.
Prerequisite: TEE 201. Principles and applications of electronic de-
vices, circuits, and systems to industrial processes. Particular emphasis
is placed on commercial and industrial circuits so that the student
can associate the theoretical concepts of automation with equipment
in actual use. Topical units of instruction include solid-state devices,
transducers, servomechanisms, magnetic amplifier, error detectors, and
machine control. Six contact hours (4 class hours; 2 laboratory hours).

TEE 206 — Advanced Electronic Circuit Analysis  3 cr.
Prerequisite: TEE 102. The study of network theories, D.C. circuit
analysis, filters, plot, lag and lead phase-shift networks, parallel-series
circuit conversions, resonance, antiresonance, bandwidth selectivity,
input and output impedance, universal resonance curve, transient analysis, and transformers. Three class periods. (Formerly ET 206.)

**EG 101 — 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 (2 class hours; 4 laboratory hours).

**EG 102 — Descriptive Geometry**

3 cr.
Prerequisite: EG 101. Theory and practice in solving graphic problems involving point, line, and space relationships. Six contact hours (2 class hours; 4 laboratory hours).

**EG 105 — 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 class period.

**EH 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 class periods.

**EH 102 — English Composition**

3 cr.
Prerequisite: EH 101. A continuation of EH 101, this course includes study and practice in research writing. Three class periods.

**EH 103 — Comprehensive English**

3 cr.
A unified course in English composition for students in Associate in Science degree programs, which combines essential elements of reading, speaking, writing, and logical thinking. Appropriate pieces of literature are studied to broaden range of reading knowledge, increase vocabulary, and insure proficiency in assembling material and writing a library paper. Three class periods.

**EH 135 — Developmental Reading**

1 cr.
Prerequisite: Recommendation of EH 101 instructor. An advanced reading course available to students who wish to accelerate reading skills and deepen proficiency in reading comprehension. The student aims at acquiring greater efficiency through intensive study approaches, expanded vocabulary, and diagnostic methods of determining reading skill. Particularly recommended for prospective transfer students with reading needs. Two laboratory hours.

**EH 201 — Great Ideas in World Literature**

3 cr.
Prerequisite: EH 101-102. Also, a strong background in the history of western civilization is recommended. An approach through reading and discussion to the great works of ancient and medieval and Renaissance literature with the purpose of exploring man's search for meaning and freedom in the contemporary world. Three class periods.
EH 202 — Great Ideas in World Literature  
3 cr.  
Prerequisite: EH 101-102. An approach through reading and discussion to the great works of Renaissance and modern literature with the purpose of exploring man's search for meaning and freedom in the contemporary world. Three class periods.

EH 203 — American Literature  
3 cr.  
Prerequisite: EH 102. A critical study of selections from American Literature: Colonial period to the late 19th century. Three class periods.

EH 204 — American Literature  
3 cr.  
Prerequisite: EH 102. A critical study of selections from American literature: late 19th century to the present. Three class periods.

EH 205 — English Literature  
3 cr.  
Prerequisite: EH 102. An introduction to the main literary traditions from Beowulf through the Restoration and Eighteenth Century. Study of the best and most characteristic writings of these periods. Three class periods.

EH 206 — English Literature  
3 cr.  
Prerequisite: EH 102. 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 class periods.

EH 215 — Imaginative Writing  
3 cr.  
Prerequisite: EH 102 and consent of EH 215 instructor. A course to develop the student's capacity for imaginative writing. Critical discussion of student's work and of selected literary techniques. Individual conferences. Three class periods.

EXPERIMENTAL COLLEGE  
Alpha Program: Interdisciplinary Studies  
IDS 101 — Universal Man in the 20th Century  
9 cr.  
This course is an interdisciplinary study of the 20th Century. It encompasses all areas of General Education — Communications, Humanities, Psychology, Natural Science, Social Science, Mathematics — and is open to students by application to the Dean of Special Education. Students admitted to the Interdisciplinary Studies program will elect IDS 102, IDS 201, IDS 202, and 4 credit hours in Physical Education in addition to IDS 101 to complete their General Education requirements. Offered Term I (Fall) through the Experimental College.

IDS 102 — Universal Man in Antiquity  
9 cr.  
Prerequisite: IDS 101. This course is an interdisciplinary study from the dawn of man to 1066 A.D. It encompasses all areas of General Education — Communications, Humanities, Psychology, Natural Science, Mathematics — and is open to students by application to the Dean of Special Education. Students admitted to the Interdisciplinary Studies program will elect IDS 101, IDS 201, IDS 202, and 4 credit hours in Physical Education in addition to IDS 102 to complete their General Education requirements. Offered Term II (Winter) through the Experimental College.
IDS 201 — Universal Man in the Middle Ages and Renaissance
10 cr.
Prerequisite: IDS 102. This course is an interdisciplinary study from 1066 A.D. to 1815. It encompasses all areas of General Education — Communications, Humanities, Psychology, Natural Science, Social Science, Mathematics — and is open to students by application to the Dean of Special Education. Students admitted to the Interdisciplinary Studies program will elect IDS 101, IDS 102, IDS 202, and 4 credit hours in Physical Education in addition to IDS 201 to complete their General Education requirements. Offered Term I (Fall) through the Experimental College.

IDS 202 — Universal Man in the Age of Enlightenment
10 cr.
Prerequisite: IDS 201. This course is an interdisciplinary study from the Baroque to the Victorian Ages, with a projection into 2001 A.D. It encompasses all areas of General Education — Communications, Humanities, Psychology, Natural Science, Social Science, Mathematics — and is open to students by application to the Dean of Special Education. Students admitted to the Interdisciplinary Studies program will elect IDS 101, IDS 102, IDS 201, and 4 credit hours in Physical Education in addition to IDS 202 to complete their General Education requirements. Offered Term II (Winter) through the Experimental College.

Beta Program
The Experimental College is developing a second phase of “Beta” program in interdisciplinary studies which will be open to all students on a non-selective basis. The scope of this program will be a re-organization of General Education requirements into six 7-credit courses.

HEF 101 — 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 the qualities and the performance of a fabric. Use and care of fabrics and cost factors will be included.

HEF 102 — 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 skills. The selection of suitable accessories will also be included.

FSP 100 — 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.
FSP 101 — Fire Company Organization and Procedures
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.

FSP 102 — Fire Operations
The structure and function of battalion and company as components of municipal organizations; duties and responsibilities of the company officer.

FSP 103 — Fundamentals of Fire Prevention
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.

FSP 200 — Fire Fighting Tactics and Strategy
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.

FSP 201 — Fire Investigation
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 procedure; reports and records.

FSP 202 — Fire Codes and Building Construction
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.

FSP 203 — Hazardous Materials
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 radioactive materials, precautions to observe in fighting fires involving hazardous materials, and laboratory demonstrations of incompatibles.

FSP 204 — Physical Science for Firemen
The fundamentals of chemistry and physics applied to fire fighting and fire prevention are presented using laboratory demonstrations and other visual aids. This includes elementary physical and chemical testing of materials and products such as chemicals, fuels, metals, and plastics. It emphasizes the purpose, meaning, and methods of testing. There are demonstrations and experiments concerning the incompatibility of chemicals.

FSP 205 — Fire Fighting Equipment and Apparatus
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.

**FSP 206 — Rescue Practices** 3 cr.
Instruction is given in life saving practices pertaining to the fire company. Training for resuscitator squads and rescue equipment, the fire department's role in civil defense and other disaster acts, chemicals and diseases that affect breathing, law on first aid, and the use of breathing apparatus are included.

**TEF 101 — Flight Theory** 3 cr.
Classroom Instruction. An introduction to the theory of flight, navigation, meteorology, and Federal Aviation Agency regulations. Three class hours.

**TEF 103 — Solo Flight** 1 cr.
Co-requisite or prerequisite TEF 101. Actual flight training including both dual and solo flight instruction, sufficient to qualify for solo flight.

**TEF 104 — Private Pilot Training** 3 cr.
Prerequisite: TEF 103. A continuation of TEF 103. Sufficient dual flight, solo flight and oral instruction is provided so that a person can qualify for the FAA Private Pilot Certificate.

**FS 101 — Orientation** 3 cr.
A general course intended to familiarize the student with the food service industry, specifically hospital food service.

**FS 102 — Basic Nutrition (Nutrition I)** 3 cr.
A course emphasizing normal nutrition and nutrition and disease.

**FS 103 — Diet Therapy (Nutrition II)** 3 cr.
This course stresses the hospital dietary considerations related to diet and disease.

**FS 104 — Basic Food Preparation** 3 cr.
A laboratory course in the principles of food preparation. All types of foods will be studied, with standards of preparation and service being emphasized.

**FS 105 — Equipment** 3 cr.
Equipment terminology, safety, operation, terminology, and sanitation are covered in this course.

**FS 106 — 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.
FS 110 — Child Nutrition  2 cr.
A study of the specific nutritional needs of children and the effects of food on their growth and development. Emphasis will be placed on the establishment of good food habits and the methods of approaching this according to age. Menu planning for the child will also be included.

FS 120 — 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.

FS 201 — Sanitation and Safety  3 cr.
Instruction in implementation and supervision of sanitation and safety procedures in quality food service operations. Hazards of sanitation and safety peculiar to food service will be discussed.

