

COURSES  
OF INSTRUCTION

## Credit Course Description

Opposite each course title are printed three numbers, such as 3-2-4. The first number indicates the number of regular classroom hours for the course each week; the second number indicates the number of laboratory hours per week; and the third number indicates the hours of credit awarded for the successful completion of the course.

The College reserves the right to cancel or delete any course with insufficient enrollment.

### **Accounting 1101. Basic Accounting 3-0-3**

Quarter Equivalent: ACC 101

Acquaints students with the basic accounting procedures used by small businesses. Topics include analyzing and journalizing transactions, posting the ledger, preparing the financial statements, and adjusting and closing the accounts. Special journals, subsidiary ledgers, and banking procedures will be introduced. (Technical Certificate Course)

### **Accounting 2101. Principles of Accounting I 3-0-3**

Prerequisite: Business Administration 1115, Computer Applications/Systems 1101, Computer Science 1125, or permission of the instructor

Quarter Equivalent: ACC 210

Examines the underlying theory and application of financial accounting concepts.

### **Accounting 2102. Principles of Accounting II 3-0-3**

Prerequisite: ACCT 2101.

Quarter Equivalent: ACC 211

Examines the underlying theory and application of managerial accounting concepts.

### **Allied Health Technology 1110. Allied Health Terminology 2-0-2**

Quarter Equivalent: AHT 110

A study of medical language including word construction, definition, spelling, and proper usage of terms related to most allied health disciplines. (Career Course)

### **Allied Health Technology 1115. Medicolegal Ethics and Quality Assurance 1-0-1**

Quarter Equivalent: AHT 115

Medical ethics, legal issues, and methods of quality assurance, including agencies which regulate health care institutions, are carefully reviewed. Students are made aware of their legal and ethical responsibilities to all aspects of professionalism and confidentiality. (Career Course)

### **Allied Health Technology 1150. Introduction to Health Unit Coordinating 3-0-3**

Prerequisites: Allied Health Technology 1110, 1115, Biology 1100, Office Administration 2250, and acceptance into the Health Unit Coordinator program and permission of HUC faculty.

Quarter Equivalent: AHT 150

Documentation of patient care within the hospital is stressed. Students apply techniques of transcribing physicians' orders, computer applications of terminology, and appropriate communication skills. (Career Course)

### **Allied Health Technology 1155. Health Unit Practicum 2-30-12**

Prerequisites: Successful completion with "C" or higher of all HUC course requirements and permission of HUC faculty.

Quarter Equivalent: AHT 155

The HUC student will be assigned to an area health care facility to apply the techniques learned in the classroom. Students will gather for a problem-solving seminar on a weekly basis. (Career Course)

**Allied Health Technology 1160. Basic Coding Skills 3-0-3**

Prerequisite: Allied Health Technology 1110, 1115, Biology 1100, Office Administration 1250, and acceptance into the MCS program and permission of MCS instructor. Other students wishing to take ALHT 1160 will be evaluated on an individual basis by the MCS faculty.

Quarter Equivalent: AHT 160

Coding is a uniform language that accurately describes medical, surgical, and diagnostic services. It is the basis for insurance claims and for the development of guidelines for medical care review. Students will identify and properly code medical diagnoses and procedures performed by medical personnel. (Career Course)

**Allied Health Technology 1165. Coding Specialist Practicum 2-30-5**

Prerequisite: ALHT 1160 and permission of the MCS faculty.

Quarter Equivalent: AHT 165

The MCS student will be assigned to an area health care facility under the direction of a preceptor to apply techniques learned in the classroom. Students will meet for a problem-solving seminar on a weekly basis. (Career Course)

**Anthropology 1102. Introduction to Cultural Anthropology 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: ANT 101

Examines various types of human society. While an introduction is provided to the four fields of anthropology: archaeology, cultural anthropology, linguistics, and physical anthropology; the major emphasis is placed on the study of human culture.

**Astronomy 1101. Introduction to Astronomy 3-2-4**

Prerequisite: Mathematics 1101

Quarter Equivalent: AST 101

Focuses on solar system stellar evolution, galaxies, and cosmology. The labs will concentrate on the descriptive aspects of astronomy (locating stars and constellations) and will include some night time observation sessions using binoculars and telescopes.

**Automotive Technology 1011. Engine Principles & Construction 2-2-3**

Quarter Equivalent: AUM 110

Develops a thorough understanding of basic engine principles, enabling the student to troubleshoot and perform engine overhaul as prescribed by the various engine manufacturers.

**Automotive Technology 1012. Computer Control & Fuel Systems 2-2-3**

Quarter Equivalent: AUM 115 and AUM 117

Provides a foundation for servicing electronic fuel injection in great detail, includes operation and service of fuel management sensors, and air management is discussed. (Technical Certificate Course)

**Automotive Technology 1013. Principles of Engine Tune-Up 2-2-3**

Quarter Equivalent: AUM 124

Emphasizes the fundamentals of the modern automotive engine, using tune-up equipment for diagnosis and adjustment from the basic point type to the modern distributor less systems. Also includes servicing CCC systems, HEI, EST, and Hall Effect Ignition systems. (Technical Certificate Course)

**Automotive Technology 1014. Automotive Shop Practice I 0-8-4**

Quarter Equivalent: AUM 119

Provides students with opportunities in the diagnosis and repair of automotive problems. Experiences will be gained either in the campus

automobile lab or in automotive dealerships and independent garages. (Technical Certificate Course)

**Automotive Technology 1021. Specialized Automotive Electronic 2-2-3**

Quarter Equivalent: AUM 120

Course builds from the electrical principles and concepts through automobile semi-conductors to microprocessors. Includes electrical measurement devices and wire repairing including copper/aluminum and weather pack service techniques through on-bench and on-car practical exercises and homework. Students build personal test equipment in class and practice diagnostic procedures applicable to present and future automotive electronics systems. (Technical Certificate Course)

**Automotive Technology 1022. Automotive Charging & Starting Systems 2-2-3**

Quarter Equivalent: AUM 126

The fundamentals of electrical theory and how it applies to the modern automobile. Includes a study of AC and DC systems, starting motors, and voltage regulators. (Technical Certificate Course)

**Automotive Technology 1023. Power Train & Transmission 2-2-3**

Quarter Equivalent: AUM 130, AUM 132, and AUM 134

Provides an understanding of the many problems encountered in automotive transmissions, and enables the student to troubleshoot and perform minor repairs as prescribed by the vehicle manufacturer.

**Automotive Technology 1024. Automotive Shop Practice II 0-8-4**

Quarter Equivalent: AUM 129

Provides students with opportunities in the diagnosis and repair of automotive problems. Experiences will be gained either in the campus automotive lab or in automotive dealerships and independent garages. (Technical Certificate Course)

**Automotive Technology 1031. Automotive Brakes System 2-2-3**

Quarter Equivalent: AUM 140

Presents the basic fundamentals of steering systems, front and rear suspension systems, and wheel alignment and balancing. Also a study of service procedures on standard hydraulic brakes. (Technical Certificate Course)

**Automotive Technology 1032. Automotive Air Conditioning Systems 2-2-3**

Quarter Equivalent: AUM 144

A study of basic refrigeration principles and automotive air conditioning operations; enables the student to troubleshoot, repair, and install automotive air conditioning as prescribed by the manufacturers. (Technical Certificate Course)

**Automotive Technology 1033. Steering and Suspension Systems 2-2-3**

Quarter Equivalent: AUM 146

Presents the basic fundamentals of steering systems, front and rear suspension systems, and wheel alignment and balancing. Laboratory assignments develop skills and knowledge needed to properly service steering and suspension systems on the modern automobile.

**Automotive Technology 1034. Automotive Shop Practice III 0-8-4**

Quarter Equivalent: AUM 139

Provides students with opportunities in the diagnosis and repair of automotive problems. Experiences will be gained either in the campus automotive lab or in automotive dealerships and independent garages. (Technical Certificate Course)

**Biology 1100. Human Biology 3-0-3**

Quarter Equivalent: BIO 100

Prepares non-health majors for employment in the health professions. Topics include basic chemistry, cell biology, genetics, and digestive, excretory, respiratory, circulatory, endocrine, reproductive, and skeletal systems. Laboratory demonstrations and practices are included. (Technical Certificate Course)

**Biology 1101. General Biology I 3-2-4**

Quarter Equivalent: BIO 101

Focuses on the study of biological principles using the scientific method. Topics covered include molecular and cellular biology, energy transformations, nutrient procurement, gas exchange, transport of materials, circulatory systems, osmoregulation and excretion, hormonal control, and the reproductive system.

**Biology 1102. General Biology II 3-2-4**

Prerequisite: Biology 1101

Quarter Equivalent: BIO 102

Continues the study of biological principles begun in Biology 1101. Topics covered include cellular reproduction, genetics, gene regulation, genetic engineering, immunology, development, evolution, ecology, nervous systems, and behavior.

**Biology 1105. Environmental Studies 3-2-4**

Quarter Equivalent: BIO 105

Focuses on the interrelationship of the biological and physical components of the environment and the impact of human activities on the biosphere.

**Biology 2203. Principles of Botany 3-2-4**

Quarter Equivalent: BIO 203

Introduces students to plant cell biology, anatomy, physiology, genetics, biotechnology, economic importance, diversity, and classification. Teaches students sterile technique, basic plant tissue culture, and techniques for microscopic observation of plants.

**Biology 2212. Anatomy and Physiology 3-3-4**

Prerequisite: Biology 1101, except Plan 1 Nursing Majors

Quarter Equivalent: BIO 212

Focuses on the study of human anatomy and physiology. Topics include chemistry, cells, tissues, and the integumentary, skeletal, muscular, nervous, and endocrine systems.

**Biology 2213. Anatomy and Physiology 3-3-4**

Prerequisite: Biology 2212 or permission of MLT advisor

Quarter Equivalent: BIO 213

Continues the study of human anatomy and physiology begun in Biology 2212. Topics covered include the circulatory-lymphatic, immune, respiratory, digestive-metabolic, excretory, and reproductive systems and human development and heredity.

**Biology 2215. Microbiology 3-2-4**

Prerequisite: Biology 1101 or Biology 2212

Quarter Equivalent: BIO 215

Introduces students to the biology of viruses, bacteria, fungi, and protozoan and animal parasites. Teaches students the fundamental principles of microbiology with special emphasis on the relationships of microbes to man. Trains students to isolate, culture, and identify microbes in a laboratory.

**Biology 2224. Entomology 3-2-4**

Prerequisite: Biology 1102

Quarter Equivalent: BIO 224

Presents an introduction to the anatomy, biology, and behavior of insects. The laboratory emphasizes classification and identification of insects.

**Business Administration 1105. Introduction to Business 3-0-3**

Quarter Equivalent: BUA 251

Surveys the functional areas of business (finance, operations, marketing, human resources, etc.).

**Business Administration 1115. Fundamentals of Computer Applications 2-2-3**

Prerequisite: Degree credit math course or permission of instructor.

Quarter Equivalent: BUA 115

Assures a basic level of computer applications literacy; to include spreadsheet, database, word processing, LAN, e-mail, and Internet utilizations.

**Business Administration 2105. Communication in the Business Environment 3-0-3**

Prerequisite: English 1101

Quarter Equivalent: BUA 231

Emphasizes both interpersonal and organizational communications; includes written and oral exercises appropriate to business practice.

**Business Administration 2106. The Environment of Business 3-0-3**

Quarter Equivalent: BUA 270

Introduces the political, social, legal, ethical, environmental, and technological issues which form the context for business; includes an overview of the impact of demographic diversity on organizations.

**Certified Nursing Assistant 1110. Basic Nursing Assistant Skills 2-2-3**

Prerequisite: Permission of instructor.

Quarter Equivalent: CNA 110

This course emphasizes the needs of the elderly and other persons requiring the services of nursing facilities. It focuses on nursing assistant skills and functions, safety and the psychosocial approach to the care of the resident. Caring, understanding, and respect for the residents as individuals are important attitudes conveyed to the nursing assistant. Skills such as body mechanics and safety, feeding, bath and bed making are practiced in the nursing lab before applying these skills in the clinical setting. (Technical Certificate Course)

**Certified Nursing Assistant 1111. CNA Clinical Practicum 0-6-2**

Prerequisite: Certified Nursing Assistant 1110

Quarter Equivalent: CNA 111

The purpose of this clinical practicum is to provide the student with opportunity to utilize developing skills acquired in the classroom and lab of CNAS 1110. The goal of these skills includes: acquiring insight into his/her personal development, developing and utilizing communication skills, and to safely and effectively relate theory as presented in the classroom setting to the individual patient in a clinical area (examples: Geriatrics and Acute Care Hospitals). (Technical Certificate Course)

**Certified Nursing Assistant 1130. Home Care Training 1-0-1**

Prerequisite: Certified Nursing Assistant 1111

Quarter Equivalent: CNA 130

This course builds upon the basic Certified Nursing Assistant concepts with an expansion of the role of the Certified Nursing Assistant in order to function outside of the structure of the healthcare facility. Subject areas included are orientation to the home care industry, communication skills, working with people, caring for clients at various stages of development, and caring for the client's home environment. (Technical Certificate Course)

**Certified Nursing Assistant 1131. Home Care Skills Practicum 0-6-2**

Prerequisite: Certified Nursing Assistant 1130

Quarter Equivalent: CNA 131

This course is the clinical component of Certified Nursing Assistant 1130. Principles and skills introduced in the classroom will be practiced in the clinical setting under the supervision of a nurse preceptor (RN or LPN). During the two weeks of clinical practicum, the student will meet with their primary instructor at the end of the week for post-conference and problem solving. (Technical Certificate Course)

**Chemistry 1105. Fundamentals of Chemistry 3-3-4**

Prerequisite: High School Algebra II with a "C" average or exit Mathematics 0098

Quarter Equivalent: CHM 105

Introduces the fundamentals of chemistry including general principles of atomic structures, bonding, reactions, gases, water, solutions, pH and elementary organic chemistry and biochemistry.

**Chemistry 1121. General Chemistry I 3-3-4**

Prerequisite: Mathematics 1101 or permission of instructor

Quarter Equivalent: None

Explores the discipline of chemistry through an understanding of the basic laws and properties of matter, stoichiometry, atomic structure, chemical bonding, gas laws, solutions and the physical states of matter. Requires laboratory experimentation which illustrates applications of concepts studied in lecture.

**Chemistry 1122. General Chemistry II 3-3-4**

Prerequisite: Chemistry 1121

Quarter Equivalent: None

Continues the exploration of the discipline of chemistry begun in Chemistry 1121. Focuses on the more quantitative aspects of chemistry including chemical equilibria, kinetics, acid-base, solubility product, electrochemistry and coordination compounds. Requires laboratory development of techniques necessary to identify common metallic and non-metallic ions.

**Chemistry 2240. Organic Chemistry I 3-3-4**

Prerequisite: Chemistry 1122 or permission of instructor

Quarter Equivalent: CHM 240

Introduces the chemistry of organic compounds including aliphatic and aromatic hydrocarbons, stereo-chemistry, monofunctional compounds and some polyfunctional compounds. Requires the illustration of techniques for synthesis, separation, purification and identification of organic compounds in the laboratory.

**Chemistry 2241. Organic Chemistry II 3-3-4**

Prerequisite: Chemistry 2240

Quarter Equivalent: CHM 241

Continues the exploration of the chemistry of organic compounds with an emphasis on the characteristics and reactions of a variety of functional groups. Requires the illustration of techniques for synthesis, separation, purification and identification of organic compounds in the laboratory.

**Cinema 1101. Introduction to Film as Literature 3-0-3**

Prerequisite: English 1101 or permission of the instructor.

Quarter Equivalent: CIN 101

Presents an introduction to film which incorporates humanistic, philosophic, and historical analyses of film from the silent period through modern times. Explores selected films for critical application of these methodologies as well as appreciation through lectures, readings, and viewings, including capability in electronic resources and documentation.

**Communications 1110. Fundamentals of Speech 3-0-3**

Quarter Equivalent: SPC 108

Presents a course in the basic principles of effective oral communication. Emphasizes planning, researching, organizing, and presenting types of speeches used in business, educational, and political activities. Gives special attention to informative and persuasive extemporaneous speeches.

**Communications 2240. Group Discussion and Parliamentary Procedure 3-0-3**

Quarter Equivalent: None

Focuses on the theory and practical application of discussion methods used in committees, informal groups, and business conferences. Special attention will be given to the principles and practices in the use of parliamentary procedure, motions, amendments, nominations, elections, constitutions, and bylaws. The main emphasis is on group theory, problem solving, and critical thinking.

**Computer Applications/Systems 1101. Introduction to Computers 2-2-3**

Corequisite: Office Administration 1140, or knowledge of computer key functions and ability to type at least 20 words per minute, or permission of instructor.

Quarter Equivalent: CAS 101

A survey of computer-related topics; including the basic elements of a computer system, ways in which computers can be used, and their organizational and social impact. Hands-on experience with microcomputers using Microsoft Windows, data-management, and electronic-spreadsheet programs. (Career Course)

**Computer Applications/Systems 1120. Data Center Operations 3-2-4**

Prerequisite: Computer Applications/Systems 1101, or Business Administration 1115, or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 120

A survey of jobs and opportunities in computer centers. Lectures are supported by hands-on laboratory exercises, primarily utilizing the IBM AS/400. (Career Course)

**Computer Applications/Systems 1130. Data Communications and Networking 3-2-4**

Corequisite: Computer Applications/Systems 1140 or permission of instructor.

Quarter Equivalent: CAS 130

Coverage of the fundamentals of data communications, including hardware, software, protocols, local and wide-area networks, and network issues. (Career Course)

**Computer Applications/Systems 1140. Microcomputer Operating Systems 3-2-4**

Prerequisite: Computer Applications/Systems 1101, or Business Administration 1115, or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 140

An overview of operating system essentials for microcomputers, with emphasis on those used with IBM compatibles. (Career Course)

**Computer Applications/Systems 1150. Multiuser Operating Systems 3-2-4**

Prerequisite: Computer Applications/Systems 1120, or permission of instructor.

Quarter Equivalent: CAS 150

Study of operating system concepts emphasizing the operating systems used on minicomputers and mainframes. Hands-on experience is provided using UNIX and the OS/400 operating system. (Career Course)

**Computer Applications/Systems 1203. COBOL 3-2-4**

Prerequisites: Computer Applications/Systems 1101, or Business Administration 1115, or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 203

The design, coding and testing of programs using COBOL. Programs written include arithmetic operations, simple IF statements, and the generation of reports with edited output and final totals. (Career Course)

**Computer Applications/Systems 1209. Computer Problems 0-9-3**

Prerequisite: Four CAPS courses, or three CAPS courses (other than CAPS 1101) plus an introductory course such as Business Administration 1115 or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 209

Students obtain job-related experience in a data-processing installation or computer-utilizing unit in the community; or perform special projects to meet their individual needs. (Career Course)

**Computer Applications/Systems 1211. Programming in RPG I 3-2-4**

Prerequisite: Computer Applications/Systems 1101, Business Administration 1115, Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 211

Students design, code, and test programs using the Report Program Generator (RPG IV) language. Programs written include report editing, mathematical operations, use of subroutines to support structured programming, IFs and case structures, and external and logical files. (Career Course)

**Computer Applications/Systems 1212. Programming in RPG II 3-2-4**

Prerequisite: Computer Applications/Systems 1211 or permission of instructor.

Quarter Equivalent: CAS 212

A continuation of CAPS 1211. Programs written include file processing, interactive applications, and tables and arrays. Review of RPG logic cycle. (Career Course)

**Computer Applications/Systems 1216. Database and Interactive Applications 3-2-4**

Prerequisite: Computer Applications/Systems 1101, or Business Administration 1115, or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 216

This course involves application development in an interactive-database environment. Students receive hands-on experience with a microcomputer database package. (Career Course)

**Computer Applications/Systems 1217. Electronic Spreadsheets 3-2-4**

Prerequisite: Computer Applications/Systems 1101, or Business Administration 1115, or Computer Science 1125, or permission of instructor.

Quarter Equivalent: CAS 217

Study of various types of applications using electronic spreadsheets. Topics include financial, statistical, database, and graphic applications; and macros. (Career Course)

**Computer Applications/Systems 1218. Systems Analysis and Design 3-0-3**

Prerequisite: Computer Applications/Systems 1101 and Computer Applications/Systems 1216 and/or 1217, or permission of instructor.

Quarter Equivalent: CAS 218

An overview of the system development life cycle. Discussion of the analysis and documentation of existing systems, development of requirements for alternate systems, and design/implementation considerations for new systems. Emphasis is on tools (i.e., data-flow diagrams) used in all phases of the life-cycle. (Career Course)

**Computer Applications/Systems 1219. Software Testing and Maintenance 3-2-4**

Prerequisite: Computer Applications/Systems 1216 and 1217, or permission of instructor.

Quarter Equivalent: CAS 219

Construction of test data; advanced debugging and testing techniques. Students modify and debug applications using test data that they construct. (Career Course)

**Computer Applications/Systems 1235. Local Area Networks 3-2-4**

Prerequisites: Computer Applications/Systems 1130 and 1140.

Quarter Equivalent: CAS 235

Installation, management, and maintenance of local area networks, with focus on Novell NetWare and Windows NT. (Career Course)

**Computer Applications/Systems 1240. Advanced Topics in Computer Applications/Systems 3-2-4**

Prerequisite: Permission of instructor.

Quarter Equivalent: CAS 240

Selected topics in the use of the computer based on current needs and trends; for example, an in-depth exploration of an operating system or an introduction to a programming language not currently taught. (Career Course)

**Computer Science 1100. Computer Literacy 1-0-1**

Quarter Equivalent: None

Introduces basic computer concepts including computer terminology, Windows 95, and navigation of the Internet. Students will be exposed to the components that comprise computer hardware and the software needed to effectively use personal computers.

**Computer Science 1125. Computer Concepts 3-0-3**

Prerequisite: Mathematics 1101 or permission of instructor

Quarter Equivalent: CSC 125

Covers such topics as computer operating systems and problem solving using applications software. Software packages in word-processing, spreadsheet design and database management will be studied. For non-computer science majors.

**Computer Science 2220. Programming in Pascal 3-0-3**

Prerequisite: Permission of instructor, CMPS 1125, BUSA 1115, or CAPS 1101

Quarter Equivalent: CSC 220

Introduces computer programming using the Pascal language. Emphasis is on the design and teaching of correct well-structured algorithms using appropriate control structures with simple data types and data structures.

**Computer Science 2221. Programming in C++ 3-0-3**

Prerequisite: CMPS 2220 or permission of instructor

Quarter Equivalent: CSC 221

Continues the development of program design using the language C++.

**Criminal Justice 2201. Introduction to Criminal Justice 3-0-3**

Prerequisites: Political Science 1101 and Sociology 1101, or permission of the instructor.

Quarter Equivalent: CRJ 201

Introduces the study of the institutions and processes of the criminal justice system, including the legislature, law enforcement, attorneys, courts, and corrections. An emphasis is placed upon inter-component relations and checks and balances within the system. Discussion of relevant philosophical models of the criminal justice system is included.

**Criminal Justice 2221. Introduction to Criminology 3-0-3**

Prerequisite: Sociology 1101

Quarter Equivalent: CRJ 221

Examines criminal behavior, theories of deviance, and social control. Considers the relationship between individual deviance and social disorder.

Includes analysis of criminal statistics as well as models of treatment and prevention.

**Criminal Justice 2231. Introduction to Corrections 3-0-3**

Prerequisite: Sociology 1101

Quarter Equivalent: CRJ 231

Investigates the history and origins of the correctional process through the organizational structure, the treatment procedures, and the control and management of institutions, jails, and detention facilities.

**Criminal Justice 2261. Introduction to Juvenile Justice 3-0-3**

Prerequisite: Sociology 1101

Quarter Equivalent: CRJ 261

Examines the nature of juvenile delinquency as well as the significant causal theories and models of treatment and prevention. Includes analysis of delinquency statistics and relationships among selected social indicators.

**Dalton College Studies 1101. A Guide to College Success 2-0-2**

Quarter Equivalent: DCS 101

Concentrates on the requirements for success at Dalton College and provides practical strategies and methods of realizing success. Self-assessment, feedback and reinforcement activities are applied to the development of effective study skills, self-management strategies, interpersonal communication skills, and short- and long-term goals. The course prepares students to assume responsibility for their own learning and growth. (Institutional Credit)

**Dalton College Studies 1105. Career Choices and Decisions 1-0-1**

Quarter Equivalent: DCS 105

Provides an overview of the career planning process. Information, activities, and resources will assist students in developing the skills necessary in choosing a major/career, learning about various occupations and industries, and exploring educational options. (Institutional Credit)

**Dalton College Studies 1110. Personal Development and Wellness 1-0-1**

Quarter Equivalent: DCS 110

Explores the concept of personal development, focusing on the application of life management skills to student success. The dimensions of wellness as they relate to the whole person physical, mental, and psychological are discussed, and life skills such as goal-setting and motivation, stress management, and communication skills are presented. (Institutional Credit)

**Drafting 1120. Applied Computer Graphics 1-4-3**

Prerequisite: Computer Applications/Systems 1101, or permission of instructor.

Quarter Equivalent: DFT 120

This course provides an introduction to computer graphics used in business applications. It is designed for the non-drafting student. Topics covered include terminology, hardware, and applications software necessary to produce computer generated graphics. (Career Course)

**Drafting 1141. Engineering Graphics I 1-4-3**

Quarter Equivalent: None

Engineering Graphics I is the introductory course for students majoring in Drafting and Design Technology. The course will introduce engineering graphics and its role in the engineering and manufacturing process. Beginning sketching, lettering, and the use of drafting tools as well as the process of creating working drawings are presented. (Career Course)

**Drafting 1143. Engineering Graphics II 1-4-3**

Prerequisite: Drafting 1141.

Quarter Equivalent: None

This course will build upon and expand knowledge and skill levels in geometric construction, multi-view drawing, sectioning, and dimensioning practices. Pictorial drawing along with auxiliary, steel detailing and welding drawing are introduced. (Career Course)

**Drafting 1145. Geometric Tolerancing and Dimensions 1-2-2**

Prerequisite: Drafting 1141.

Quarter Equivalent: None

The course will introduce the student to geometric tolerancing and dimensioning and how these practices are used in machine drawings found in various industries. The student will gain experience applying geometric tolerances to machine design problems. (Career Course)

**Drafting 1151. Introduction to Computer-Aided Drafting (CAD I) 2-3-3**

Quarter Equivalent: DFT 124

Introduces the student to computer-aided drafting (CAD I) and its role in today's engineering processes. Includes micro-based CAD software and the use of plotters and other computer graphics hardware. (Career Course)

**Drafting 1153. Intermediate Computer-Aided Drafting (CAD II) 2-3-3**

Prerequisites: Drafting 1141 and 1151.

Quarter Equivalent: DFT 254

This course will cover 3D CAD. The use of 3D space, 3D tools, solids modeling and advanced modeling concepts and commands. The student will have an introduced to the programming language of AutoLisp. (Career Course)

**Drafting 1161. Architectural Drafting I 1-2-2**

Prerequisite: Drafting 1141.

Quarter Equivalent: None

This course will give the student an overview of architectural drafting. The student will be exposed to components of architectural plans, lettering, and sketching. The course will be taught using traditional board drafting techniques. (Career Course)

**Drafting 2245. Descriptive Geometry 2-3-3**

Prerequisite: Drafting 1141.

Quarter Equivalent: DFT 224

This course will present descriptive geometry as a problem solving tool. Students experience how descriptive geometry is used in developing solutions to technical design problems. (Career Course)

**Drafting 2247. Manufacturing Processes 1-2-2**

Prerequisite: Drafting 1141.

Quarter Equivalent: DFT 132

Various manufacturing processes will be introduced along with the use of calipers, micrometers, and computer-aided manufacturing (CAM). (Career Course)

**Drafting 2255. Advanced Computer-Aided Drafting (CAD III) 2-3-3**

Prerequisites: Drafting 1151 and 1153.