FS 202 — Quantity Food  3 cr.
Study and laboratory experience in the preparation of food in quantity. Quality standards in preparation and service, use of standardized recipes and portion control will be included.

FS 203 — 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.

FS 204 — Food Purchasing and Storage  3 cr.
A study of food purchasing procedures and policies in quantity food service operations. Students will also be taught the proper procedures for receiving, storing and controlling food and other supplies.

FS 205 — Areas of Specialization  3 cr.
A course designed to permit the student to investigate any food service related field he desires for the sake of self-improvement.

FS 206 — Food Merchandising  3 cr.
A study of proper food merchandising methods, food display techniques, effective menu presentations, promotional programs, public relations and effective atmosphere.

FS 220 — 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.

FRENCH  

FH 101 — Beginning French  3 cr.
This course consists of pronunciation, grammar, conversation, exercises, reading and composition. Visual and auditory aids are employed. Four contact hours (2 class hours; 2 laboratory hours).

FH 102 — Beginning French  3 cr.
Prerequisite: FH 101 or equivalent. A continuation of FH 101. Four contact hours (2 class hours; 2 laboratory hours).
FH 201 — Intermediate French 3 cr.
Prerequisite: FH 102 or equivalent. Reading from modern and classic French authors, grammar review, and conversation. Four contact hours (2 class hours and 2 laboratory hours).

FH 202 — Intermediate French 3 cr.
Prerequisite: FH 201 or equivalent. A continuation of FH 201. Four contact hours (2 class hours and 2 laboratory hours).

FH 203 — French Composition and Conversation 3 cr.
Prerequisite: FH 202 or four years of high school French. Informal composition and conversation emphasizing development of vocabulary and facility in handling the basic structures of the French language. Three class periods.

FH 204 — French Composition and Conversation 3 cr.
Prerequisite: FH 203. A continuation of FH 203 emphasizing written and oral reports and discussion of topics of contemporary cultural interest with regular reference to periodicals in the language. Three class periods.

TEG 99 — Introduction to Technical Math 3 institutional cr.
A review of High School mathematics for students who lack the background necessary for enrollment in TEG 101. The course includes review of number theory, fractions, decimals, ratio and proportion, percentages, areas, volumes and basic algebra as applied to engineering calculations.

TEG 100 — Introduction to Engineering Technologies 3 cr.
An overview of the various Engineering Technologies. Emphasis is placed on such topics as job descriptions, industrial environment, and the qualification of a technician. Included will be periodic presentations from members of the various industrial fields. Three class periods.

TEG 101 — Technical Math I 3 cr.
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. The prerequisites for this course are two years of high school algebra and a year of geometry, 3 class hours.

TEG 102 — Technical Math II 3 cr.
Prerequisite: TEG 101. A continuation of TEG 101 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. 3 class hours.

TEG 201 — Technical Math III 3 cr.
Prerequisite: TEG 102. 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 class periods.
TEG 203 — Technical Report Writing 3 cr.
Prerequisite: EH 101 or 103. 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 class periods.

TEG 204 — Planning and Estimating 3 cr.
Prerequisites: TEG 101, TEM 101. 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 (2 class hours; 2 laboratory hours).

GY 105 — 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 inter-relationships and problems of conservation of natural resources. Three class periods.

GY 201 — 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 class periods.

GL 101 — Physical Geology 3 cr.
Physical Geology, a science, 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 class periods.

GN 101 — Beginning German 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 (2 class hours; 2 laboratory hours).

GN 102 — Beginning German 3 cr.
Prerequisite: GN 101 or equivalent. A continuation of GN 101. Four contact hours (2 class hours; 2 laboratory hours).

GN 201 — Intermediate German 3 cr.
Prerequisite: GN 102 or equivalent. Reading from standard German authors; careful review of grammar, conversation, and composition. Four contact hours (2 laboratory hours).

GN 202 — Intermediate German 3 cr.
Prerequisite: GN 201 or equivalent. A continuation of GN 201. Four contact hours (2 class hours; 2 laboratory hours).
GSI 89 — Guided Studies Institute 3 institutional cr.
The Institute is a diversified program tailored to give individual remedial instruction in the basic areas of general education and to offer an introduction to all facets of academic learning experiences. Counseling will be an integral part of the program.

GS 90 — Reading Laboratory 3 institutional cr.
A reading program designed to prepare students for college reading by teaching the following: to select main and subordinate ideas; to improve techniques in vocabulary study; to adjust reading method to purpose; to determine tone and intent of author; and to improve reading rate while maintaining comprehension. Three class periods.

GS 94 — Developing Effective Study Skills 3 institutional cr.
A course for students who wish to find an effective way to study. Study skills will be taught and practiced through an individualized approach to each student's need and in conjunction with the student's own course of study. Attention will be given to general principles of learning, study attitudes, scheduling of time, a study formula technique and its application; also the use of learning resources and research techniques.

GS 95 — Guided Studies Mathematics 3 institutional cr.
This course is designed for students who do not meet the prerequisites or do not score sufficiently high on the mathematics guidance test to enter directly into courses designated MS. Its main purpose is to increase the student’s understanding of arithmetic and especially the understanding of basic algebraic concepts. This course does not satisfy the General Education certification requirement. Three class periods.

GS 97 — English Fundamentals 3 institutional cr.
This course is designed for students who are not yet academically prepared to enter EH 101. Its main purpose is to increase the student’s proficiency in the mechanical skills of English so that these skills may be used in the development of writing. Three class periods.

HH 105 — Personal and Community Health 3 cr.
A study of health problems which are of major importance to our society. Emphasis is placed on the general principles involved in our present understanding of health related areas. Three class periods.

HH 107 — First Aid I 1 cr.
A course dealing with first aid skills to be used in the treatment of injuries in an emergency. One class period.

HH 108 — First Aid II 1 cr.
A course dealing with first aid skills to be used in the treatment of injuries in an emergency. One class period.

HOM 115 — Health Care Management I 3 cr.
Introduction to nursing home management. History, theories, scope of the manager in relation to all departments vital in managing a nursing home such as nursing, dietary, business office, housekeeping, personnel, and maintenance will be emphasized. (Formerly BMG 115).
HOM 116 — Health Care Management II 3 cr.
Prerequisite: Health Care Management I. Study of the nursing home organizational structure. The special sociological problems necessary in understanding that the nursing home is a health agency as well as a social institution, are included. Patient care needs will be studied. Role and scope of the manager in relation to all departments vital in managing a nursing home will be continued as started in HOM 115.

HISTORY

HY 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 class periods.

HY 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 class periods.

HY 201 — 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 class periods.

HY 202 — 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 class periods.

HY 221 — History of the Far East 3 cr.
A history of the Far East from early modern times. Three class periods.

HY 230 — History of Florida 3 cr.
History of Florida with emphasis on the explorations, U.S. acquisitions, Convention at St. Joseph, Civil War and Reconstruction, and Florida’s rapid growth in the 20th Century. Three class periods.

HY 265 — 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 class periods.

HY 275Y — Honors Survey of History 3 cr.
Prerequisite: Outstanding performance in HY 101, 102, 201 or 202. 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.
HEF 101 — 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 the qualities and the performance of a fabric. Use and care of fabric and cost factors will be included.

HEF 102 — 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.

HEM 101 — 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 class periods.

HS 200 — 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.

HS 201 — Humanities 3 cr.
Prerequisites: EH 102 or EH 103 or consent of instructor. A study of contemporary and recurrent human problems and values, largely through an examination of man's cultural achievements as revealed in his art, literature, music, and philosophy. Open only to students in Associate in Science Degree programs. Three class periods.

HS 203 — Humanities 4 cr.
A study of human expression, problems and values through the examination of man's cultural achievements as revealed in art, music, literature, and philosophy. The course provides an introduction to the arts and a study of ancient medieval-renaissance-baroque arts and ideas. Four class periods.

HS 204 — Humanities 4 cr.
Prerequisites: HS 203 or consent of instructor. This course is primarily concerned with man and his contemporary cultural environment, dealing with the age of enlightenment, romantic and contemporary periods. Four class periods.

NOTE: Credit will not be granted in both HS 203-204 and HS 201.
HS 211-212 — Overseas Study 8 cr.
An overseas tour study program to assist the student in grasping the wealth of western culture through on-site study of architecture, art, customs, religion, music, literature, and philosophy in the western world. Upon completion this course will satisfy general college requirements of HS 203-204. On-campus orientation seminars are mandatory for those taking the course for credit and a research paper must be completed before credit is given. Several tours are offered. A student may elect to take a tour for four hours credit with requirements adjusted accordingly. The student will then need to satisfy four more hours of humanities credit.

JOURNALISM

JM 201 — Introduction to Journalism 3 cr.
Prerequisite: EH 101 or consent of instructor. An introductory course in journalism and newswriting. The course will include the history and development of journalism, contemporary journalism, and elements of newswriting. Three class periods.

JM 202 — Writing for Mass Communications 3 cr.
Prerequisite: JM 201 or EH 101 or EH 215 or consent of instructor. Further study of the various professions within the field of mass communications with emphasis on polished performance in newswriting. Three class periods.

MATHEMATICS

MS 101 — College Mathematics 3 cr.
Prerequisite: Two years of high school mathematics, GS 99, or equivalent. 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 class periods.