Quarter Equivalent: DFT 264

A study of 3D modeling and rendering techniques used to create photo-realistic renderings, animation, and presentations. (Career Course)

**Drafting 2257. CAD Machine Drafting I 2-3-3**

Prerequisites: Drafting 1141 and 1151.

Quarter Equivalent: DFT 128

This course introduces components and design concepts used in creating machine drawings and working drawings. (Career Course)

**Drafting 2259. CAD Machine Drafting II 2-3-3**

Prerequisite: Drafting 2257.

Quarter Equivalent: DFT 228

This course is where all drafting concepts come together. Subjects include working drawings, sheet layout, zoning, bill of materials, and assembly drawings. (Career Course)

### **Drafting 2263. Architectural Drafting II 2-3-3**

Prerequisites: Drafting 1151 and 1161.

Quarter Equivalent: DFT 232

Covers basic principles of house planning and styles of home architecture. The student will prepare a complete set of residential house plans using architectural CAD software. (Career Course)

### **Drafting 2274. Special Problems in CAD 1-4-3**

Prerequisites: Permission of Instructor

Quarter Equivalent: DFT 274

Course will include selected advanced CAD topics, CAD updating skills, and other software applications not covered in previous CAD courses. (Career Course)

### **Economics 1101. Introduction to Economics 3-0-3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: ECN 101

Describes and analyzes the economic operation of a modern industrial/commercial society, promotes an understanding of economic concepts as they apply to everyday life, and examines the role of government in the economy. (Designed primarily for students in non-business programs)

### **Economics 2105. Principles of Macroeconomics 3 0 3**

Prerequisite: Degree credit math course or permission of instructor

Quarter Equivalent: ECN 202

Surveys macroeconomic principles. Topics covered include the scope and method of economics, basic demand and supply theory, national income/output analysis, employment/unemployment, inflation, fiscal policy, and monetary policy.

### **Economics 2106. Principles of Microeconomics 3 0 3**

Prerequisite: Degree credit math course or permission of instructor

Quarter Equivalent: ECN 201

Surveys microeconomic principles. Topics covered include the operation of markets, output and price determination, market structure, income distribution, government regulation of business, labor organizations, and international trade.

### **Education 2203. Introduction to Education and Teaching 3-0-3**

Prerequisite: Psychology 1101, or Sociology 1101, or permission of instructor.

Quarter Equivalent: EDU 203

Introduces the historical, philosophical, and organizational aspects of teacher education. Includes a 32-hour practicum of primary, middle, and/or secondary classroom observation.

### **Electronics and Computer Technology 1010. Basic Electrical Circuits Analysis 3-4-5**

Prerequisite: None

Quarter Equivalent: ELT 101 and ELT 103

Provides knowledge and skills to analyze, construct, and troubleshoot basic electrical circuits that contain resistors, inductors, and capacitors. Topics include: electrical laws, safety practices, series-parallel circuits, instruments, soldering, energy and power, opens and shorts, inductance, and capacitance. (Career Course)

### **Electronics and Computer Technology 1020. AC Circuits Analysis 3-4-5**

Prerequisites: ELCT 1010 or permission of instructor

Quarter Equivalent: ELT 103 and ELT 105

Provides knowledge and skills to analyze, construct, and troubleshoot basic RL and RC circuits. Topics include: transformers, generations of DC and AC electricity, oscilloscopes, frequency, amplitude, period, and phase, magnetism, L (inductance), C (capacitance), reactance, impedance, resonance, filters, three-phase power systems. (Career Course)

### **Electronics and Computer Technology 1030. Electronic Devices and Circuits 3-4-5**

Prerequisites: ELCT 1020 or permission from instructor.

Quarter Equivalent: ELT 106 and ELT 108

Provides knowledge and skills to analyze, construct, and troubleshoot semiconductor circuits. Topics include: junction diodes, Zener regulators, bipolar transistors, field effect transistors, thyristors, opto devices, basic amplifiers, operational amplifiers, linear integrated circuits, power supplies, oscillators, waveshaping circuits, and modulation and demodulation circuits. (Career Course)

### **Electronics and Computer Technology 1040. Visual BASIC Programming 3-4-5**

Prerequisites: Introduction to Computers 1101 or permission from instructor.

Quarter Equivalent: ELT 111

This course provides the student with knowledge and skills to create programs using Microsoft's Visual BASIC. Topics include BASIC programming, debugging programs, forms, menus, OLE, standard controls, custom controls and ACTIVEX controls. Upon completion of this course, students will be able to develop applications using Visual BASIC. (Career Course)

### **Electronics and Computer Technology 2010. Microprocessor Technology 3-4-5**

Prerequisites: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: ELT 126 and ELT 128

This course provides knowledge and skills to analyze, interface, program, construct, and troubleshoot microprocessor-based circuits. Topics include: microprocessor architecture, machine language programming, memory, input-output, addressing schemes, digital-to-analog and analog-to-digital conversions, peripheral interface adapters, communications, and peripheral input-output devices. (Career Course)

### **Electronics and Computer Technology 2020. Computer Operating Systems 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: CAS 140

This course provides knowledge and skills to use computer operating systems to install, maintain, and troubleshoot computer applications. Topics include: floppy and hard discs, CPUs, memory, input devices, DOS, and Windows. (Career Course)

### **Electronics and Computer Technology 2030. Electrical Systems Troubleshooting 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or instructor approval.

Quarter Equivalent: IEL 142

Provides knowledge and skills to methodically troubleshoot electrical/electronic systems. Topics include: review of basic electrical concepts relating to all electrical and electronic components, industrial control devices circuits, transformers, motors, troubleshooting methodology and skills, and maintenance. (Career Course)

### **Electronics and Computer Technology 2040. Programmable Logic Controllers (PLCs) 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or instructor approval.

Quarter Equivalent: IEL 144

Provides knowledge and skills to analyze, construct, program, and troubleshoot computer-based programmable logic controllers used in industrial processes. Topics include: programmable controllers, input/output, processing and programming, field wiring, start-up, timers, counters, sequencers, analog and digital I/O, PID, Human Machine Interface (HMI) software and troubleshooting. (Career Course)

### **Electronics and Computer Technology 2050. Electrical Codes and Circuits 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: IEL 120 and IEL121

Provides knowledge and skills to analyze electrical power distribution systems with emphasis on National Electrical Code conformity. Topics include: wiring methods, branch circuits, feeders and mains, residential, commercial, industrial, grounding, hazardous locations, motor circuits, GFCI's, ladder logic, start-stop control, forward-reversing, wiring and line diagrams, timers, counters, and sensors. (Career Course)

### **Electronics and Computer Technology 2060. Motors, Controls and Drives 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: IEL 131 and IEL 132

Provides knowledge and skills to analyze, construct, and troubleshoot DC motors and control circuits. Topics include: DC motors, controllers, motor circuit protection, braking, forward and reversing, acceleration and deceleration and Electronic motor drives, single-phase AC motors, three-phase AC motors, Electronic AC motor drives (Inverters), branch circuit protection, overload protection. (Career Course)

### **Electronics and Computer Technology 2070. Networking 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: CAS 130

This course provides knowledge and skills for the student to install, maintain, and troubleshoot computer networks and data communication systems. Topics include: communication hardware and software, networking hardware and software, cabling and connections, terminations, fiber optics, network management, protocols, installing and maintaining local area networks. (Career Course)

### **Electronics and Computer Technology 2080. Computer Systems Troubleshooting 3-4-5**

Prerequisite: Electronics and Computer Technology 1040 or permission of instructor.

Quarter Equivalent: ELT 146 and ELT 148

This course provides knowledge and skills for the student to install, maintain, and troubleshoot microcomputer systems. Topics include: software diagnostics, hardware diagnostics, system upgrading, disk drives, CD ROMs, monitors, printers, peripheral and network interface cards. (Career Course)

### **Emergency Medical Services Technology 1100. Emergency Medical Service I 6-2-7**

Prerequisite: Admission to the Basic EMT program.

Quarter Equivalent: EMS 100 and EMS 101

Introduction to Emergency Medical Services and Emergency Medical Technician's skills; Emergency Medical Services and the Law; introduction to Emergency Vehicle Operations, and Equipment; introduction to Blood and

Airborne Pathogens; Universal Precautions; Introduction to Hazardous Materials; Introduction Anatomy and Physiology; Patient Assessment; and Radio Communications; introduction to written documentation; introduction to Basic Life Support; introduction to the use of an Automatic External Defibrillator; introduction to the use of airway adjuncts and oxygen therapy. (Career Course)

**Emergency Medical Services Technology 1101. Emergency Medical Services II 6-2-7**

Prerequisite: Emergency Medical Services 1100.

Quarter Equivalent: EMS 101 and EMS 102

Introduction to wounds, bleeding, and bandaging; introduction to shock, instruction of MAST as an invasive procedures; introduction to General Pharmacology and the use of Ephrine - SQ 1: 1,000 in anaphylaxis. Covers the invasive procedures of IV therapy and treatment and management of injuries to soft tissue, the abdomen, the musculoskeletal system, the head, neck, chest, and spine. Covers environmental and behavioral emergencies as well as disaster/triage and patient lifting, moving and handling. (Career Course)

**Emergency Medical Services Technology 1102. Emergency Medical Services III 4-6-7**

Prerequisite: Emergency Medical Services 1101.

Quarter Equivalent: EMS 102 and EMS 104

Procedures in the assessment and management of medical emergencies, pediatrics, obstetrics, environmental and behavioral emergencies are covered. Sessions involving patient management and mechanical aspects of extrication are included. Supervised experience with patients in clinical facilities is included. (Career Course)

**Emergency Medical Services Technology 1103. Introduction to the Paramedic Profession 3-1-3**

Prerequisite: Program admission or permission of instructor.

Quarter Equivalent: EMS 103

Introduces the student to the paramedic profession and provides an overview of human systems with emphasis on appropriate medical terminology, systems function, and initial patient management. Discussion of the paramedic profession centers on functions that extend beyond those of the EMT. Topics include: the role and responsibilities of the paramedic, the emergency services system, medical/legal considerations, emergency medical services communications, major incident response, medical terminology, anatomy and physiology, primary and secondary assessment and early field management. This course provides instruction on topics in Division I, Sections 1, 2, 3, 4, and 6 and Division II of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1105. Fluids, Electrolytes, and Shock 1-1-1**

Prerequisite: Program admission.

Corequisite: Emergency Medical Services Technology 1103.

Quarter Equivalent: EMS 105

Emphasizes the pathophysiology of shock and the functions and characteristics of body fluids. Topics include: cardiovascular anatomy and physiology; fluid and electrolyte balance; and classification, assessment, and management of shock. This course provides instruction on topics in Division II, Section 4 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1106. General Pharmacology for Paramedics 1-1-1**

Prerequisite: Program Admission

Corequisite: Emergency Medical Services Technology 1103, 1105, Mathematics 1104

Quarter Equivalent: EMS 106

Provides a study of the principles and procedures necessary for the proper use and administration of pharmaceuticals in emergency medical care. Topics

include: identification of drugs, drug calculations, drug administration techniques and procedures, and drug safety and standards. This course provides instruction on topics in Division II, Section 5 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1107. Respiratory Function and Management 3-1-3**

Prerequisites: Program admission, Emergency Medical Services Technology 1103.

Quarter Equivalent: EMS 107

Provides an in-depth study of the anatomical and physiological foundation of respiration and the assessment and management of respiratory pathophysiology and distress. Topics include: anatomy and physiology of the respiratory system, respiratory assessment, airway and ventilation management, and respiratory disease. This course provides instruction on topics in Division IV, Section I and Division II, Section 3 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1108. Cardiology 6-1-6**

Prerequisites: Program admission, Emergency Medical Services Technology 1103

Quarter Equivalent: EMS 108

Emphasizes the study of the cardiovascular system, electrocardiography, and cardiovascular treatment methods. Topics include: cardiovascular anatomy and physiology; principles of electrocardiography; recognition of cardiac dysrhythmias; assessment and management of cardiovascular emergencies; methods of emergency cardiovascular treatment such as pharmacologic intervention, defibrillation, and cardioversion; and ACLS skills. This course provides instruction on topics in Division IV, Section 2 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1109. Trauma 3-1-3**

Prerequisite: Emergency Medical Services Technology 1105

Quarter Equivalent: EMS 109

Introduces students to the assessment and management of trauma patients. Topics include: systematic approaches to the assessment and management of trauma, such as basic trauma life support (BTLIS) and pre-hospital trauma life support (PHTLS); anatomy and physiology of the integumentary system, the major internal organs, types of soft tissue injuries and their management, types of musculoskeletal injuries and the management, and the classification and care of burns. This course provides instruction on topics in Division I, Section 5 and Division III, Section 1 and 2 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1111. Medical Emergencies I 2-0-2**

Prerequisites: Emergency Medical Services Technology 1105 and 1107.

Quarter Equivalent: EMS 111

Provides an in-depth study of the endocrine, nervous, digestive, genitourinary, immune systems, infectious disease, and anaphylaxis. Topics include: the assessment and management of endocrine system disorders, the assessment and management of nervous system disorders, the assessment and management of digestive system and genitourinary system disorders, and anaphylaxis. This course provides instruction on topics in Division IV, Section 3, 4, 5, 6, and 8 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1112. Medical Emergencies II 2-0-2**

Corequisite: Emergency Medical Services Technology 1111.

Quarter Equivalent: EMS 112

Emphasizes the etiology, pathophysiology and in-field management of immune system compromise and infectious disease and toxicologic, environmental, and gerontological emergencies. Topics include: the

assessment and management of patients with infectious disease and the utilization of universal precautions; toxicology, alcoholism, and substance abuse disease process; management of environmental emergencies; and geriatrics and gerontology. The course provides instruction on topics in Division IV, Sections 7, 9 and 10 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1113. Obstetrics/  
Gynecology 1-1-1**

Prerequisite: Emergency Medical Services Technology 1105.

Quarter Equivalent: EMS 113

Provides a study of the female reproductive system, birth processes, and management of OB/GYN emergencies. Topics include: anatomy and physiology of the female reproductive system, normal and abnormal birth processes, assessment and management of OB/GYN emergencies, assessment and management of the newborn, and management of sexual assault victims. The course provides instruction on topics in Division V, Section 1 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1114. Pediatrics 1-1-1**

Prerequisites: Emergency Medical Services Technology 1105, 1107, 1108, and 1109.

Quarter Equivalent: EMS 114

Provides the student with the necessary knowledge and skills to care for the ill or injured pediatric patient. Topics include: growth and development, specific diseases of the pediatric patient, approach to and assessment of the pediatric patient, and management of the pediatric patient. This course provides instruction on topics in Division IV, Section 11 and Division V, Section 1 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1116. Behavioral  
Emergencies 1-0-1**

Prerequisite: Program admission.

Quarter Equivalent: EMS 116

Provides an overview of the assessment and management of behavioral emergencies as they pertain to pre-hospital care. Topics include: communication skills and crisis intervention, assessment and management of the adult and adolescent patient with behavioral emergencies, management of the violent patient, management of the suicidal patient, medical/legal considerations, and stress management. This course provides instruction on topics in Division VI, Section 1, and Division I, Section 7 of the national curriculum. (Career Course)

**Emergency Medical Services Technology 1118. Clinical Rotation I 0-8-3**

Corequisite: Emergency Medical Services Technology 1103.

Quarter Equivalent: EMS 118

Provides supervised experience that meets Georgia Department of Human Resources (GDHR) requirements for actual patient care in the hospital and advanced ambulance settings. Simulations in the classroom, experience on an advanced ambulance, and service in a hospital develop assessment and treatment skills. Emphasis is placed on ethics, hospital etiquette, assessment and management of medical emergencies, practice of paramedic roles and responsibilities, and application of patient care skills. Clinical opportunities will be provided that meet GDHR requirements for clinical experience in the following areas: ethics and hospital etiquette, care of the critical intensive care patient, intravenous therapy, airway and ventilation management, management of normal and abnormal deliveries, management of the pediatric patient in the emergency department, management of the adult in the emergency department, patient care in an advanced ambulance, and psychological intervention. (Career Course)

**Emergency Medical Services Technology 1128. Clinical Rotation II  
0-8-3**

Prerequisite: Emergency Medical Services Technology 1118.

Quarter Equivalent: EMS 118B

A continuation of the clinical applications of advanced emergency care. (Career Course)

### **Emergency Medical Services Technology 1138. Clinical Rotation III**

**0-8-3**

Prerequisite: Emergency Medical Services Technology 1128.

Quarter Equivalent: EMS 118C

A continuation of the clinical applications of advanced emergency care. (Career Course)

### **Emergency Medical Services Technology 1180. Board Review 1-0-1**

Prerequisite: Permission of instructor.

Quarter Equivalent: EMS 180

A review of didactic material and applied clinical techniques utilized in advanced emergency care. (Career Course)

### **English 0098. Developmental Studies English 4-0-4**

Quarter Equivalent: ENG 098

Emphasis placed on the basics of grammar, paragraphs, and essays to prepare students to complete English 1101 successfully. Students may exit from Developmental Studies from this course. (Institutional Credit)

### **English 1095. Regents' Testing Program 2-0-2**

Quarter Equivalent: ENG 095

Provides required remediation to (1) students who have failed the essay portion of the Regent's Test and to (2) students who have earned 45 degree credit hours and who have not passed (or taken) the essay portion of the Regents' Test. (Institutional Credit)

### **English 1100. Communication Skills 3-0-3**

Prerequisite: Satisfactory English placement score or successfully complete Learning Support English 0090.

Quarter Equivalent: ENG 100

Offers a basic course in the effective use of oral and written communication skills related to the student's technical program and designed to enable the student to organize, compose, and revise reports, business letters, and other forms of business communication. (Technical Certificate Course)

### **English 1101. English Composition I 3-0-3**

Prerequisite: Developmental Studies English 0098 unless exempt.

Corequisite: Developmental Studies Reading 0098 unless exempt.

Students scoring below the acceptable minimum on the diagnostic reading examination must successfully complete Reading 0098 before receiving credit for English 1101.

Quarter Equivalent: ENG 101

Provides a composition course focusing on skills required for effective writing in a variety of contexts, with emphasis on exposition, analysis, and argumentation, and also including introductory use of a variety of research skills. Special sections use computers each semester. A minimum grade of "C" is required in English 1101 before the student can take English 1102.

### **English 1102. English Composition II 3-0-3**

Prerequisite: English 1101 or the equivalent.

Quarter Equivalent: ENG 102

Presents a composition course that develops writing skills beyond the levels of proficiency required by English 1101, that emphasizes interpretation and evaluation, and that incorporates a variety of more advanced research methods, including capability in electronic resources and documentation.

### **English 1110. Creative Writing 1-0-1**

Prerequisite: English 1102 or permission of instructor.

Quarter Equivalent: None

Writing fiction, with an emphasis on plotting, characterization, point of view, imagery, and symbolism for the short story. Special attention is given to drafting and revising. Classes contingent upon enrollment.

### **English 2111. World Literature I 3-0-3**

Prerequisite: English 1102 or permission of the instructor.

Quarter Equivalent: ENG 201

Surveys important works of world literature from ancient times through the mid-seventeenth century.

### **English 2112. World Literature II 3-0-3**

Prerequisite: English 1102 or permission of the instructor.

Quarter Equivalent: ENG 202

Surveys important works of world literature from the mid-seventeenth century to the present. Continues study begun in English 2111, but 2111 is not a prerequisite.

### **Environmental Horticulture 1100. Horticulture Science 2-2-3**

Quarter Equivalent: EHT 100

Introduces the fundamentals of plant science and horticulture as a career field. Topics include: an industry overview, plant parts, plant functions, environmental factors in horticulture, soil functions and components, fertilizer elements and analysis. (Technical Certificate Course)

#### **Environmental Horticulture 1101. Woody and Herbaceous Plant Identification 1-4-3**

Quarter Equivalent: EHT 101

Provides the basis for fundamental understanding of the taxonomy, identification, and culture requirements of woody and herbaceous plants, the classification of woody and herbaceous plants, and woody and herbaceous plant identification and culture requirements. (Technical Certificate Course)

#### **Environmental Horticulture 1103. Greenhouse Management I 2-2-3**

Quarter Equivalent: EHT 103

Develops a basic understanding of greenhouse design, construction, and environmental factors affecting plant growth. Topics include: greenhouse construction, greenhouse heating and cooling, greenhouse soil functions and components, irrigation types and effects, fertilizer types and applications, and fall crops for the local area. (Technical Certificate Course)

#### **Environmental Horticulture 1104. Horticulture Construction and Mechanics 1-4-3**

Quarter Equivalent: EHT 104

Develops skills necessary to design and construct landscape features such as retaining walls, walkways, and irrigation systems. Topics include: tool use and safety, retaining walls, drainage, irrigation/water use, low-voltage lighting, and walkways. (Technical Certificate Course)

#### **Environmental Horticulture 1105. Nursery Production 1-2-2**

Quarter Equivalent: EHT 105

Develops skills necessary to propagate and produce both container and field grown nursery stock. Topics include: an industry overview, facility design, propagation techniques and environment, field grown and container production, irrigation methods, propagation techniques, nursery soil functions and components, fertilizer types and applications, and managerial functions for nursery production. (Technical Certificate Course)

#### **Environmental Horticulture 1106. Landscape Design 1-4-3**

Quarter Equivalent: EHT 106

Introduces design principles, drawing skills, and plant selection techniques required to produce landscape plants for residential and commercial clients.

Topics include: site analysis, landscape design principles, sketching and drawing skills, landscape design process and plant material selection. (Technical Certificate Course)

### **Environmental Horticulture 1107. Landscape Installation 1-4-3**

Quarter Equivalent: EHT 107

Introduces cultural techniques required for proper landscape installation with emphasis on practical application. Topics include: landscape installation procedures and managerial functions for landscape installers. (Technical Certificate Course)

### **Environmental Horticulture 1108. Pest Control 3-0-3**

Quarter Equivalent: EHT 108

Provides experience in insect, disease, and weed identification and control with emphasis on safety and legal requirements for state licensure. Topics include: identification of insects, diseases, and weeds, safety regulations, equipment use and care, and regulations for licensure. (Technical Certificate Course)

### **Environmental Horticulture 1110. Greenhouse Management II 1-4-3**

Quarter Equivalent: EHT 110

Continues hands-on experience in crop production with emphasis on spring foliage crops and managerial skills. Topics include: light and temperature, insects and diseases, propagation techniques, production and scheduling, and winter, spring, and foliage crops for the local area. (Technical Certificate Course)

### **Environmental Horticulture 1112. Landscape Management 1-4-3**

Quarter Equivalent: EHT 112

Introduces cultural techniques required for proper landscape maintenance with emphasis on practical application and managerial techniques. Topics include: landscape management, administrative functions for landscape management, pruning, mowing, fertilization techniques, irrigation methods, estimating bids, and scheduling. (Technical Certificate Course)

### **Environmental Horticulture 1114. Garden Center Management 1-4-3**

Quarter Equivalent: EHT 114

Presents cultural and managerial techniques required for success in the garden center industry. Topics include: garden center establishment, garden center management, post-production handling and marketing, and developing a business plan. (Technical Certificate Course)

### **Environmental Horticulture 1115. Environmental Horticulture Internship 0-3-1**

Quarter Equivalent: EHT 115

Provides the student with practical experience in an actual job setting. This internship allows the student to become involved with on-the-job environmental horticultural applications that require practice and follow through. Topics include: work ethics, skills, and attitudes, demands of the horticulture industry, business management, and labor supervision. (Technical Certificate Course)

### **Fine Arts 1102. Fine Arts Appreciation 3-0-3**

Prerequisite: English 1101 or permission of the instructor.

Quarter Equivalent: FAA 102

Presents an historical study of aesthetic expression through painting, sculpture, music, dance, and architecture as those forms reflect the values and the culture of the societies that produced them. Begins with instruction in the common principles governing all the arts.

### **French 1101. Elementary French I 3-0-3**

Quarter Equivalent: FRN 101

Instructs in the basic principles of French pronunciation and in the fundamentals of grammar and sentence structure. Within a limited vocabulary

range, emphasizes equally the development of speaking, writing, reading, and listening skills.

**French 1102. Elementary French II 3-0-3**

Prerequisite: French 1101 or permission of the instructor.

Quarter Equivalent: FRN 102

Follows the same patterns and objectives used for French 1101 but includes a more detailed study of grammar, longer conversational exercises, and some discussion of French history, culture, and literature.

**French 2201. Intermediate French I 3-0-3**

Prerequisite: French 1102 or two units of high school French.

Quarter Equivalent: FRN 103

Reviews intensively French grammar, verb forms, and idioms. Includes reading of texts of moderate difficulty; more advanced conversation exercises. Classes contingent upon enrollment.

**French 2202. Intermediate French II 3-0-3**

Prerequisite: French 2201.

Quarter Equivalent: None

Continues readings of texts of moderate difficulty in literature and culture of French-speaking peoples; advanced conversation exercises. Classes contingent upon enrollment.

**Geography 1101. Introduction to Human Geography 3-0-3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: GEO 102

Introduces the study of world geography with attention given to demographic, political, cultural, economic, and environmental characteristics of regions of the world.

**Geography 1111. Introduction to Physical Geography 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: GEO 101

Introduces the basic principles of geography as related to the physical elements of the human environment and area distribution throughout the world. Includes maps and locations, weather, climate, and natural resources.

**History 1111. World Civilization to 1500 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: HIS 201

Surveys the history of civilization from its beginnings through the ancient, classic, and medieval eras to 1500 C.E. Although Western civilization and its antecedents in the Mediterranean basin receive the most intense study, Indian, Far Eastern, and Islamic civilizations are also given extensive consideration.

**History 1112. World Civilization since 1500 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: HIS 202

Surveys the history of civilization in the modern era from 1500 C.E. to the present. While the perspective of the course is global, the development of Western ideals and institutions and their expansion on a world-wide scale serve as the basic organizing principles of the course. A continuation of History 1111 but may be taken independently.

**History 2111. United States History to 1877 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: HIS 251

Surveys the history of colonial America and the United States from the first European encounters with the New World through the Civil War and Reconstruction.

**History 2112. United States History since 1877 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: HIS 252

Surveys United States history from the Reconstruction era to the present. A continuation of History 2111 but may be taken independently.

**Humanities 2212. Electronic Culture 1-0-1**

Prerequisite: Computer Science 1100 or comparable skill level.

Quarter Equivalent: None

Carries students beyond the introduction to electronic technology and research begun in English 1102 and the appreciation of culture begun in Fine Arts 1102 to an exploration and assessment of the subject matter of the Humanities in electronic forms, of electronic aids to research, and of the cultural treasures of the Internet. Classes contingent upon enrollment.

**Independent Electrical Contractors 1101. Electricity I 3-2-4**

Quarter Equivalent: IEC 101

An introduction to basic concepts of electricity to include orientation, safety, hand tools, applied math concepts, lighting/appliance circuits, magnetism, conductor sizes/types, wiring, basic circuits, switch controls, receptacles, bonding, OHMS Law, ground fault protection, and lighting fixtures. (Technical Certificate Course)

**Independent Electrical Contractors 1102. Electricity II 3-2-4**

Prerequisite: Independent Electrical Contractors 1101.

Quarter Equivalent: IEC 102

A continuation of electricity including bedroom lighting, parallel circuits, lighting branch circuits, entryway lighting, kitchen circuits, living room/study circuits, laundry outlets, series/parallel, garage circuits, Kirchoff's laws, rec rooms and workshops, efficiency, water pumps and heaters, power sources, and kitchen outlets. (Technical Certificate Course)

**Independent Electrical Contractors 1103. Electricity III 3-2-4**

Prerequisite: Independent Electrical Contractors 1102.

Quarter Equivalent: IEC 103

A continuation of electricity including special purpose outlets, heating systems, low voltage systems, lamp identification, low voltage lighting, fire alarm/security systems, remote control systems, knots and rigging, pipe bending, service entrance equipment, and swimming pools. (Technical Certificate Course)

**Independent Electrical Contractors 1104. Electricity IV 3-2-4**

Prerequisite: Independent Electrical Contractors 1103.