MS 103 — Intermediate Algebra 3 cr.
Prerequisite: 1 year of high school algebra. In addition all students enrolled in MS 103 will be given a first year algebra test. Students falling to make a satisfactory score on this exam will be recommended not to continue in MS 103. This course is designed to prepare students wishing to enter MS 105. This course will also meet the 3-hour General Education requirement in mathematics of sets; vocabulary; functional relationships; simple fractional equations and the real number system vocabulary. Three class periods.

MS 105 — College Algebra 3 cr.
Prerequisite: Two years of high school algebra and one year of plane geometry or equivalent. 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; series; theory of equations; and mathematical induction. This course is intended for students who need more preparation for trigonometry and the calculus. Three class periods.
MS 110 — College Trigonometry 3 cr.
Prerequisite: MS 105 or 2½ years of high school algebra, one year of plane geometry and 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, graphs of trigonometric functions, and solutions of triangles. Three class periods.

MS 115 — College Algebra and Trigonometry 4 cr.
Prerequisite: Two years of high school algebra and one year of plane geometry and trigonometry. A course for the above-average student which includes integrated topics of college algebra and trigonometry. The symbolism and terminology of sets and mathematical logic are applied when appropriate. It is designed primarily for the student planning to study analytic geometry and calculus. Four class periods.

MS 121 — Introductory Analysis (Honors) 4 cr.
Prerequisite: High achievement in four years of academic high school mathematics, satisfactory scores on the twelfth grade placement test and the American College Test, and departmental approval. This course is designed to provide the student with a unified and substantial approach to the logical structure of mathematics. MS 121 aims to introduce the student to more advanced topics with the hope of encouraging further study and reading in this direction. Four class periods.

MS 127 — Elementary Statistics 3 cr.
Prerequisite: MS 105. This is an introductory course in statistics and will include the following topics: frequency distribution and graphical representation, percentiles, measures of central tendency and dispersion or variability, normal curve of distribution, sampling error theory, standard measures and methods of combining test scores, correlation theory and techniques of applying these theories. Three class periods.

MS 131 — Calculus with Analytic Geometry I 4 cr.
Prerequisite: MS 110 or MS 115 or two years of high school algebra, one year of plane geometry, ½ year of 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 class periods.

MS 190 — Computer Oriented Mathematics 3 cr.
Prerequisite: MS 105 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 a 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.)
MS 232 — Calculus with Analytic Geometry 4 cr.
Prerequisite: MS 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 class periods.

MS 233 — Calculus with Analytic Geometry III 4 cr.
Prerequisite: MS 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 class periods.

MS 240 — Differential Equations 3 cr.
Prerequisite: MS 233. A study of the procedure and theory of various methods of solving ordinary differential equations, which includes a development of Laplace Transforms and applications. Three class periods.

MS 275 — 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.

MECHANICAL TECHNOLOGY

TEM 101 — Engineering Materials and Processes 4 cr.
A survey of the basic materials used in industry, metallic and nonmetallic, and the processes used to form, fabricate, and finish these materials. Five contact hours (3 class hours; 2 laboratory hours).

TEM 202 — Fluid Mechanics 3 cr.
Prerequisite: TEG 102. 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 class periods.

TEM 205 — Engineering Mechanics 4 cr.
Corequisite: TEG 102. 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. Four contact hours (3 class hours; 2 laboratory hours).

TEM 206 — Testing and Strength of Materials 4 cr.
Prerequisite: TEM 205. 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 (3 class hours; 2 laboratory hours).
TEM 208 — Air Conditioning & Heating 3 cr.
An introductory course to environmental control of buildings and houses
with emphasis on equipment performance and system design. Four
contact hours (2 class hours; 2 laboratory hours.)

TEM 210 — Fabrication Processes 3 cr.
Prerequisite: TEM 205. Analysis of the methods and materials involved
in the assembly of machines and structures. The study includes evalua-
tion of the specifications and standards, stress analysis, quality control,
material properties and engineering principles involved. Four contact
hours (2 class hours; 2 laboratory hours).

MA 100 — Introduction to Medical Assisting 2 cr.
An overview of the Medical Assisting profession: duties and responsi-
bilities; opportunities and compensations; professional requisites; ethics
and legal aspects of medicine and medical assisting; and professional
development. Two class periods.

MA 101 — Medical Terminology 2 cr.
Development of a medical vocabulary commonly used in physicians’
offices. Emphasis 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 class periods.

MA 102 — Office Practices and Procedures 3 cr.
Provides instruction pertaining to the administrative aspects of the
operation of a physician’s office: public relations; receptionist’s respon-
sibilities; making appointments; inter-office communications, including
telephone and switchboard operations; records and reports; inventorying
and ordering supplies; prescription writing; housekeeping; fees and
collections insurance forms; welfare agencies; and special problems in
dealing with patients. Three class periods.

MA 201 — Laboratory Techniques and Procedures 3 cr.
Instruction pertaining to laboratory procedures used in identifying
micro-organisms and the relation of micro-organisms to health and
disease. Also, instruction pertaining to cultures and smears, urinalysis,
blood counts, blood sugar, sedimentation rate, and dosages and solu-
tions. Also, introduction and instruction for the use of the electro-
cardiograph and basal metabolism equipment and other special topics
as needed. Five contact hours (2 class hours; 3 hours laboratory and
demonstration).

MA 202 — Clinical Practices and Procedures 3 cr.
Instruction pertaining to: orientation of a patient to physician's office;
assisting in examination of patient including weighing, measuring,
taking temperatures, pulse, respiration, and blood pressure; draping
for examinations; assisting with minor surgery, including applying and
removing surgical dressings, bandages, and splints; sterilization pro-
cedures and techniques; dealing with emergencies, including resusci-
tation, use of oxygen, shock, fainting, and allergy reactions; introduc-
tion to use of equipment; diathermy, ultrasound, and photomograph;
instruction pertaining to vaccinations and immunology; and familiariz-
ation of student with the principles, preparations, and precautions of
x-ray examinations. Five contact hours (2 class hours; 3 hours labora-
tory and demonstration).
MA 204 — Seminar in Medical Assisting 3 cr.
Consideration of the variations of the operation of physician's office of the different medical specialties. Time devoted to reviewing, summarizing, and synthesizing information and concepts introduced in previous courses. Special topics and problems related to individual and group interests included as needed. Recommended to be taken in fourth term. Three class periods.

MA 205 — Practicum in Medical Assisting 3 cr.
Learning experiences are selected to provide students with opportunities to practice skills in offices, clinics, or hospitals. One class period and six laboratory hours.

MA 206 — Practicum in Medical Assisting 3 cr.
Continuation of MA 205. Class and laboratory practice, under the direction of an instructor, in selected clinical facilities. One class period and six laboratory hours.

MEDICAL LABORATORY TECHNOLOGY

CLT 101 — Medical Laboratory Technology 5 cr.
Orientation to the Medical Laboratory theory and method: Microbiology, mycology, and parasitology; renal function and urinalysis, 8 contact hours in classroom-clinical laboratory. Open only to students in Medical Laboratory Technology program.

CLT 102 — Medical Laboratory Technology 5 cr.
Introduction to Hematology with emphasis on the hemogram, the coagulogram, cell genesis, immunohematology, and diseases of the blood. 8 contact hours in classroom-clinical laboratory. Open only to students in Medical Laboratory Technology.

CLT 201 — Medical Laboratory Technology 3 cr.
Theory and techniques of pretransfusion tests, Blood Banking procedures, electrocardiograms, and advanced immunohematology. 10 contact hours.

CLT 202 — Clinical Chemistry 5 cr.
Blood analysis, includes theory, techniques, and instrumentation of laboratory tests and a critical appraisal of the tests and their interpretations. 8 contact hours in classroom-clinical laboratory. Open only to students in Medical Laboratory Technology.

CLT 203 — Clinical Clerkship 16 cr.
Directed clinical experience in the laboratories of JHEP participating hospitals. Weekly campus seminar and conference. 40 contact hours. Open only to students in the Medical Laboratory Technology.

MUSIC

MSC 95 — Repertory class 1 institutional cr.
Lecture recital emphasizing literature, styles, and techniques of performance. Meeting hour may be changed to coincide with special performance time. Required of all music majors. One class or equivalent laboratory periods.
MSC 96 — Introduction to Music Theory
3 institutional cr.
A course designed for students whose background and Theory Placement Test scores indicate further preparation is needed for MSC 114. Includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing, dictation, and keyboard skills. Three class periods.

MSC 100 — College Chorus
1 cr.
Choral organization open to all college students. Both accompanied and unaccompanied compositions are included in the repertoires. Can be elected for credit each semester. Three rehearsal periods.

MSC 103 — College Chorale
1 cr.
Prerequisite: Permission of director. Tours, television appearances, and several concerts are given throughout the year. Some performances are choreographed and several different types of costumes are used. The music studied consists of major works, madrigals, popular numbers with various types of accompaniment, and contemporary works. Five rehearsal periods.

MSC 105 — 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 class periods.

MSC 111 — Music Workshop
1 cr.
Open to all persons interested in theatre and music in the areas of performance and technical operation. May be elected for credit each semester. Three rehearsal hours.

MSC 113 — Community Chorus — Jacksonville
MSC 114 — Community Chorale
1 cr.
Evening chorale organization open to all members of the community. Repertoire includes secular and sacred major works as well as shorter compositions. May be elected each semester for credit, or non-credit under adult education, GAEA 61610. Two hour rehearsal period.

MSC 114 — 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. 3 class and 2 laboratory hours.

MSC 115 — Music Theory II
4 cr.
Prerequisite: MSC 114 or permission of instructor. A continuation of MSC 114. A basic course including music terminology, notation, harmony, melody, rhythm, and form. Sight singing and ear training included. 3 class and 3 laboratory hours.

MSC 121 — Concert 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. May be elected for credit each semester. Three rehearsal periods.
MSC 122 — Stage Band
Prerequisite: Permission of the director. The repertoire includes various styles from jazz and popular literature. May be elected for credit each semester. Two rehearsal periods.

MSC 123 — String Ensemble
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.

APPLIED MUSIC

Depending on availability of qualified staff, private instruction is offered in piano, voice, and the orchestral instruments. The courses which follow in the 61 series, carrying 2 credits per semester for 2 half-hour lessons per week, are designed for music majors in their principal areas; the courses which follow in the 31 series, involving 1 half-hour lesson weekly for 1 credit per semester, are for all other private music study.

Fees: (per semester)
One private lesson weekly ............................................. $25.00
Each additional lesson per week ................................... 15.00

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

MSC 131 — Applied Music I (Freshman) (Private Instruction — Secondary instrument) 1 cr.
One half-hour lesson per week. (See note concerning Applied Music above.)

MSC 132 — Applied Music II (Freshman) (Private Instruction — Secondary Instrument) 1 cr.
One half-hour lesson per week. (See note concerning Applied Music above.)

MSC 141 — Class Piano I
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.

MSC 142 — Class Piano II
Prerequisite: MSC 141 or equivalent. A continuation of MSC 141. Two laboratory hours.
MSC 151 — Class Voice I  1 cr.
For singers with no previous vocal study and instrumentalists wishing
a fundamental vocal knowledge. Emphasis on correct diction and tone
production. Individual aid given. Two laboratory hours.

MSC 152 — Class Voice II  1 cr.
Prerequisite: MSC 151 or equivalent. A continuation of MSC 151. Two
laboratory hours.

MSC 161 — Applied Music I (Freshman) (Private
Instruction — Principal instrument)  2 cr.
Two half-hour lessons per week. (See note concerning Applied Music.)

MSC 162 — Applied Music II (Freshman) (Private
Instruction — Principal instrument)  2 cr.
Prerequisite: MSC 161 or equivalent. Two half-hour lessons per week.
(See note concerning Applied Music.)

MSC 171 — Class Strings  1 cr.
Teaches basic performance skills on violin, viola, violin-cello, or double
bass. Open to any student. Two laboratory hours.

MSC 173 — Class Brass  1 cr.
Teaches basic performance skills on trumpet or cornet, trombone, or
French horn. Open to any student. Two laboratory hours.

MSC 175 — Class woodwinds  1 cr.
Teaches basic performance skills on clarinet, flute or oboe. Open to
any student. Two laboratory hours.

MSC 177 — Class Percussion  1 cr.
Teaches basic performance skills on percussion instruments with
emphasis on rudimental snare drumming. Open to any student. Two
laboratory hours.

MSC 214 — Music Theory III  4 cr.
Prerequisite: MSC 115 or permission of instructor. Techniques of
analysis and part writing in vocal, keyboard, and instrumental styles.
Advanced tertian harmony, modulation, sequence, and phrase, period,
and part forms. Sight singing and ear training included. 3 class and
2 laboratory hours.

MSC 215 — Theory IV  4 cr.
Prerequisite: MSC 214 or permission of instructor. Altered and chro-
matic chords, extension of tonality, 20th century harmonic, melodic, and
rhythmic styles. Advanced sight singing and ear training included.
3 class and 2 laboratory hours.

MSC 217 — Keyboard Harmony  1 cr.
Prerequisite: MSC 115 or permission of instructor. Development of
skills at the piano. Emphasis upon harmonization of melodies, modula-
tion, transposition, and improvisation. Required of all music majors.
Two laboratory hours.

MSC 218 — Keyboard Harmony  1 cr.
Prerequisite: MSC 217 or equivalent. A continuation of MSC 217.
Two laboratory hours.
MSC 231 — Applied Music (Sophomore) (Private Instruction — Secondary instrument) 1 cr.
Prerequisite: MSC 132 or equivalent. One half-hour lesson per week.
(See note concerning Applied Music.)

MSC 232 — Applied Music (Sophomore) (Private Instruction — Secondary instrument) 1 cr.
Prerequisite: MSC 231 or equivalent. One half-hour lesson per week.
(See note concerning Applied Music.)

MSC 235 — Survey of Music History 3 cr.
A study of the development of music from the early Medieval period to the present day. Emphasis upon the stylistic trends of each period. Three class periods.

MSC 261 — Applied Music (Sophomore) (Private Instruction — Principal instrument) 2 cr.
Prerequisite: MSC 162 or equivalent. Two half-hour lessons per week.
(See note concerning Applied Music.)

MSC 262 — Applied Music (Sophomore) (Private Instruction — Principal instrument) 2 cr.
Prerequisite: MSC 261 or equivalent. Two half-hour lessons per week.
(See note concerning Applied Music.)

NURSEING

NUR 101 — Fundamentals of Nursing 6 cr.
Corequisite: BY 207. A study of the concepts, principles, and techniques that form the foundation for all subsequent nursing courses. Emphasis is placed on the essential knowledge, understandings, and skills which are basic in the nursing care of patients in all age groups. Content includes instruction in the problem-solving process, inter-personal relationships, nursing history, mental health concepts, asepsis, nutrition, body mechanics, hygienic practices, drug administration, and community health needs and resources. Three class periods and nine laboratory hours.

NUR 102 — Maternal-Child Nursing 6 cr.
Prerequisite: BY 207, corequisite: BY 209: A study of the complete maternal cycle and the physiological and sociopsychological growth and development of the well child. Laboratory experiences are selected to provide students with opportunities to give nursing care to mothers and infants. Three class periods and nine laboratory hours.

NUR 201 — Physical-Mental Illness I 7 cr.
Study of the physical and psychological needs of patients in all age groups. Content includes instruction and concurrent laboratory practice in the nursing care of patients with medical or surgical conditions, care of the sick child and the mental and emotional illnesses of functional origin. Three class periods of twelve laboratory hours.

NUR 202 — Physical-Mental Illness II 10 cr.
Continued study of the major health problems in the community and nation with guided laboratory experience in the care of patients with acute and long term illnesses including mental disorders of organic origin. Five class periods and fifteen laboratory hours.
NUR 203 — Nursing Seminar 3 cr.
This course is designed to continue the study of the professional organizations, the nursing practice laws, licensure, the different educational programs in nursing, the ethical and legal responsibilities of the registered nurse, in-service education programs, team nursing, and the community health agencies available to the public. Class sessions will be conducted on a seminar basis with discussion centered on assigned topics. Three class periods.

TEO 110 — Ophthalmic Materials I 3 cr.

TEO 111 — Ophthalmic Materials II 3 cr.

TEO 210 — Ophthalmic Materials III 3 cr.

TEO 211 — Ophthalmic Dispensing I 6 cr.

TEO 212 — Ophthalmic Dispensing II 6 cr.

TEO 213 — Contact Lenses 4 cr.
An introduction to contact lens. Theory and practice. Topics include: history; development, and manufacture of contact lenses. Use of kera-
tomometer and ophthalmometer, optics of contact lenses. Fitting of corneal, scleral and cosmetic contact lenses. Patient management. Use of bio microscope and fluorescein in evaluation of lens fit for optimum performance. Prerequisite: BY 208 Anatomy and Physiology of the Eye. 7 contact hours.

**TEO 214 — Special Visual Aids**

3 cr.

A study of the various devices to aid the subnormal vision patient. Use of magnifiers. Fitting of telescopic and microscopic spectacles and other aids. Considerations of illumination, size of type and working distance on visual performance. Prerequisite: TEO 211 Ophthalmic Dispensing I. 4 contact hours.

**PHILOSOPHY**

**PY 201 — Introduction to Philosophy**

3 cr.

The course provides a historical survey of some influential systems of western philosophic thought. The student is introduced to a novel intellectual environment while studying ancient philosophers, then introduced to widely varied and influential schools of contemporary thought. The primary objective is to enable the student to appreciate the range of intellectual alternatives available to man, and the consequences of adopting some one system of thought. Three class periods.

**PY 211 — 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 class periods.

**PY 221 — Introduction to Ethical Theory**

3 cr.

A survey of the efforts made by philosophers to comprehend the ethical phase of human existence. The course consists, primarily, of an analysis of selected writings in which philosophers have attempted to do such things as characterize the most satisfactory life, specify the basis of moral responsibility, define the 'good' and the 'right,' and to specify the meaning of moral discourse.

**PHYSICAL EDUCATION ACTIVITY COURSES**

All courses, unless specifically designated, may be assigned PEM, PEW, or PEC headings.

**PE 111 — 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 human, crawl, elementary back, and side strokes will be introduced. Two class periods.

**PE 112 — 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 drownproofing. Two class hours.
PE 113 — Life Saving
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: a) standing front dive in good form, b) surface dive of 6 feet and swim two body lengths under water, c) swim 440 yards, continuously in good form, d) tread water for one minute, e) float motionless for one minute. Two class hours.