Quarter Equivalent: IEC 104

A continuation of electricity including safety refresher, further applied math concepts, AC electricity, inductance and transformer theory, capacitance, series AC circuits, AC power and resonance, three-phase AC, meters, and generators. (Technical Certificate Course)

**Independent Electrical Contractors 1105. Electricity V 3-2-4**

Prerequisite: Independent Electrical Contractors 1104.

Quarter Equivalent: IEC 105

A continuation of electricity including DC motors, AC motors, motor operation/ types/protection, general wiring, wire conduit and box sizing, outlets, appliances, lighting and heating, services and feeder calculations, grounding, bonding, and overcurrent protection, hazardous locations, motor circuit wiring, health care facilities, and emergency systems. (Technical Certificate Course)

**Independent Electrical Contractors 1106. Electricity VI 3-2-4**

Prerequisite: Independent Electrical Contractors 1105.

Quarter Equivalent: IEC 106

A continuation of electricity including industrial and commercial wiring, special applications wiring and code review, motor control circuits, connection and testing, motor control hookups and review, transformer operation and installation, transformer sizing and protection, transformer connections and testing, autotransformers and secondary ties, and overall review of motors and transformers. (Technical Certificate Course)

### **Independent Electrical Contractors 1107. Electricity VII 3-2-4**

Prerequisite: Independent Electrical Contractors 1106.

Quarter Equivalent: IEC 107

A continuation of electricity including safety review, motor and three-phase system review, transformer review, introduction to blueprint reading, blueprint reading fundamentals, construction processes and concrete blueprints, steel and framing blueprints, plumbing/masonry/welding blueprints, mechanical systems, and electrical blueprints. (Technical Certificate Course)

### **Independent Electrical Contractors 1108. Electricity VIII 3-2-4**

Prerequisite: Independent Electrical Contractors 1107.

Quarter Equivalent: IEC 108

A continuation of electricity including advanced blueprint reading, introduction to grounding, grounding conductors, grounding equipment, fault currents, introduction to motor controls, introduction to logic and line diagrams, contactors and magnetic motor starters, and time delay and complex line diagrams. (Technical Certificate Course)

### **Independent Electrical Contractors 1109. Electricity IX 3-2-4**

Prerequisite: Independent Electrical Contractors 1108.

Quarter Equivalent: IEC 109

A continuation of electricity including application and installation of control devices, reversing circuits, power distribution systems, hazardous location, special hazardous location and fireproofing, signs and sign connections, and basic fiber optics. (Technical Certificate Course)

### **Independent Electrical Contractors 1110. Electricity X 3-2-4**

Prerequisite: Independent Electrical Contractors 1109.

Quarter Equivalent: IEC 110

A continuation of electricity including safety with hazardous materials, solid state electronic control devices, electromechanical and solid state relays, photoelectric and proximity controls, programmable controllers, AC reduced voltage starters, and accelerating and decelerating methods. (Technical Certificate Course)

### **Independent Electrical Contractors 1111. Electricity XI 3-2-4**

Prerequisite: Independent Electrical Contractors 1110.

Quarter Equivalent: IEC 111

A continuation of electricity including preventive maintenance and troubleshooting, triacs, diacs, and transistor amplifiers, introduction to fire prevention signaling systems, alarm initiating devices and indicating appliances, installation and startup of fire alarm systems, maintenance and troubleshooting of fire alarm systems, and wiring methods, materials and design. (Technical Certificate Course)

### **Independent Electrical Contractors 1112. Electricity XII 3-2-4**

Prerequisite: Independent Electrical Contractors 1111.

Quarter Equivalent: IEC 112

A continuation of electricity including design and protection of circuits, motors, controls, air conditioning/refrigeration, transformers and grounding, services, dwellings, industrial/commercial locations, hazardous locations and swimming pools, NEC code review, and leadership concepts. (Technical Certificate Course)

**Law Enforcement 1100. Basic Law Enforcement 3-0-3**

Prerequisite: Approval by a recognized law enforcement agency.

Quarter Equivalent: LEN 100

A basic law enforcement course of 240 hours of classroom instruction designed for all peace officers. The following topics are prescribed by the Georgia Peace Officers Standards and Training Council for the Recruit Minimum Curriculum: Introduction to Law Enforcement, Criminal law, Evidence, Criminal Investigation, Patrol Procedures, Juvenile Procedures, Firearms, Accident Investigation, Community Relations, and First Aid. (Career Course)

**Law Enforcement 1105. Basic Patrol Procedures 3-0-3**

Quarter Equivalent: LEN 105

Introduces law enforcement and patrol procedures. (Career Course)

**Law Enforcement 1110. Fundamentals of Investigation and Crime Scene Processing 3-0-3**

Quarter Equivalent: LEN 110

Introduces criminal investigation. Special emphasis is placed upon the skills necessary to conduct a preliminary criminal investigation and includes recording the scene as well as identifying and collecting physical evidence. (Career Course)

**Law Enforcement 1115. Rules of Evidence and Courtroom Presentation 3-0-3**

Quarter Equivalent: LEN 115

Examines the rules of evidence commonly recognized by the judicial system. Topics covered are: legal rules governing presumption, opinion evidence, hearsay evidence, privileged communications, and the classification of evidence in terms of real, testimonial, direct, and circumstantial; the fundamentals of being an effective witness in court; the importance of preparation before court; and the importance of the officer's appearance and manner while on the witness stand. (Career Course)

**Law Enforcement 1120. Georgia Laws and the Georgia Peace Officer 3-0-3**

Quarter Equivalent: LEN 120

Introduces Georgia Criminal Law, Georgia Juvenile Law, Georgia Traffic Law, and certain aspects of Georgia Criminal Procedures. This course is designed to give students a working knowledge of definitions, legal procedures, and the evidentiary elements of crime. (Career Course)

**Law Enforcement 1125. Criminal Procedure 3-0-3**

Quarter Equivalent: LEN 125

Examines legal procedures required in "stop and frisk" situations, arrests, searches and seizures, in determining the existence of "probable cause", and in the analysis of probable cause to determine appropriate course of action. (Career Course)

**Law Enforcement 1130. Constitutional Law and the Peace Officer I 3-0-3**

Quarter Equivalent: LEN 130

Introduces the historical factors that influenced the spirit and content of the U.S. Constitution, the major characteristics and powers of the three branches of government, and those provisions of the Bill of Rights which are of particular importance to law enforcement personnel. (Career Course)

**Law Enforcement 1135. Constitutional Law and the Peace Officer II 3-0-3**

Prerequisite: Law Enforcement 1130.

Quarter Equivalent: LEN 135

Continues the introduction to constitutional law for the peace officer. (Career Course)

**Law Enforcement 1140. Management of Forensics 3-0-3**

Quarter Equivalent: LEN 140

Introduces the basic principles of forensics. Includes the collection, preservation, and submission of material evidence, the use of forensics in relation to material evidence, and the services available from forensics laboratories.

**Learning Support English 0090 2-0-2**

Quarter Equivalent: None

Prepares students for English 1100 by presenting a study of basic grammar, including subject/verb agreement, pronoun antecedent, verb tense, sentence fragments, fused sentences, and comma splices. (Institutional Credit)

**Learning Support Mathematics 0090 2-0-2**

Quarter Equivalent: None

Presents the fundamentals of arithmetic: addition, subtraction, multiplication, and division of whole numbers, fractions and percentages. Percentages and applications are also covered. (Institutional Credit)

**Learning Support Reading 0090 2-0-2**

Quarter Equivalent: None

Prepares students for Reading 1100 by placing emphasis on vocabulary development, identification of main ideas and details, the author's style, and other basic components of reading. (Institutional Credit)

**Licensed Practical Nursing 1105. Pharmacology 3-1-3**

Prerequisite: Mathematics 1102 or permission of instructor.

Quarter Equivalent: LPN 105

This course provides the student with basic skills to compute dosages and solutions calculation. Content includes broad drug classification, action, common side effects and criteria for evaluating effectiveness of drug therapy and drugs. Students will practice the procedures for medication administration in a simulated clinical environment. (Technical Certificate Course)

**Licensed Practical Nursing 1110. Nursing Skills I/Nutrition 4-4-5**

Prerequisite: Acceptance into LPN program and current professional rescuer CPR certification.

Quarter Equivalent: LPN 110

The first of two courses. This course assists students in developing the knowledge and skills needed to perform basic nursing procedures. Through emphasis on the nursing process students are taught the basic principles and concepts involved in meeting the needs of the individual patient. Topics include: orientation to the profession, ethics and law, community health, cultural diversity, basic nursing procedures, and concepts of basic nutrition. (Technical Certificate Course)

**Licensed Practical Nursing 1111. Nursing Skills II 4-5-6**

Prerequisite: Licensed Practical Nursing 1110.

Quarter Equivalent: LPN 111

Continuation of Licensed Practical Nursing 1110 focusing on development of more complex nursing skills. Emphasis is on the study of geriatric nursing. Clinical experience occurs in a skilled nursing home and the acute care setting. (Technical Certificate Course)

**Licensed Practical Nursing 1120. Medical/Surgical I 3-7-5**

Prerequisite: Licensed Practical Nursing 1111.

Quarter Equivalent: LPN 120

The first of four courses. This course assists students in developing knowledge, skills and attitudes in the care of adults. Special emphasis is on

utilizing the nursing process in meeting the individual patient's needs. Contents include: common illness/disorders related to the reproductive, endocrine and gastrointestinal system. Each unit of study includes: pharmacology, diet, therapy, psychosocial, cultural aspects, and/or support of the terminally ill and death. All curriculum threads are continuous. Clinical experience is in the acute care setting. (Technical Certificate Course)

**Licensed Practical Nursing 1121. Medical/Surgical II 3-7-5**

Prerequisite: Licensed Practical Nursing 1120.

Quarter Equivalent: LPN 121

Continuation of Licensed Practical Nursing 1120 with emphasis on common illness/disorders of the cardiovascular, respiratory and urinary system. Clinical experience is in the acute care setting. (Technical Certificate Course)

**Licensed Practical Nursing 1130. Medical/Surgical III 3-7-5**

Prerequisite: Licensed Practical Nursing 1121.

Quarter Equivalent: LPN 130

Continuation of Licensed Practical Nursing 1121. Emphasis is on common illness/disorders of the musculoskeletal, eye, nose, throat, and the nervous system. Clinical experience is in the acute care setting. (Technical Certificate Course)

**Licensed Practical Nursing 1131. Medical Surgical IV 3-7-5**

Prerequisite: Licensed Practical Nursing 1130.

Quarter Equivalent: LPN 131

Continuation of Licensed Practical Nursing 1130. Emphasis is on common illness/disorders of the integumentary system, mental health and illness, and oncology nursing. Clinical experience is in the acute care setting. (Technical Certificate Course)

**Licensed Practical Nursing 1140. Obstetrics 2-5-4**

Prerequisite: Licensed Practical Nursing 1131.

Quarter Equivalent: LPN 140

This course is structured toward the utilization of the nursing process and nursing skills applicable to the family, maternal and newborn care. Instruction focus will lend itself to relevant pharmacology, diet therapy, and nursing interventions associated with the complicated and uncomplicated stages of labor, delivery, puerperium and newborn care. (Technical Certificate Course)

**Licensed Practical Nursing 1141. Pediatrics 2-5-4**

Prerequisite: Licensed Practical Nursing 1140.

Quarter Equivalent: LPN 141

This course is structured toward the utilization of the nursing process and nursing skills applicable to child care in the home and hospital setting. Instruction focus will lend itself to relevant pharmacology, diet therapy, normal growth and development, and nursing interventions associated with health prevention and disease/disorders of all body systems. (Technical Certificate Course)

**Licensed Practical Nursing 1150. Nursing Leadership I 2-1-2**

Prerequisite: Office Administration 1250 or permission of instructor.

Corequisite: Licensed Practical Nursing 1110 or permission of instructor

Quarter Equivalent: LPN 150

The first of two courses. Builds on concepts presented in Office Administration 1250 and Licensed Practical Nursing 1110. Provides students with concepts and issues related to leadership, management and safe health care delivery. (Technical Certificate Course)

**Licensed Practical Nursing 1151. Nursing Leadership II 0-6-2**

Prerequisite: Licensed Practical Nursing 1131 and 1150 or permission of instructor.

Quarter Equivalent: LPN 155

Continuation of Licensed Practical Nursing 1150. Mid-management skills are introduced utilizing the team nursing concept with multiple assignment. Clinical experience is in a skilled nursing home. (Technical Certificate Course)

**Licensed Practical Nursing 1160. State Board Reviews 1-0-1**

Prerequisite: Permission of instructor.

Quarter Equivalent: LPN 160

This course assists students in the preparation of the NCLEX-CAT. Review focuses on patient needs and nursing process, test taking skills and the discussion of NCLEX-CAT. (Technical Certificate Course)

**Machine Shop 1100. Hand Tools, Power Saws, Lay-Out 1-6-3**

Quarter Equivalent: MSP 100 and MSP 120

An introductory course in hand tools, power saws, drill presses, and lay-out tools used in machine shops. Projects include lay-out, sawing, drilling, tapping, filing, and finishing. Shop safety is also included. (Technical Certificate Course)

**Machine Shop 1110. Lathes 1-6-3**

Quarter Equivalent: MSP 130

Introduction to the lathe, emphasizing safety, tool sharpening, machine parts and accessories, measuring tools, and drilling and boring are include in the course. (Technical Certificate Course)

**Machine Shop 1120. Milling Machine 1-6-3**

Quarter Equivalent: MSP 140

Introduction to the milling machine, emphasizing safety, feed and speed setups, maintenance, tool selection, project setups, and completion of project assignments. (Technical Certificate Course)

**Machine Shop 1130. Machining Techniques 1-6-3**

Prerequisite: Machine Shop 1110 and 1120

Quarter Equivalent: MSP 150

The use of all machine tools and equipment through machine projects. Precision machining is stressed. (Technical Certificate Course)

**Machine Shop 1140. Grinders 1-6-3**

Quarter Equivalent: MSP 160

Emphasis is placed on the operation of surface grinders, and tool and cutter grinders. Projects made in other courses are finished on the surface grinder. (Technical Certificate Course)

**Machine Shop 1150. Advanced Machining Techniques I 1-6-3**

Prerequisite: Machine Shop 1110 and 1120.