PE 121 — Beginning Tennis
An introductory course covering the history, scoring, game strategy, and basic skills which include footwork, forehand and backhand drives, serve, volley and lob. Two class hours.

PE 123 — Tennis-Archery
The introduction of the basic skills and fundamental techniques with game or tournament practice in two equal units. Two class hours.

PEW 126 — Tennis-Folk Dance
The introduction of the basic skills, knowledge, and practice of tennis and the exploration of the fundamental steps, positions, and formations of popular round and folk dances in two equal units. Two class hours.

PEC 128 — Beginning Badminton
Course work is designed to cover history, scoring, basic skills, game strategy and appropriate class tournaments. Two class hours.

PEC 131 — Archery
The introduction of the basic skills and fundamental techniques with tournament practice. Two class hours.

PEC 132 — Archery-Volleyball
The introduction of the basic skills and fundamental techniques with game or tournament practice in two equal units. Two class hours.
PEM 140 — 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 class hours.

PEM 141 — Field Events 1 cr.
The course will include an introduction to the basic skills and knowledge involved in the high, long, and triple jumps, pole vault, shot put, discus, javelin, and hammer throw. Two class hours.

PEM 151 — Circuit Training 1 cr.
A planned fitness training program to increase muscular strength and endurance through a planned series of exercises. Two class hours.

PEM 153 — Beginning Wrestling 1 cr.
The introduction of the basic takedowns, escapes, reversals, counters, breakdowns and pinning holds. Two class hours.

PEC 161 — 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 class hours.

PE 171 — 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 class hours.

PEC 221 — 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 class hours.

PE 241 — 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 $8.00. Two class hours.

PEC 243 — 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 $8.00. Two class hours.

PE 253 — 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 class hours.

PEM 254 — Soccer 1 cr.
Course consists of fundamental skills and techniques, game, strategy, and rule interpretation, offensive and defensive team play. Two class hours.

PEM 255 — Advanced Basketball 1 cr.
A course designed to teach skills in basketball. This includes offensive and defensive fundamentals, strategy, rules of basketball, and applica-
tion of fundamentals, strategy and rules in game situations. Two class hours.

**PE 256 — 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 class hours.

**PEC 261 — 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 class hours.

**PEC 271 — 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 class hours.

**PE 205 — Sports Officiating** 3 cr.
Techniques of officiating various sports. Three contact hours. (1 class: 2 laboratory practice.) Does not meet the general education requirements of Physical Education activity.

**PE 215 — 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 $8.00. Three class hours and two overnight camping trips. Three class hours.

**PE 251 — Introduction to Physical Education** 3 cr.
Prerequisite: Sophomore standing. 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 class hours. Does not meet the general education requirements of Physical Education activity.

**PEC 103-104-203-204 — Adaptive Physical Education** 1 cr. (each)
The adapted program is open only to those students who are assigned to it by the college or medical advisor through counselors from the Department of Physical Education. Each student engages in a program specifically designed to meet his limitations, capacities, and interests. Depending on his needs, a student may enroll in any of the program areas — special conditioning, aquatics, recreational sports. Two class hours.

**PS 201 — General Physics** 4 cr.
Prerequisite or corequisite: MS 110 — College Trigonometry or MS 115 — College Algebra and Trigonometry. Subject matter includes...
mechanics, heat, thermodynamics, and sound. Laboratory work will illustrate important principles and develop techniques through experiments requiring quantitative conclusions. This course, stressing problem-solving ability is designed for all students taking programs requiring physics, including science and engineering majors. Three class periods and one 3-hour laboratory.

**PS 202 — General Physics**

Prerequisite: PS 201. A continuation of PS 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 PS 201. Three class periods and one 3-hour laboratory.

**PS 210 — Principles of Optics I**

Prerequisite: High School Geometry and High School Algebra. Subject matter includes: Reflection (Laws of Reflection, Refractive Index, Refraction through different media), Total Internal Reflection, Prisms, Lenses (Lens formula, images formed in lenses, Power of a Lens, Combination of Lenses), Optical Instruments (Photographic Camera, Eye, Defects of the Eye, Microscopes and Telescopes), Dispersion (Spectrum and its study). Special emphasis is given for Ophthalmic Dispensing and Optometric Studies. Three class periods including demonstration experiments.

**PS 211 — Principles of Optics II**

Prerequisite: PS 210 or PS 202. Subject matter includes Geometrical Optics, including Lens Maker’s Formula and the related problems, Interference, Diffraction, Polarization, Ophthalmic and Medical Instruments (Retinoscope, Ophthalmoscope, Slit Lamp, etc.), Simple ideas about Atomic Spectra, Modern Optics, including the use of Lasers. 3 class periods and one 3-hour laboratory.

**POLICE SCIENCE AND ADMINISTRATION**

**PSA 100 — Introduction to Criminal Justice**

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 class periods (Formerly PSA 100 - Introduction to Law Enforcement).

**PSA 101 — Police Organization and Administration**

Principles of organization and administration in Law Enforcement; functions and activities; planning and research; public relations, personnel and training; inspection and control; police formulation. Three class periods.

**PSA 102 — Police Operations**

Prerequisite: PSA 101. Principles of organization and administration as applied to operational services. Patrol; criminal investigation; intelligence and vice units; juvenile units; traffic administration; records; communications; custody; etc. Three class periods.

**PSA 103 — The Role of Criminal Justice in Crime and Delinquency**

An analysis of the duties and responsibilities of the agencies of the criminal justice system and a detailed study of their role in crime
and delinquency. Special emphasis will be placed on law enforce-
ment, courts and corrections. Three class periods. (Formerly PSA
103 - Policing Techniques).

PSA 200 — 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 class periods.

PSA 201 — Introduction to Criminalistics
3 cr.
General course in the scientific aspects of criminal investigation with
emphasis upon recording the crime scene, collection and preservation
of evidence, and the examination of evidence employing techniques
available to the criminal investigator or crime scene technician. Ad-
vanced criminalistics discussed to the extent necessary to familiarize
the student with the capabilities and limitations of the advanced
law enforcement science lab. Four contact hours (2 class hours - 2
lab hours).

PSA 202 — Court Organization and Procedures
3 cr.
Study of court organization and procedures in the State of Florida.
Special emphasis is placed on the criminal procedure in Florida. Three
class periods. (Formerly PSA 202 - Criminal Court Procedures and
Evidence).

PSA 203 — Criminal Investigation
3 cr.
Prerequisite: PSA 201. Introduction to criminal investigation pro-
cedures, including theory of an investigation, case preparation, specific
techniques for selected offenses, questioning of witnesses and suspects,
and problems in criminal investigation. Three class periods.

PSA 204 — Police Supervision
3 cr.
Techniques and theory of police supervision: problems of policy and
procedure, instructional and disciplinary methods; motivation: super-
visory investigations and reports. Performance rating.

PSA 205 — Seminar in Police Problems
3 cr.
Prerequisite: Satisfactory completion of 18 hours of Police Science
and Administration courses. Research, writing, and discussion of se-
lected subject areas including foreign police agencies, industrial and
retail security, and duties of various governmental regulatory agencies.
Analysis of contemporary law enforcement problems. One 3-hour
seminar.

PSA 207 — Evidence
3 cr.
Study and evaluation of evidence and proof; kinds, degrees, admis-
sibility, competence, and weight; specifically deals with rules of
evidence and procedure of particular import at the operational level
in law enforcement. Three class periods.

PSA 208 — Criminal Law II
3 cr.
Prerequisite: PSA 200. Studies in the State Constitution and the

PSA 210 — Police Arsenal and Weapons
2 cr.
The handling, care and use of firearms in police work to enable the
policeman to compete with any situation where firearms are needed.
Lectures are supplemented by an intensive range program in deliberate.
point, and defense shooting. Laboratory fee. Two Class Hours. Prerequisite: Full-time law enforcement officer and permission of Director, Department of Police Science and Administration.

**PSA 211 — Law Enforcement Defensive Tactics** 2 cr.
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. Two class hours. Prerequisite: Full-time law enforcement officer and permission of Director, Department of Police Science and Administration.

### POLITICAL SCIENCE

**PLS 201 — 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 class periods.

**PLS 202 — 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 class periods.

**PLS 207 — 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 class hours.

**PLS 285 — 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 class periods.

### PSYCHOLOGY

**PSY 101 — 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 class periods.

**PSY 105 — General Psychology** 3 cr.
An analysis of human behavior by the study of the adaptation of the individual to his physical and social environment. Three class periods.

**PSY 205 — Child Psychology** 3 cr.
Prerequisite: PSY 105. A study of the hereditary, maturational, psychological, and social factors in child behavior. Three class periods.

**PSY 207 — Adolescent Psychology** 3 cr.
Prerequisite: PSY 105. Development in the adolescent years with emphasis on psychological problems. Three class periods.
PSY 209 — Educational Psychology 3 cr.
The study of psychology as it relates to the problems of education. Three class periods.

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

REL 221 — Religious Thought in the Old Testament 3 cr.
A study of religious thought and instructions in the Old Testament. Attention is given to the problems of authorship, date, historical setting, and textual criticism. Three class periods.


DER 101 — 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 are covered.

DER 102 — 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.

DER 100-3 — Retail Practicum 4 cr.
Occupational experiences are provided with cooperating businesses. Four hours daily of part-time employment are provided in order to follow a predetermined plan of learning experiences.

SC 101 — Life in its Biological Environment 3 cr.
This course is a general education course designed to acquaint students with the major principles, theories, and concepts of the biological sciences. Students should gain a better understanding of the life sciences and their role in and contribution to daily living. Topics and materials which best illustrate these principles will be selected. The course will include lectures, demonstrations, audio-visual aids, field trips, and guest lecturers. Three class periods.

SC 102 — Life in its Physical Environment 3 cr.
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 of the specific physical sciences. Three class periods.

SC 103 — Life in its Physical Environment 3 cr.
No prerequisites may be taken before SC 101 or 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 the earth sciences, solar astronomy, geology, and meteorology. Presentation involves lectures, demonstrations, and films. The course is not designed essentially as an introductory or preparatory course for any of the specific physical sciences. Three class periods.

SC 104 — 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 requirement while also fulfilling the laboratory requirement needed by many students who plan to transfer to a four-year institution. Three class periods and two laboratory.

SC 275 — 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 class periods.

SOCIAL SCIENCE

SLS 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 class periods.

SLS 102 — Origins of American Society 3 cr.
A continuation of SLS 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 class periods.

SLS 103 — Human Institutions 3 cr.
An analysis of trends and institutions of contemporary American Society in an historical perspective. Development and change of the basic components of American Life are examined through the study of social processes, institutions, and problems. A study of the United States Constitution is included in the course. (A one-semester modification of SLS 101-102 — Origins of American Society.) Three class periods. Open only to students in Associate in Science Degree Program. NOTE: Credit will not be granted both in SLS 101-102 and SLS 103.

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SLS 203 — 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. Students who have earned credit in ES 201 or ES 202 may not receive credit for SLS 203. Three class periods.

SY 201 — Introductory Sociology 3 cr.
A study of sociological concepts, theories, and methods; social groups, processes, and change. Three class periods.

SY 202 — Social Problems 3 cr.
Prerequisite: SY 201. A consideration of major social problems which affect individuals and groups in industrial societies, with special attention to American society. Three class periods.

SY 203 — Marriage and Family 3 cr.
A study of mate selection, courtship, marriage and child rearing, with special attention to the contemporary American family. Three class periods.

SH 101 — Beginning Spanish 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.

SH 102 — Beginning Spanish 3 cr.
Prerequisite: SH 101 or equivalent. A continuation of SH 101. Four contact hours (2 class; 2 laboratory).

SH 201 — Intermediate Spanish 3 cr.
Prerequisite: SH 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.

SH 202 — Intermediate Spanish 3 cr.
Prerequisite: SH 201 or equivalent. A continuation of SH 201. Four contact hours.

SCH 105 — Fundamentals of Speech 3 cr.
This course is designed to improve the basic skills of speaking through classroom exercise, discussion, oral reading, and public address. Three class periods.
SCH 118 — Introduction to Theatre 3 cr.
Prerequisite: none. This course is designed to acquaint the student with the historical development of the theatre and its relationship to changing social orders. The course will deal primarily with dramatic literature and acting and production methods of selected historical periods. Three class periods.

SCH 205 — Oral Interpretation 3 cr.
Prerequisite: SCH 105 or consent of instructor. 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. Designed to enhance the student's appreciation of words, ideas, and beauty in all forms of literature. Three class periods.

SCH 207 — Foundations of Discussion and Debate 3 cr.
Prerequisite: SCH 105 or consent of instructor. A study of the principles of argumentation — the discovery and use of evidence, reflective thinking, and logical reasoning — as used in persuasion, discussion, and debate. Includes a study of the technical forms of discussion and debate. Three class periods.

SCH 217 — 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 class periods.

SCH 218 — Drama Practicum 1 cr.
Planning and execution of production functions; scene construction and painting, props, costuming, lighting and other full technical responsibilities. Three class periods.

VBEV 12810 — Business English
A study of the business letter, discrimination in the use of words, spelling, review of grammar, punctuation, and development of language power.

VBEV 28310 — 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.

VBEV 70410 — Typewriting
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.

VBEV 70415 — Advanced Typing
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.

VBEV 70710 — Shorthand
An introductory course in principles and skills of shorthand designed for adults who wish to take beginning shorthand. Standards of per-
formance in transcription are comparable to those for regular high school courses in beginning shorthand.

**VB EV 70810 — 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.

**VB EV 71610 — Office Practice**
A course of study consisting of filing, 10-key adding machine, Key Driven Calculator, Rotary Calculator, Voice Writing Machines, Duplicating (Spirits and Mimeograph).

**VB EV 71810 — 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.

**VB EV 72310 — 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.

**VB EV 73910 — Supervisory Training**
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.

**VDEV 51010 — Business Management**
This course is designed for administrative management personnel concerned with the organization and operation of a business. Typical topics considered include selecting a business location, sales promotion, long and short-term financing, recordkeeping, managerial aids, and efficient use of personnel and merchandise.

**VDEV 51110 — 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.

**VDEV 51310 — Service Station Management**
This course is designed for training 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.

**VDEV 51410 — Hotel-Motel Management**
This course is designed to cover all phases of hotel and/or motel operation. It includes supervision of employees, room sales, dining room service, bellman duties, and training techniques. All phases of promoting the sales of services offered by the institution are considered, together with accounting procedures.
VDEV 51510 — Food Service Management
This course is designed 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.

VDEV 51610 — Insurance Sales and Agency Management
The objective of this course is to prepare individuals for insurance agency management and insurance sales management. A brief discussion of insurance history including growth of the industry and methods of operation is covered. The essentials of direct selling, group demonstrations, and the techniques of preparing sales talks are included.

VDEV 51710 — Warehouse Management
This course is designed for retail and wholesale personnel involved in the merchandising and distribution of salable goods from the factory to the sales counter. Transportation from sources, warehousing procedures, inventory control systems, warehouse to store distribution, insurance and protection from theft and damage, handling costs, material handling equipment, and warehouse labor problems are covered in this course.

VDEV 53010 — Credit Management
This course is designed for executive or supervisory level personnel. It 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.

VDEV 53310 — Sales Analysis and Financing
This course is designed to give adequate and practical help to the manager and/or supervisor who wants to do a better job of advising his customers about finances. It provides a thorough discussion of all aspects of finance with which the family comes in contact.

VDEV 53410 — Merchandising and Buying
This course deals principally with training for personnel specializing in merchandising and buying. The functions of the merchandising department, inventory control system, stock turnover, and buying functions, and sales promotion are covered.

VDEV 53510 — Supervisory Training for Distributive Workers
This course includes a study of the basic principles of supervision and how to apply these principles in practice. It covers the job of supervision, the establishment of good human relations, evaluation of job performance, employee training, job advancement, and development of other supervisory skills.

VDEV 55010 — Principles of Retailing
This course of study shows the organization and operation of a retail merchandising business. Included is 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.
VDEV 55110 — Techniques of Selling
This is a basic selling course which 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.

VDEV 55410 — Cashiering for Salespeople
This course is designed for salespersons covering machine use, essentials of business mathematics, sales and luxury taxes, and handling of sales invoices.

VDEV 56010 — 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.

VDEV 56310 — Route Selling
This course includes discussions on how to secure good public relations for your firm, knowing your product and your job, traffic safety, and promoting additional business.

VDEV 56410 — Securities Sales Training
This course is designed for bankers, investment business, investment salesmen and others interested in learning the operations and methods involved in merchandising stocks, mutual funds, bonds, and listed and unlisted securities. Analyses are made of a number of different types of investments.

VDEV 56610 — Apparel and Accessories (Fashion Merchandising)
Organized subject matter and learning experiences related to the variety of sales, fashion, and sales-supporting tasks performed by employees and management in establishments primarily engaged in selling clothing of all kinds and related articles for personal wear adornment.

VDEV 56710 — Grocery Merchandising (Food Distribution)
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.

VDEV 57010 — Banking Fundamentals
This course offers a study of the principles and functions of commercial banking in the United States and stresses the fundamentals of banking. It explains the operating principles of both small and large banks and gives complete coverage to all ordinary banking procedures.

VDEV 57110 — Negotiable Instruments
This course is built around the provisions of the uniform negotiable instruments law with emphasis upon bills of lading, stock certificates, bonds, certificates of deposit, trade acceptances, warehouse receipts, and other similar banking instruments.
VDEV 57210 — Savings and Loan Principles
This course stresses the basic principles of savings and loan organizations and explains the procedures involved in their operation.

VDEV 58010 — Principles and Practices of Insurance
This course is designed to teach the basic information and skills needed to obtain and retain employment in the insurance business. Basic sales procedures, such as contacting prospects, sales interviews, analysis of insurance policies and programs, are covered.

VDEV 58110 — Insurance Sales Training
This course is designed especially for training in the sale of insurance. It includes a study of minimizing and meeting risks, disposition wants, estate questionnaires, securing action, estate creation and conservation, the sales process, and fitting the product to the market.

VDEV 58210 — Insurance Rating
This course deals with the rating problems encountered in a general insurance agency; fire, automobile, casualty, fidelity, and surety. Practice with up-to-date manuals and policies enables the learner to obtain knowledge of the major factors involved in fidelity and surety and insurance rating.

VDEV 59010 — Real Estate License
This course includes a study and review of the Florida real estate license law. It covers the field of real estate law and ethics used by successful brokers and salesmen.