Quarter Equivalent: MSP 170

Presents complicated projects on all equipment. Precision layout, machining techniques, inspection procedures, and machine tool attachments are stressed. (Technical Certificate Course)

**Machine Shop 1160. Advance Machining Techniques II 1-6-3**

Prerequisite: Machine Shop 1110 and 1120.

Quarter Equivalent: MSP 180

Prepares the student to enter the industrial machine shop arena in industry through complicated projects and lay-out procedures. Students make more than one of the same project, as they would in a production shop. (Technical Certificate Course)

**Machine Shop 1170. Computer Numerical Control (CNC) Operations**

**1-6-3**

Quarter Equivalent: MSP 190

A study of the planning, programming, tool selection, determining feeds and speeds, setting up, and operating CNC programs. The production of parts on a CNC milling machine and a CNC lathe are also covered. (Technical Certificate Course)

**Management 1201. Principles of Management 3-0-3**

Prerequisite: Business Administration 1105 or permission of instructor.

Quarter Equivalent: MGT 260

This course is designed to familiarize students with the basic functions of the management process applicable all types of organizations. Major emphasis is devoted to planning, organizing, staffing, directing, and controlling, and is presented in the context of political, societal, regulatory, ethical, global and technical forces. (Career Course)

**Management 1203. Labor Economics 3-0-3**

Prerequisite: Management 1201 or permission of instructor.

Quarter Equivalent: MGT 266

This course is designed to familiarize students with the supply and demand of labor, the implications of wages, income, types of jobs available, why people are being paid what they are and labor relations. These issues are presented in a framework of current social issues and public policy debates. (Career Course)

**Management 1205. Human Resources Management 3-0-3**

Prerequisite: Management 1203 or permission of instructor.

Quarter Equivalent: MGT 203

An introduction of major topical areas in human resources management. Emphasis is placed on the functional areas that form the major occupational categories in personnel. Basic concepts in employment planning, recruiting, employee and labor relations, compensation and benefits, health and safety, and security are included. (Career Course)

**Management 1207. Small Business Management 3-0-3**

Prerequisite: Management 1205 or permission of instructor.

Quarter Equivalent: MGT 280

An introduction to entrepreneurship and practical applications to the management and operation of small businesses. Included are: start-up issues, legal forms of organization, operational planning, financing the business, budgeting, personnel issues, developing an accounting and control system, long-range planning and strategy formation, developing a business plan, and other appropriate topics. (Career Course)

**Management 1210. Supervisory Development 3-0-3**

Quarter Equivalent: MGT 201

This course provides supervisory skills needed for survival in today's business environment. Supervision concepts that apply to most every situation will be examined. Particular attention will be spent on unique issues, ideas, and trends that affect supervisors. (Career Course)

**Marketing 1210. Principles of Marketing 3-0-3**

Prerequisite: Business Administration 1105 or permission of instructor.

Quarter Equivalent: MKT 265

An introduction to the principles of marketing. This course examines the activities of individuals and organizations which encourage and facilitate exchanges of values. It includes research, physical distribution, product planning, pricing and promotional activities. These concepts are examined as they apply to marketing of goods and services, in profit and non-profit sectors, in both domestic and global markets. (Career Course)

**Marketing 1211. Professional Selling 3-0-3**

Prerequisite: Marketing 1210 or permission of instructor.

Quarter Equivalent: MKT 204

An introduction to selling principles with attention to the business-to-business market and the consumer. It examines the role of personal selling in the firm's marketing strategy, communication, psychology, and sales techniques.

Students will be required to develop and deliver effective sales presentations. (Career Course)

**Marketing 1214. Advertising and Sales Promotion 3-0-3**

Prerequisite: Marketing 1210 or permission of instructor.

Quarter Equivalent: MKT 271

Emphasizes the role of advertising in the marketing of goods and services. Discussions on the different uses of advertising, types of media, how advertising is created, budgeting, agency functions and social and economic aspects of the industry. Advertising display, copy and art work preparation, printing and selection of media are also covered. (Career Course)

**Marketing 1218. Retail Organization and Management 3-0-3**

Prerequisite: Marketing 1214 or permission of instructor.

Quarter Equivalent: MKT 103

Examines the organization of the retail establishment to reach its goals. The course includes the study of site selection, internal layout, store operations, budgeting and security, the retailing mix, the buying process, pricing, and selling. (Career Course)

**Mathematics 0096. PreAlgebra 2-0-2**

Quarter Equivalent: MAT 096

Reviews fractions, decimals, percents. Topics, preparatory to introductory, to be covered include signed numbers, order of operations and variable expressions. (Institutional Credit)

**Mathematics 0097. Introductory Algebra 2-0-2**

Quarter Equivalent: MAT 097

Introduces the fundamentals of algebra. Topics include linear equations and inequalities, linear graphing, simultaneous equations and polynomials. (Institutional Credit)

**Mathematics 0098. Intermediate Algebra 2-0-2**

Quarter Equivalent: MAT 098

Continues the development of algebra. Topics include factoring polynomials, rational expressions, radicals and quadratic equations. Students may exit from Developmental Studies from this course. (Institutional Credit)

**Mathematics 0099. College Preparatory Mathematics 2-0-2**

Quarter Equivalent: None

Prepares students for college mathematics. Topics include complex numbers, fractional exponents, logarithms and functions. This course is designed to give students a "head start" on Mathematics 1101 by introducing topics covered in college mathematics which are traditionally difficult for students. The course is recommended, but not required, for students exiting Developmental Studies in Mathematics 0098. Students who pass Mathematics 0098 but do not pass the exit exam will be required to enroll in Mathematics 0099. Students may exit from Developmental Studies from this course. (Institutional Credit)

**Mathematics 1101. Introduction to Mathematical Modeling 3-0-3**

Prerequisite: High School Algebra with a "C" average or successfully complete Developmental Studies Mathematics

Quarter Equivalent: None

Satisfies the mathematics requirement in core Area A or general education. Emphasizes the modeling of real-world data represented by linear, quadratic, polynomial, exponential and logarithmic functions. Exploration of data may include selected topics from descriptive statistics. Appropriate technology will be incorporated in topic exploration and problem solving.

**Mathematics 1102. Medical Mathematics 2-0-2**

Prerequisite: Satisfactory Mathematics placement score or successfully complete Learning Support Mathematics 0090

Quarter Equivalent: MAT 102

Designed primarily for those students majoring in health professions. Topics covered include a review of computational skills, metric and apothecary systems, and dosage calculations for tablets, solutions, and intravenous fluids. (Technical Certificate Course)

#### **Mathematics 1104. Applied Mathematics 2-0-2**

Prerequisite: Satisfactory Mathematics placement score or successfully complete Learning Support Mathematics 0090

Quarter Equivalent: MAT 104

A review of mathematics using problems that apply to the student's program of study. Topics include fractions, decimals, percentages, ratio and proportion, geometric shapes and graphs. (Technical Certificate Course)

#### **Mathematics 1111. Technical Mathematics 2-0-2**

Prerequisite: Satisfactory mathematics placement score or successfully complete Mathematics 0096

Quarter Equivalent: MAT 111

Covers such topics as basic arithmetic, elementary and intermediate algebra, geometry, and elementary trigonometry. (Career Course)

#### **Mathematics 1112. Trigonometry 3-0-3**

Prerequisite: Mathematics 1101

Quarter Equivalent: MAT 101

Introduces trigonometric functions, graphs of trigonometric functions, solutions and applications of right triangles, identities, inverse functions, general triangle, complex numbers.

#### **Mathematics 1113. Precalculus Mathematics 3-0-3**

Prerequisite: At least one year of high school mathematics above Algebra II or Mathematics 1101

Quarter Equivalent: MAT 116

Provides immediate transition from high school algebra into calculus and physics. Material goes beyond that normally covered in Mathematics 1101. Algebra topics include linear, quadratic equations, functions and graphing, exponential and logarithmic functions. Trigonometry topics include trigonometric functions and inverse, law of sines, law of cosines and identities. For students planning to take calculus and/or physics.

#### **Mathematics 1145. Business Mathematics 2-0-2**

Prerequisite: Satisfactory mathematics placements score or successfully complete Mathematics 0096

Quarter Equivalent: MAT 145

Reviews arithmetic operations and basic algebra followed by problems in simple compound interest, payrolls and taxes, valuation of assets, investments and statistics and graphing. (Career Course)

#### **Mathematics 2181. Applied Calculus 3-0-3**

Prerequisite: Mathematics 1101

Quarter Equivalent: MAT 181

Surveys differential and integral calculus of polynomial, rational, exponential and logarithmic functions. Detailed applications to problems and concepts from business, economics and life science are covered.

#### **Mathematics 2200. Introduction to Statistics 3-0-3**

Prerequisite: Mathematics 1101

Quarter Equivalent: MAT 200

Surveys descriptive and inferential statistics. Topics include organizing and graphing data, measures of central tendency, dispersion, probability, normal

distribution, sampling, confidence intervals, hypothesis tests, significance tests, correlation and regression.

**Mathematics 2201. Foundations of Mathematics 3-0-3**

Prerequisite: Mathematics 1101

Quarter Equivalent: MAT 201

Emphasizes the basic principles and historical development of numeration systems, geometry, number theory and problem solving. Designed primarily for education majors.

**Mathematics 2253. Calculus and Analytic Geometry I 4-0-4**

Prerequisite: Mathematics 1113 or permission of instructor

Quarter Equivalent: None

Includes topics limits and continuity, derivatives and their applications and an introduction to the concept of the integral. The first in a four course sequence in Calculus.

**Mathematics 2254. Calculus and Analytic Geometry II 4-0-4**

Prerequisite: Mathematics 2253

Quarter Equivalent: None

Emphasizes the definite integral and its applications, the calculus of trigonometric, exponential, logarithmic, hyperbolic and inverse functions, techniques of integration, improper integrals, L'Hospital's Rule, infinite series and conic sections. The second course in the Calculus sequence.

**Mathematics 2255. Calculus and Analytic Geometry III 3-0-3**

Prerequisite: Mathematics 2254

Quarter Equivalent: MAT 256

Emphasizes calculus in three dimensions. Topics include vectors, parametric equations, partial derivatives, multiple integrals and their applications and topics in vector calculus. The third course in the Calculus sequence.

**Mathematics 2256. Calculus IV 3-0-3**

Prerequisite: Mathematics 2255

Quarter Equivalent: None

Introduces low-dimensional linear algebra through eigenvalues and eigenvectors. Applications to linear systems, least-square problems, and the calculus, including elementary differential equations. The fourth course in the Calculus sequence.

**Medical Laboratory Technology 1101. Introduction to Health Sciences 3-2-3**

Quarter Equivalent: MLT 101

The student is introduced to the health sciences environment and language. The hospital as an organization is discussed, as well as the role of each major department. The concepts, personnel, and work flow of the clinical laboratory is discussed in detail, as an example of health care application. Other topics include professional ethics regulatory agencies, legal concepts as applied to confidentiality and patients' rights, infection control, and safety. Students will learn venipuncture/capillary puncture techniques, equipment, application, and specimen processing. Enrollment is limited to students of the Medical laboratory, Medical Office, or Phlebotomy programs. (Career Course)

**Medical Laboratory Technology 1102. Phlebotomy Clinical Practicum 1-11-5**

Prerequisite: Successful completion (with a grade of "C" or better) of Medical Laboratory Technology 1101, Office Administration 1250, and Biology 1100 and approval of the instructor.

Quarter Equivalent: MLT 102

Students receive clinical application of the venipuncture and micropuncture skills learned in Medical Laboratory Technology 1101. Four days per week

students are assigned to an area hospital where they work under the direct supervision of a preceptor. Students return to campus one day per week for problem-solving and review. (Technical Certificate Course)

**Medical Laboratory Technology 1103. Hematology/Coagulation I 2-2-3**

Quarter Equivalent: MLT 109

Introduces the fundamental formation of some disease states. Safety and quality control also included throughout the course. Instrumentation relating to hematology began. (Career Course)

**Medical Laboratory Technology 1104. Hematology/Coagulation II 2-2-3**

Prerequisite: Medical Laboratory Technology 1103.

Quarter Equivalent: MLT 104

Coagulation and related diseases, instrumentation relating to coagulation, critical level, blood cell dyscrasias, safety and quality control are covered. (Career Course)

**Medical Laboratory Technology 1105. Serology/Immunology 2-2-3**

Prerequisite: Biology 2215 or permission of MLT Advisor.

Quarter Equivalent: MLT 105

Introduces the fundamental theory and techniques applicable to serology and immunology practice in the clinical laboratory. Topics include: immune system, antigen and antibody reactions, common clinical applications, serological/microbiological applications, common serological techniques, and safety and quality control. (Career Course)

**Medical Laboratory Technology 1106. Blood Bank 2-2-3**

Prerequisite: Biology 2215 or permission of MLT Advisor.

Quarter Equivalent: MLT 106

Provides an in-depth study of immunohematology principles and practices as applicable to medical laboratory technology. Topics include: genetic theory and clinical implications, immunology, donor collection, pre-transfusion testing, management of disease statistics, and safety and quality control. (Career Course)

**Medical Laboratory Technology 1107. Clinical Chemistry 2-2-3**

Prerequisite: Chemistry 1121 or permission of instructor.

Quarter Equivalent: MLT 107

Develops concepts and techniques of clinical chemistry applicable to medical laboratory technology. Topics include: carbohydrates, electrolytes and acid-base balance, nitrogenous compounds, enzymes and endocrinology, bilirubin metabolism, lipids, toxicology and therapeutic drug monitoring, and safety and quality control. (Career Course)

**Medical Laboratory Technology 1112. Urinalysis/Parasitology 2-2-3**

Quarter Equivalent: MLT 103 and 109

Provides theory and techniques of urinalysis. Urinalysis topics include: significance, correlation to disease states, physical, chemical and microscopic urinalysis theory and practice. Selected types of other body fluids will be discussed to discover their significance and uses in disease correlation. This class also introduces concepts and techniques used in the identification of selected human parasites.

**Medical Laboratory Technology 1118. Instrumentation and Computer Applications in the Clinical Laboratory 3-2-4**

Prerequisites: Medical Laboratory Technology 1101, 1103, and 1105, or permission of instructor.