VDEV 59110 — Real Estate Law
This course covers legal practices and procedures in real estate and includes a study of the legal documents used in real estate transactions. It offers actual practice in the preparation of various legal forms.

VDEV 59210 — Real Estate Sales Promotion
This course 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.

VDEV 59310 — Real Estate Appraisals
This course includes a study of the nature and purposes of appraisals, reasons for and use of appraisals, depreciation, income approach, types of appraisals, valuations, maps, values, costs, and markets.

VDEV 59410 — Real Estate Finance
Typical topics considered include the problems involved in obtaining mortgage money, money sources, mortgage liability, foreclosure proceedings, debts and pledges, titles, recording rights, and liabilities of mortgagor and mortgagee.

VDEV 60010 — 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.

VDEV 60110 — Hostess Training
This course, designed 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.

**VDEV 60210 — Hotel-Motel Front Office Procedures**
This course covers the basic duties and responsibilities of front office personnel, i.e., registering and rooming guests, reservations, recording charges and credits, billing guests, checking out guests, preparing transcripts of guests' accounts receivable, and balancing transcripts.

**VDEV 60610 — Executive Housekeeping**
This course develops 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.

**VDEV 62010 — Advertising**
Included in this course are retail advertising procedures, copy-writing and testing, selection and use of illustrations, direct mail advertising, including research and analysis of sales territory, and the coordination of the display, advertising, and sales departments.

**VDEV 62110 — Display**
This course offers training in design, trimming and constructing interior and window display for small stores and large stores. It includes the techniques of display from the idea to the completed construction. Individual problems in window display and trimming are studied in classes held in local stores.

**VDEV 62210 — Export and Import Practices**
This course 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 are included.

**VDEV 62310 — Income Tax Problems 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.

**VDEV 62410 — Traffic Management and Rates**
This course offers basic information on routing procedures and interstate commerce rules and regulations for the person entering employment in this field. Particular emphasis is given to new developments in the field of traffic control.

**VHRV 06110 — Nursing — Licensed Practical Nurse**
This course is designed to prepare individuals to share in giving direct care to patients in the hospital, nursing home, or home. This is a 12-month course with classes being admitted in March and September. 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 Licensing Examination.
VHRV 06210 — 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.

VHRV 06310 — Surgical Technician

The surgical technician course is a vocational level course that prepares the person 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 surgical technician assists in the care, preparation and maintenance of sterile and unsterile supplies; functions as a “scrub” or “circulating” assistant; assists in the maintenance and care of operating rooms and assists with the transportation of patients. The course leads to a certificate.

Home Economics For Useful Employment

VHEV 80510 — Basic Clothing Construction

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 using modern sewing and pressing equipment, completion of a simple garment using modern sewing techniques and selection of suitable accessories.
VHEV 80610 — Advanced Clothing Construction
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.

VHEV 80710 — Basic Tailoring
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.

VHEV 80810 — 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.

VHEV 81110 — Intermediate Clothing Construction
This course is planned 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.

VHEV 81510 — Food For the Family
This course includes the planning, preparing and serving of nutritious meals for the family. Actual preparation of foods for breakfast, lunch and dinner will be included. Consideration will be given to problems including the purchasing of food, use, care, storage and arrangement of utensils and equipment and management of time and energy.

VHEV 81610 — Advanced Foods
This course 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.

VHEV 81710 — Short Cuts in Meal Preparation
This course 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.

VHEV 81910 — 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. Attention is given to planning and preparing family meals which may be easily adapted to the special needs of the individual.

VHEV 83010 — Home Decoration
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.

**VHEV 83410 — Home Furnishings (Slipcovers, Draperies, Bedspreads)**

This course includes a study of line, color and fabrics as they relate to furniture and furniture coverings for family housing situations and income. Practical information concerning choice of furnishings will be included. This course may include construction of slipcovers or bedspreads.

**VHEV 84110 — Family Relationships (Personal Improvement)**

This course includes 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.

**VHEV 85310 — Supervised Food Service Worker**

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)

**VHEV 85710 — Homemaker’s Assistant**

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 — 306)

**VHEV 85810 — 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.
COURSE DESCRIPTIONS

VIEV 90110 — Air Conditioning, Refrigeration, and Heating Mechanics
Training in the installation, inspection, and repair of heating and cooling units for commercial and residential building, motor vehicles, aircraft, and ships.

VIEV 90210 — Appliance Service
Training in the repair and maintenance of electrical and gas appliances.

VIEV 90310 — Auto Body Repair
Training in the repair and replacement of damaged automobile body parts, including the removal of dents, glass installation, body painting and refinishing, and upholstery.

VIEV 90410 — Automotive Mechanics
Training in the repair of passenger automobiles and light delivery trucks, including engines, transmissions, clutches, carburetors, ignition systems, chassis, bodies, and power operated equipment.

VIEV 91010 — Blueprint Reading
Training in the reading and interpretation of blueprints and architectural drawings, and from such designs computes labor, material and equipment costs for construction work.

VIEV 91510 — Cabinet and Furniture Making
Cabinet making and Furniture making training in hand carpentry necessary to cut, shape and assemble furniture, fixtures, cabinets, doors and window frames, and finish interior woodwork.

VIEV 91810 — Commercial Art
Training in the creation of figures to illustrate advertising copy, books, and magazines, plus design of posters, signboards, billboards, and show cards.
COURSE DESCRIPTIONS

VIEV 92010 — Cosmetology
Training in all of the services available including hair cutting, shampooing, dyeing, 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.

VIEV 92410 — Diesel Mechanics
Training in maintenance and repair of diesel engines used on trucks, railroads, boats, and large construction machinery and in Power Plants.

VIEV 92510 — Drafting
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.

VIEV 93010 — Electric Code
This course is designed to prepare apprentice electricians to pass the electric code examination.

VIEV 93210 — Electronics
Training in the installation, maintenance, and repair of electronically controlled and operated distribution systems used in industry and commercial businesses.

VIEV 93710 — Garment Making Commercial
Training in the commercial design, pattern cutting and making of any kind of clothing.

VIEV 93810 — Outboard Motor Repair
Training in the inspection and repair of the mechanical equipment of gasoline-powered engines (other than automobile and truck), including motor testing, carburetor adjusting, fuel line cleaning, generator adjusting, valve replacing and grinding, piston ring installing, and replacing and grinding, and replacing broken or damaged parts.

VIEV 94410 — Hydraulic Mechanics
Training in the testing and adjusting of hydraulic systems including diagnosing faulty operation of systems and the replacing and adjusting of defective parts.

VIEV 95510 — Machine Shop Work
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.

VIEV 97010 — Photography and Photo-Finishing
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.

VIEV 97210 — Plumbing & Pipe Fitting
Training in the assembly and installation of air, gas, water and waste-disposal systems, including the cutting, reaming, and threading of...
pipe, caulk ing and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers, or foundations.

**VIEV 97510 — Printing**
Training in the duties concerned with hand and machine setting of type, assembling type and cuts in chases, and related duties prior to the actual printing operations.

**VIEV 97810 — Radio & Television Service**
Training in the installation, testing, adjusting, and repair of radio and television sending and receiving equipment.

**VIEV 98611 — Water & Sewage Plant Operation — Math**
Training in mathematics in preparation for Water & Sewage Plant Operator’s License Exam.

**VIEV 98612 — Water & Sewage Plant — Related Communication**
Training in communications in preparation for the Water & Sewage Plant Operator’s License Exam.

**VIEV 98613 — Water & Sewage Plant — Related Chemistry**
Training in chemistry in preparation for the Water & Sewage Plant Operator’s License Exam as well as various functions of Water & Sewage Plant operation.

**VIEV 98710 — Shoe Repair**
Training in repairing shoes. To understand the construction of a shoe, how to use and respect equipment, tools and materials. How to properly use the manufacturer’s manuals and reference materials.

**VIEV 99110 — Tailoring**
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.

**VIEV 99410 — Welding**
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.

**VIEV 99610 — Tool and Die Math and Blueprint Reading**
Applied mathematics necessary for precise machine shop work.

**VIEV 99611 — Tool and Die Blueprint Reading**
Training in the reading and interpretation of blueprints used in precise machine shop work.

**VIEV 99710 — Upholstering**
Training in installing, arranging, and securing springs, padding, and covering materials such as cloth or leather to frames of over-stuffed chairs, davenports and stationary seats, including automobile seats.

**GAEA 9910 — 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 for study at the secondary level.
GAEA 11410 — English
This course in the fundamentals of written and spoken English is
designed to meet the needs of adults in their personal and business
activities in the area of communication.

GAEA 11710 — English for Foreign Born
English for the alien is a class designed for students who have diffi-
culty with the English language. This course is especially designed
for new arrivals in the United States.

GAEA 14310 — Speed Reading
This is an advanced course designed to increase reading speed and
further improve reading skills and comprehension.

GAEA 14315 — How to Succeed in College
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.

GAEA 14320 — Reading Techniques
This is a developmental course which emphasizes basic reading skills
and comprehension.

GAEA 16710 — Creative Writing
An introduction to the craft of writing, this course is concerned with
basics — purpose, organization, development and form — with em-
phasis on analyzing, editing, correcting and revising individual writing
samples. The course is a study and evaluation of special techniques and
writing.

GAEA 19310 — Library Science
This course is designed to teach adults how to use a library effectively
so as to minimize time and effort required in locating and using the
resources of the library and to encourage and facilitate broader use
of appropriate materials in research and study.

GAEA 21310 — Mathematics, General
This course is designed to satisfy the needs of individuals whose in-
terests require a knowledge of modern general mathematical skills
and concepts.

GAEA 21320 — Mathematics for Parents
This course is designed primarily for those parents who wish to have
an orientation and an understanding of the basic concepts and termi-
ology of the new mathematics.

GAEA 24310 — Modern Math
This course is designed primarily for those who wish to have an
orientation to and an understanding of the basic concepts and termi-
nology of the new mathematics program being taught in the elementary
and junior high schools in Florida.

GAEA 28310 — 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.
GAEA 31410 — Biology Experiments
This course is a study of living things, plant and animals, from the most simple to the most complex and includes experiments involved in basic biology.

GAEA 39310 — Health Education
A course designed to provide information and experience to enable individuals to protect and maintain their health, with emphasis on good physical conditioning.

GAEA 39315 — Health Education
A course designed to provide information and experience to enable individuals to protect and maintain their health. Emphasis will be on male physical conditioning.

GAEA 42710 — Family Psychology
This course is a basic study of human behavior with consideration given to the family and its role in society, psychology and human relations, coping with the problems of a changing social and cultural environment and understanding the interests, aptitudes and desires of individuals in matters of personal and group adjustment.

GAEA 50310 — Spanish
A course in Spanish designed to meet the needs of an adult group. Usually, emphasis is placed on speaking and oral comprehension.

GAEA 50311 — Spanish I
Elements of grammar, pronunciation, elementary conversation, and reading of simple Spanish texts.

GAEA 50312 — Spanish II
Review of grammar, with conversation and composition, and reading of Spanish texts.

GAEA 52310 — French
This course is adapted to the needs and interests of adults who wish to acquire a speaking and oral comprehension ability in introductory French.

GAEA 54310 — Russian
Conversation rather than grammar is emphasized. This course also includes a brief background in Russian history, culture, and literature.

GAEA 61310 — Instrumental Music
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.

GAEA 61315 — Instrumental Music (Organ)
A course offered to meet the needs of individuals who wish to learn fundamentals of playing the organ.

GAEA 61610 — Choral Music
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.
GAEA 61613 — Chorus
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.

GAEA 67310 — Fundamentals of Art
A study of the fundamentals of drawing and painting, concepts of drawing principles and composition, and study of techniques.

GAEA 70310 — Typewriting
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.

GAEA 70610 — Beginning Shorthand
An introductory course in principles and skills of shorthand designed for adults who wish to take beginning shorthand. Standards of performance in transcription are comparable to those for regular high school courses in beginning shorthand.

GAEA 70810 — Bookkeeping Non-Vocational
An introductory course which is designed to contribute to the general education of the student through the application of basic principles, concepts and knowledges required for practical bookkeeping in everyday living, with particular emphasis on principles of personal and family financing.

GAEA 71310 — Business 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 machines in the bookkeeping process.

GAEA 73510 — Notetaking
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.

GAEA 80310 — General Shop, Woodworking I
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.

GAEA 80315 — General Shop-Metals
This course provides experiences in general shop involving beginning, advanced and specialized work in metals.

GAEA 80320 — General Shop-Graphics
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.

GAEA 81315 — General Shop, Drafting
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.

**GAEA 90310 — Public Relation Technique of Communications**
This course includes training in pertinent elements of social psychology,
human relations, writing, speaking and personal deportment.

**GAEA 90610 — 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.

**GAEC 11410 — English**
A course in the fundamentals of written and spoken English designed
to meet the needs of adults in their personal and business activities
in the area of communication.

**GAEC 14310 — Speed Reading**
An advanced course designed to increase reading speed and further
improve reading skills and comprehension.

**GAEC 14810 — Literature**
Reading and discussion of literature by English authors from the
Anglo-Saxon period through the modern age.

**GAEC 16710 — Creative Writing**
A laboratory-type course in the special techniques in writing. Emphasis
is placed on the principles of composition and reporting to accommodate
needs of individuals where duties may involve the preparation and
presentation of information of public interest.

**GAEC 21310 — General Math**
A course designed to satisfy the needs of individuals whose interests
require a knowledge of modern general mathematical skills and
concepts.

**GAEC 21510 — Algebra I**
An introduction to algebra with emphasis on fundamentals, the solution
of equations, and the application of equations to everyday problems.

**GAEC 21610 — Algebra II**
Continuation of Algebra I with emphasis on fractions, fractional equa-
tions, quadratic equations, elementary trigonometry, ratio and propor-
tion, and radicals with problems using these.

**GAEC 21810 — Plane Geometry**
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.

**GAEC 28310 — Business Math**
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.
GAEC 31410 — General Biology
A study of the origin, development, structure, functions, and distribution of plants and animal life.

GAEC 31610 — Chemistry
Course covers the areas of elements and compounds, oxygen and hydrogen, water and solutions, carbon and its oxides: and acids, bases and salts.

GAEC 34410 — General Science
An introductory survey course designed to acquaint the student with both the physical and biological sciences.

GAEC 41210 — History
History is offered to meet the needs of adult students in special areas significant in the development of our civilization.

GAEC 41310 — Civics
This course deals with the structure and function of government at the local, state, and national levels.

GAEC 41410 — World History
A survey of European and Asiatic History. Explains the world today by showing the political, economic, and social development in the United States from Colonial days to the present.

GAEC 41610 — American History
Emphasis is placed on political, economic, and social development of the United States from Colonization to the present.

GAEC 41810 — Problems of Democracy
Materials covered in this course show how and why the historical problems are vital in contemporary thinking.

GAEC 41817 — American Government
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, and citizenship.

GAEC 41818 — American Problems
Materials covered in this course give a clearer idea of historical setting of problems and show how and why the problem is vital in contemporary thinking.

GAEC 41910 — Americanism Vs. Communism

GAEC 50310 — Spanish
An easy introduction to Spanish for busy people. It combines entertainment with instruction through a functional method. Reading and speaking Spanish start with the first lesson. Grammatical explanations used when necessary.

GAEC 61310 — Instrumental Music
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.
GAEC 61610 — Music, Choral
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.

GAEC 67310 — Fundamentals of Art
A study of the fundamentals of drawing and painting, concepts of drawing principles and composition, and a study of techniques.

GAEC 70310 — Typing
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.

GAEC 70610 — Shorthand
An introductory course in principles and skills of shorthand designed for adults who wish to take beginning shorthand. Standards of performance in transcription are comparable to those for regular high school courses in beginning shorthand.

GAEC 70810 — Bookkeeping
An introductory course of basic principles, concepts, and knowledge required for practical bookkeeping in everyday living.

GAEC 81310 — Drafting
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.

CSAE 11410 — What is Happening in the New English?
An introduction to the nature and structure of language from the linguist's viewpoint. Stress is placed on fundamental insights about language with which well-educated persons should be familiar and not on the discipline of linguistics nor its technical vocabulary. For parents and teachers.

CSAE 14310 — Speed Reading
A reading program designed to accelerate reading speed and increase proficiency in reading comprehension.

CSAE 14810 — Readings in Great Literature
A discussion course of great books from Job, the Old Testament drama of good and evil to J. B., the modern treatment of the same concept. Other works for discussion include Oedipus Rex, Aeneid, Inferno, Hamlet, Candide, and Crime and Punishment.

CSAE 16710 — Creative Writing
An introduction to the craft of writing, this course will be concerned with basics—purpose, organization, development and form—with emphasis on analyzing, editing, correcting and revising individual writing samples.
CSAE 17310 — Practical Public Speaking
This course includes the fundamentals of effective speaking, practice in organization of materials and delivery, development of voice, vocabulary, diction and poise.

CSAE 24310 — Understanding New Math
This course explains and demonstrates the advantages of modern mathematics for students and covers such topics as set languages, venn diagrams, expanded notation numberation basis, numbers and their properties.

CSAE 28310 — Basic Math of Investment
This course includes the consideration of personal and family resources to secure the greatest benefit and satisfaction through wise investment in stock and similar securities. Basic investment mathematics is the core of the course.

CSAE 41310 — City Government Organization
This course includes the structure and function of government at the local or city level.

CSAE 42710 — Human Relations
A down-to-earth review of modern concepts in human relations including allocation of time, motivation, communication and emotional stability.

CSAE 42712 — Advanced Human Relations
Emphasis will be placed on human behavior in the home and in the "market place," and on the development of personal leadership qualities. The adjustment concept will be studied together with methods of treating the maladjusted.

CSBE 12820 — Business Letter Writing
This course is a practical approach to better letter writing with emphasis on business correspondence. The course provides a review of common-sense grammar and spelling plus a study of correct letter form. It offers one an opportunity to improve language usage and become a more effective letter writer.

CSBE 73910 — Personnel Management
Implementation of personnel policies, practices, and methods for supervisors managing people at work.

CSDE 56410 — Investments
This course will emphasize the prerequisites to investments, the nature of the money market and its influence, interpretation of balance sheets, income statements, discussion of types of common stock, and basic approaches to common stock investment, investment companies, and investment clubs.

CSDE 56415 — Advanced Investments
The course will discuss a number of sophisticated investing and trading practices and equate them with the problems that historically confront the individual investor.