Quarter Equivalent: MLT 118

Provides an introduction to basic physics concepts used in clinical laboratory instrumentation. Examines, in detail, selected equipment in the laboratory representing the principles of cell counting, spectrophotometry, continuous-flow

analysis, and radioimmunoassay. Computer concepts, applications, and interfacing with laboratory instrumentation, is introduced. (Career Course)

**Medical Laboratory Technology 1120. Medical Laboratory Mathematics 3-0-3**

Prerequisites: Satisfactory placement examination math score or successfully complete Mathematics 0097 or 0098.

Quarter Equivalent: MLT 120

This course is designed primarily for those students majoring in Medical Laboratory Technology. Emphasis is on the metric system, preparation of solutions, percent, normal, molar, dilutions, ionic concentrations and pH, preparation of standard curves, absorbance and percent transmission, quality control statistics and standard deviation. (Career Course)

**Medical Laboratory Technology 1190. Medical Laboratory Clinical Practicum I 0-3-1**

Prerequisite: Medical Laboratory Technology 1101 and permission of the instructor.

Quarter Equivalent: MLT 190

Introduces Medical Laboratory Technician students to the hospital environment. Students gain experience with venipuncture and microcapillary techniques while working under the direction of a hospital preceptor. (Career Course)

**Medical Laboratory Technology 1191. Medical Laboratory Clinical Practicum II 0-3-1**

Prerequisites: Medical Laboratory Technology 1101, 1104, 1105, 1190 and permission of the instructor.

Quarter Equivalent: MLT 191

Resumes the clinical experience begun in Medical Laboratory Technology 1190. Students rotate through selected departments in the clinical laboratory to apply and complement concepts and applications learned in previous Medical Laboratory Technology courses. Introduces students to problem solving at the clinical level. (Career Course)

**Medical Laboratory Technology 2218. Microbiology 2-4-4**

Prerequisite: Biology 2215 or permission of instructor.

Quarter Equivalent: MLT 218

Introduces fundamental clinical microbiology theory and techniques applicable to disease state identification. Topics include: isolation techniques, biochemical techniques, anti-microbial sensitivity, safety and quality control, and disease processes. (Career Course)

**Medical Laboratory Technology 2290. Medical Laboratory Clinical Practicum III 0-12-4**

Prerequisite: Successful completion with a "C" or better of all other Medical Laboratory Technology courses, and permission of instructor.

Quarter Equivalent: MLT 290

Full-time supervised experience in an affiliated clinical laboratory. Students will rotate among designated laboratory sections where they will work side by side with, and be under the supervision of, medical technologists and the laboratory director to develop professional skills in the practice of medical laboratory technology. (Career Course)

**Medical Laboratory Technology 2291. Medical Laboratory Clinical Practicum IV 1-32-12**

Prerequisite: Successful completion with a "C" or better of all other Medical Laboratory Technology courses, and permission of instructor.

Quarter Equivalent: MLT 291

Full-time supervised experience in an affiliated clinical laboratory. Students will rotate among designated laboratory sections where they will work side by side with, and be under the supervision of, medical technologists and the

laboratory director to develop professional skills in the practice of medical laboratory technology. (Career Course)

**Medical Office Assistant 110. Clinical Procedures 2-2-3**

Prerequisites: Enrollment is limited to students accepted into the Medical Office Assisting program.

Quarter Equivalent: MOA 110

An introduction into the medical assisting field. Students learn both technical and communication skills that are performed in the physician's office including the care, use and sterilization of instruments, how to obtain vital signs, and administer electrocardiograms, how to drape and position patients for examination, application of dressings and bandages, and how to assist with minor surgical procedures in the office setting. (Career Course)

**Medical Office Assistant 110. Clinical Practicum 1-12-5**

Prerequisite: Medical Laboratory Technology 1101, Office Administration 1214, Biology 1100, Allied Health Technology 1110, and Medical Office Assistant 1110 with a grade of "C" or higher.

Quarter Equivalent: MOA 190

Students perform a practicum in a physician's office or health care facility. (Career Course)

**Nursing 1101. Fundamentals of Nursing I 1-5-3**

Corequisite: Nursing 1102, Mathematics 1101, Biology 2212

Quarter Equivalent: None

Introduces nursing concepts and skills. Requires clinical application in a health care setting. (Career Course)

**Nursing 1102. Pharmacology 2-0-2**

Corequisite: Nursing 1101

Quarter Equivalent: None

Introduces pharmacological concepts including drug classifications, mathematical calculations, and principles of drug administration. (Career Course)

**Nursing 1103. Fundamentals of Nursing II 2-5-4**

Prerequisite: Nursing 1101, 1102

Corequisite: Nursing 1104

Quarter Equivalent: None

Continues the introduction of nursing concepts and skills with increased complexity of theory and practice. Requires clinical application in a health care setting with emphasis on medication administration. (Career Course)

**Nursing 1104. Nutrition 1-0-1**

Corequisite: Nursing 1103

Quarter Equivalent: None

Introduces nutrition concepts with emphasis on metabolism, essential nutrients, and the nurse's role in diet therapy. (Career Course)

**Nursing 1105. Maternal and Infant Care 2-6-4**

Prerequisite: Nursing 1103

Corequisite: Biology 2213, Psychology 1101

Quarter Equivalent: None

Emphasizes nursing concepts and skills related to the childbearing family. Requires clinical application in health care settings specific to maternal and infant care. (Career Course)

**Nursing 1106. Mental Health Nursing 2-6-4**

Prerequisite: Nursing 1103

Corequisite: Biology 2213, Psychology 1101

Quarter Equivalent: None

Focuses on nursing concepts and skills related to mental health with emphasis on therapeutic communication. Requires clinical application in health care settings. (Career Course)

**Nursing 1107. Medical Terminology 1-0-1**

Quarter Equivalent: None

Enables students to learn major prefixes, suffixes and word roots used in modern medical terminology. A programmed text will allow students to progress at their own pace. (Career Course)

**Nursing 2201. Health and Illness I 3-16-9**

Prerequisites: Nursing 1105, 1106, Biology 2215

Quarter Equivalent: None

Concentrates on nursing concepts and skills related to the care of individuals across the life span. Addresses common well-defined alterations involving cellular proliferation, mobility, neurological functions, respiration, circulation, and immunity. Requires clinical application in a variety of health care settings. (Career Course)

**Nursing 2202. Health and Illness II 3-16-9**

Prerequisite: Nursing 2201 and all general education courses

Quarter Equivalent: None

Concentrates on nursing concepts and skills related to the care of individuals across the life span. Addresses common well-defined alterations involving regulatory function, genitourinary function, digestion, the integument, and the sensory organs. Requires clinical application in a variety of health care settings involving team management of patients and health care workers. (Career Course)

**Nursing 2203. Nursing Issues 1-0-1**

Prerequisite: Nursing 2201

Corequisite: Nursing 2202

Quarter Equivalent: None

Discusses current issues in nursing. Facilitates the transition from student to registered nurse. (Career Course)

**Nursing 2204. Pharmacology Review 1-0-1**

Prerequisite: Nursing 1102

Quarter Equivalent: None

Reviews drug classifications, actions, doses, side effects and nursing implications. Pharmacology mathematical calculations will be included. (Career Course)

**Nursing 2210. Directed Independent Study 1-0-1**

Quarter Equivalent: None

Directed review of nursing techniques and concepts. Available to all returning or advanced placement students. Grading will be pass/fail. (Career Course)

**Office Administration 1140. Basic Keyboarding 1-0-1**

Quarter Equivalent: SSC 140

Develops the "type by touch" method of keying information on typewriter or computer. Basic WordPerfect functions such as Save, Retrieve, and Print are taught. The course is required for all Office Administration, Medical Office Assistant, and Medical Transcription students unless they can exempt through testing. Students majoring in other programs of study may elect the course with permission of their advisor. (Career Course)

**Office Administration 1150. Elementary Typewriting 2-0-2**

Prerequisite: Office Administration 1140 or successful demonstration of 25 net words per minute as demonstrated by exemption test.

Quarter Equivalent: SSC 150

Develops formatting skills for business letters, memos, tables, and reports. WordPerfect functions may include Margin changes, Block, Move, Indent, Spell Check, Date, Bold, Underline, Endnotes, and others. Speed building and accuracy are stressed. (Career Course)

**Office Administration 1151. Intermediate Typewriting 3-0-3**

Prerequisite: Office Administration 1150 or equivalent.

Quarter Equivalent: SSC 151

Continues the principles begun in Office Administration 1150 Elementary Typewriting. More advanced formats are mastered, and WordPerfect functions such as Merge, Multiple Windows, Footnotes, and Macros are used. Speed building and accuracy are stressed. (Career Course)

**Office Administration 1152. Advance Typewriting 3-0-3**

Prerequisite: Office Administration 1151 or equivalent.

Quarter Equivalent: SSC 152

The student completes simulations in a wide variety of office-style activities which use the skills developed in Elementary and Intermediate Typewriting. Strong emphasis is placed on building decision-making skills, proofreading, and setting priorities. (Career Course)

**Office Administration 1159. Medical Office Procedures 3-0-3**

Prerequisite: Office Administration 1150 or equivalent.

Quarter Equivalent: SSC 159

Emphasis on the production of medical correspondence and medical forms. Insurance forms will be used extensively. (Career Course)

**Office Administration 1165. Secretarial Notehand 3-0-3**

Quarter Equivalent: SSC 165

Introduces a phonetic system of writing longhand using a streamlined alphabet and digraphs of alphabetic characters. Designed to provide the secretary with basic note taking skills. (Career Course)

**Office Administration 1208. Mathematics for Office Careers 3-0-3**

Prerequisite: Satisfactory score on mathematics placement examination or exit LSRM 0090

Quarter Equivalent: SSC 208

Mathematics for business including the fundamental processes of fractions, percentages, averages, interest, and the application of these skills to business situations. (Technical Certificate Course)

**Office Administration 1214. Medical Machine Transcription I 3-0-3**

Prerequisite: Office Administration 1150 or equivalent.

Quarter Equivalent: SSC 214

Designed to orient the student to the various medical reports and terminology used daily in the medical office. The student will learn to use dictation equipment by using cassettes to transcribe medical reports. (Career Course)

**Office Administration 1215. Medical Machine Transcription II 3-0-3**

Prerequisite: Office Administration 1214 with a grade of "C" or better.

Quarter Equivalent: SSC 215

Continuation of Medical Machine Transcription I. (Career Course)

**Office Administration 1216. Medical Machine Transcription III 3-0-3**

Prerequisite: Office Administration 1215 with a grade of "C" or better.

Quarter Equivalent: SSC 216

Continuation of Medical Machine Transcription II. Includes a practicum in a health care facility. (Career Course)

**Office Administration 1220. Office Procedures 3-0-3**

Prerequisite: Office Administration 1230 and 1151.

Quarter Equivalent: SSC 220

Designed to utilize skills learned in the typing and English classes. Includes correspondence, telephone techniques, filing, and human relations skills. A major research project is required. (Career Course)

**Office Administration 1222. Transcription 3-0-3**

Prerequisite: Office Administration 1151 and 1230.

Quarter Equivalent: SSC 222

A course in transcription utilizing recorded voice media as a source of impulse-to-type. Consideration is given to correspondence, memoranda, reports, and other documents. Emphasis is placed on spelling, grammar, form, speed, and accuracy. (Career Course)

**Office Administration 1227. Machine Transcription Legal 3-0-3**

Prerequisite: Office Administration 1151.

Quarter Equivalent: SSC 227

A course in transcription utilizing recorded voice media as a source of impulse-to-type. Emphasis on spelling, grammar, form, speed, accuracy, and legal document formats. (Career Course)

**Office Administration 1230. Business English 3-0-3**

Quarter Equivalent: SSC 230

Designed to develop and improve basic language art skills. A thorough review of basic grammar, punctuation, and agreement principles. (Technical Certificate Course)

**Office Administration 1232. Business Letter Writing 3-0-3**

Prerequisite: Office Administration 1230.

Quarter Equivalent: SSC 232

Training in writing business letters, reports, articles, and memoranda. This course reinforces the basic grammar skills taught in Office Administration 1230. (Career Course)

**Office Administration 1240. Advanced Word Processing 3-0-3**

Prerequisite: Office Administration 1151 or permission of instructor.

Quarter Equivalent: SSC 240

Builds on the WordPerfect skills developed in Elementary and Intermediate Typewriting. It is a study of word processing skills using desktop publishing concepts to improve the appearance of business documents. Emphasis includes, but is not limited to, the following: creation of graphic elements, Text Art images, advanced line formatting, merge, and style features, customized table formatting, and macro assembly. (Career Course)

**Office Administration 1250. Professional Development 2-0-2**

Quarter Equivalent: SSC 250

Emphasis is placed on developing job search skills and human relations skills. Each student will prepare an employment package which includes a resume, application letter, and job application form. (Career Course)

**Office Administration 1290. Office Administration Practicum 0-12-3**

Quarter Equivalent: SSC 290

A teacher-directed independent study designed to provide work experience in the community and/or advanced study in designated areas of office technology. Effort will be made to tailor the experience to the individual career goals of the student. (Career Course)

**Philosophy 1101. Introduction to Philosophical Issues 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: PHL 101

Inquires into the art of knowing. Examines the questions of meaning, truth, reality, freedom, life, morality, and religion.

**Philosophy 1102. Logic and Critical Thinking 3-0-3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: None

Introduces the principles and standards for thinking and communicating clearly and effectively. Topics include: theories of meaning, uses of language, common causes of confusion and error in thought and argument, and evaluation of arguments.

**Physical Education 1000. Standard First Aid. 1-0-1**

(not an activity course)

Quarter Equivalent: PED 100

Trains individuals to overcome reluctance to act in emergency situations, and to recognize and care for life-threatening emergencies such as respiratory or cardiac problems, sudden illness, and injury. (American Red Cross Certification Standard First Aid/Adult C.P.R.)

**Physical Education 1010. CPR for the Professional Rescuer. 1-0-1**

(not an activity course)

Quarter Equivalent: PED 108

Provides the skills and knowledge used by professional rescuers when providing initial care for life-threatening respiratory and cardiac emergencies. (Does not fulfill the Physical Education 1000 requirement). (American Red Cross Certification C.P.R. for the Professional Rescuer)

**Physical Education 1020. Physical Fitness Concepts 0-2-1**

Quarter Equivalent: PED 111

Introduces students to basic scientific knowledge and practical experience in the principles, assessment, and development of total well-being through health related physical fitness and lifestyle management techniques. Major topics will include: cardiovascular endurance, muscular endurance and strength, flexibility, body composition, nutrition, and hypokinetic diseases.

**Physical Education 1030. Health & Wellness Concepts. 1-0-1**

(not an activity course)

Quarter Equivalent: PED 107

Introduces personal responsibility for health and wellness and provides information and strategies that can be adopted. Covers the following topics: wellness assessment, self-managed behavior, physical fitness, nutrition, weight control, hypertension, stress management, and sexually transmitted diseases.

**Physical Education 1100. Fitness Circuit Training. 0-2-1**

Quarter Equivalent: PED 101

Acquaints students with basic knowledge pertaining to the importance of participation in physical activity and its contribution to optimal living.

**Physical Education 1110. Aerobic Walking. 0-2-1**

Quarter Equivalent: PED 147

Introduces walking as a lifetime fitness activity. Acquaints the novice walker with the following: the benefits of fitness walking, clothing and equipment,

elements of a fitness routine, walking techniques, nutrition, lifetime weight control, mental benefits, motivational strategies.

**Physical Education 1120. Jogging. 0-2-1**

Quarter Equivalent: PED 145

Introduces students to the basic knowledge and techniques necessary for a lifelong fitness program. Teaches students how to use jogging/running to become more physically fit and more efficient in daily work and recreation.

**Physical Education 1130. Swim Fitness. 0-2-1**

Quarter Equivalent: PED 118

Provides guidance for students who want to use swimming to improve their health and fitness. Students learn how to train effectively, how to measure progress, how to stay motivated, and how to avoid injuries common to swimmers. This is not a "learn to swim" course.

**Physical Education 1140. Weight Training. 0-2-1**

Quarter Equivalent: PED 124

Provides basic instruction for students wishing to use weight training to improve personal health and fitness. Workouts will utilize variable and fixed resistance machines (Universal), free weights (dumbbells), and calisthenic exercises.

**Physical Education 1200. Archery. 0-2-1**

Quarter Equivalent: PED 102

Introduces the student to target archery, related archery sports, and correlated academic subject matter.

**Physical Education 1210. Beginning Badminton. 0-2-1**

Quarter Equivalent: PED 103

Introduces basic badminton skills, terminology, and rules.

**Physical Education 1215. Intermediate Badminton. 0-2-1**

Quarter Equivalent: PED 104

Continues the development and refinement of skills from Physical Education 1210 and introduces advanced badminton strategy and skills in competitive situations.

**Physical Education 1220. Table Tennis. 0-2-1**

Quarter Equivalent: PED 105

Introduces the basic rules and skills of table tennis and develops the essentials of spins, strokes, footwork, grips and tactics needed to play the game effectively.

**Physical Education 1230. Bowling. 0-2-1**

Quarter Equivalent: PED 106

Introduces the student to all aspects of bowling, including history, basic and advanced techniques, official rules, scoring, etiquette, equipment, and facilities. (Usage fee charged by the off-campus facility).

**Physical Education 1240. Golf. 0-2-1**

Quarter Equivalent: PED 110

Introduces the basic swing patterns, grips, stances, rules, and etiquette of golf.

**Physical Education 1250. Fencing. 0-2-1**

Quarter Equivalent: PED 115

Introduces basic fencing skills, terminology and rules of bouting.

**Physical Education 1260. Beginning Tennis. 0-2-1**

Quarter Equivalent: PED 137

Introduces basic tennis skills, techniques, rules, scoring, and strategy.

**Physical Education 1265. Intermediate Tennis. 0-2-1**

Quarter Equivalent: PED 138

Introduces skills appropriate to the intermediate tennis player with emphasis on control, spin, placement and shot selection in game situations.

**Physical Education 1270. Beginning Racquetball. 0-2-1**

Quarter Equivalent: PED 144

Introduces the basics of racquetball including court dimensions, scoring, basic strokes, and common errors.

**Physical Education 1275. Intermediate Racquetball. 0-2-1**

Quarter Equivalent: PED 148

Continues the development of racquetball skills by introducing advanced strokes, singles and doubles strategies, and shot sequencing.

**Physical Education 1290. Student Assistant. 0-2-1**

Quarter Equivalent: PED 125

Allows students who have previously exhibited knowledge and skills appropriate to a course to continue their interest by assisting in a class.

**Physical Education 1300. Soccer. 0-2-1**

Quarter Equivalent: PED 120

Introduces soccer as a lifetime activity and acquaints students with the fundamental skills and rules pertaining to soccer and the use of both in game situations.

**Physical Education 1310. Beginning Volleyball. 0-2-1**

Quarter Equivalent: PED 140

Introduces basic volleyball skills, terminology, rules and concepts of team play in a physical activity course.

**Physical Education 1315. Intermediate Volleyball. 0-2-1**

Quarter Equivalent: PED 141

Continues the refinement of skills from Physical Education 1310 and introduces patterns of play, set offensive and receiving plays, and officiating techniques.

**Physical Education 1500. Beginning Swimming. 0-2-1**

Quarter Equivalent: PED 116

Introduces fundamental swimming strokes, hydrodynamic principles, and water safety.

**Physical Education 1505. Intermediate Swimming. 0-2-1**

Quarter Equivalent: PED 117

A more advanced course in swimming covering swimming strokes, hydrodynamic principles, water safety, and fitness swimming components.

**Physical Education 1510. Lifeguard Training. 2-2-3**

(Counts as only one hour of activity credit and satisfies Physical Education 1000 requirement)

Quarter Equivalent: PED 119

Provides training in the various duties and responsibilities of pool lifeguarding, rescue and surveillance techniques, basic first aid, and CPR skills. (American Red Cross Certification Standard First Aid, C-Pro, Life Guarding.)

**Physical Education 2010. Introduction to Physical Education. 3-0-3**

Quarter Equivalent: PED 160

Introduces students interested in making physical education their profession to the history, philosophy, and problems of physical education and how it contributes to the total education program.

**Physics 1127. General Physics I (Trigonometry based) 3-3-4**

Prerequisite: Mathematics 1101 or Mathematics 1113

Quarter Equivalent: None

Explores the discipline of physics using the methods of trigonometry. Focuses on vectors, one and two dimensional motion, Newton's laws of motion, equilibrium, circular motion, gravitation, energy and momentum. Requires laboratory application which demonstrates the validity of concepts covered in lecture.

**Physics 1128. General Physics II (Trigonometry based) 3-3-4**

Prerequisite: Physics 1127

Quarter Equivalent: None

Continues the exploration of trigonometric based physics begun in Physics 1127 with an emphasis on fluids, temperature and heat, thermal expansion, electrostatics, magnetism, geometrical optics, atomic physics, nuclear physics and special relativity. Requires laboratory applications which demonstrate the validity of concepts covered in lecture.

**Physics 2227. Introductory Physics I (Calculus based) 3-3-4**

Prerequisite: Mathematics 2253

Quarter Equivalent: None

Introduces the discipline of physics using the methods of calculus. Addresses the topics of vectors, one and two dimensional motion, Newton's laws of motion, equilibrium, circular motion, gravitation, energy and momentum. Requires laboratory applications which demonstrate the validity of concepts covered in lecture.

**Physics 2228. Introductory Physics II (Calculus based) 3-3-4**

Prerequisite: Physics 2227

Quarter Equivalent: None

Continues the exploration of calculus based physics begun in Physics 2227 with an emphasis on fluids, temperature and heat, thermal expansion, electrostatics, magnetism, geometrical optics, atomic physics, nuclear physics and special relativity. Requires laboratory applications which demonstrate the validity of concepts covered in lecture.

**Political Science 1101. American Government 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: POL 101

Surveys the structure and operation of the American federal government, the state government of Georgia, and American local government.

**Political Science 2201. Introduction to State and Local Government 3-0-3**

Prerequisite: Political Science 1101 or permission of the instructor.

Quarter Equivalent: POL 202

Introduces the study of state and local government, with emphasis on the constitution, government, and political culture of Georgia. The place of state and local government in the federal system, the importance of state and local government to political liberty, models of state and local government, and special public policy problems faced by states and local communities today will also be considered. When possible, the course will include presentations by officials in Georgia government, or local government.

**Political Science 2301. Introduction to Comparative Politics 3-0-3**

Prerequisite: Political Science 1101 or permission of the instructor.

Quarter Equivalent: POL 203

Examines the methods by which major western governments govern and, more specifically, their formulas for dispersing power, both horizontally and vertically. The United States, Canada, Great Britain, Germany, and France, among others, will be discussed. Special attention will be given to the major problems of post-industrial societies and the "New World Order."

**Political Science 2401. International Relations 3 0 3**

Prerequisite: Political Science 1101 or permission of the instructor.

Quarter Equivalent: POL 201

Introduces the field of contemporary international relations and foreign policy. Topics covered include problems of war and peace, such as the Cold War and the Arab Israeli disputes; conflict and cooperation; the role of international organizations, such as the United Nations; United States Soviet and United States Third World Relations.

**Psychology 1101. Introduction to Psychology 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: PSY 101

Introduces the study of psychology as quantitative science and as an aid to the understanding of self and others. Includes consideration of learning principles, personality, conflict and adjustment, tests and measurements, biological bases of behavior and group phenomena.

**Psychology 2101. Introduction to the Psychology of Adjustment 3-0-3**

Prerequisite: Psychology 1101 or permission of the instructor.

Quarter Equivalent: PSY 201

Surveys the dynamics of both normal and non-integrative adjustment. Includes a study of conflicts, fears, anxiety, and frustration with emphasis on mental hygiene, building emotional stability, and preventing mental illness.

**Psychology 2103. Introduction to Human Development 3 0 3**

Prerequisite: Psychology 1101 or permission of the instructor.

Quarter Equivalent: PSY 202

Surveys human development from conception to death. Emphasizes physical, social, emotional, cognitive, and moral developmental expectations. Major theoretical and research contributions are also considered.

**Psychology 2204. Introduction to Applied Psychology 3 0 3**

Prerequisite: Psychology 1101 or permission of the instructor.

Quarter Equivalent: PSY 204

Surveys psychology as used in industrial, educational, criminal justice, and community settings, with an emphasis on research methods and experimental principles.

**Psychology 2250. Abnormal Psychology 3 0 3**

Prerequisite: Psychology 1101 or permission of the instructor.

Quarter Equivalent: PSY 250

Examines the psychology of deviations from the normal in behavior. Emphasis is upon dynamic factors in the development of differential psychological disorders.

**Reading 0098. Developmental Studies Reading 4-0-4**

Quarter Equivalent: RDG 098

Teaches reading skills necessary for success in studying and comprehending college-level courses. Emphasizes vocabulary, literal and inferential comprehension, analysis, efficiency, and reading rate. Students may exit from Developmental Studies from this course. (Institutional Credit)

**Reading 1095. Regents' Testing Program 2-0-2**

Quarter Equivalent: RDG 095

Provides required remediation to students (1) who have failed the reading section of the Regents' Test and to students (2) who have earned 45 degree credit hours and who have not passed (or taken) the reading portion of the Regents' Test. (Institutional Credit)

**Reading 1100. Reading Skills 3-0-3**

Prerequisite: Satisfactory Reading placement score or successfully complete Learning Support Reading 0090.

Quarter Equivalent: RDG 100

Uses a text and other materials to improve vocabulary, comprehension, critical reading, and other skills related to the student's technical program. Designed to enable the student to read and comprehend reports, business letters, and other forms of business communication. (Technical Certificate Course)

### **Secretarial Science see Office Administration**

#### **Sociology 1101. Introduction to Sociology 3 0 3**

Prerequisite: Reading 0098, unless exempt, or permission of the instructor.

Quarter Equivalent: SOC 105

Examines human social behavior. Topics covered include culture, social inter-action, deviance, social classes, social change, politics, religion, and the family. This course also considers the principal perspectives in sociology for interpreting everyday events and for interpreting the social structures of society.

#### **Sociology 1160. Introduction to Social Problems 3 0 3**

Prerequisite: Sociology 1101 or permission of the instructor.

Quarter Equivalent: SOC 202

Introduces the study of the social and cultural origins of significant problems in society, such as racism, sexism, poverty, and crime, as well as other urban and environmental problems. An emphasis is placed on American problems, but problems in other societies are also considered. Some of the solutions to social problems that have been tried or proposed are discussed.

#### **Sociology 2293. Introduction to Marriage and Family 3 0 3**

Prerequisite: Sociology 1101 or permission of the instructor.

Quarter Equivalent: SOC 271

Introduces the study of marriage and family relationships. Topics covered include the history of marriage and the family, the marriage and family life cycle, child rearing, marital communication and sexuality, marital problems, divorce, remarriage and step-parenting, as well as some of the alternatives to the traditional family, such as remaining single and the single-parent family.

#### **Spanish 1100. Conversational Spanish 3-0-3**

Quarter Equivalent: SPN 100

Introduces basic grammar and Spanish vocabulary for use by medical personnel in practical situations in hospitals, medical clinics, and doctors' offices. Emphasizes frequently used phrases, comprehension, and situational role playing. Topics may vary from semester to semester. (Technical Certificate Course)

#### **Spanish 1101. Elementary Spanish I 3-0-3**

Quarter Equivalent: SPN 101

Instructs in the basic principles of Spanish pronunciation and in the fundamentals of grammar and sentence structure. Equally emphasizes, within a limited vocabulary range, the development of speaking, writing, reading, and listening skills.

#### **Spanish 1102. Elementary Spanish II 3-0-3**

Prerequisite: Spanish 1101 or its equivalent.

Quarter Equivalent: SPN 102

Follows with lessons in the same patterns and objectives used for Spanish 1101 but includes a more detailed study of grammar, longer conversational exercises, and discussion of the history and culture of Spanish-speaking peoples.

#### **Spanish 1110. Customs of International Business 3-0-3**

Prerequisite: Spanish 1101

Quarter Equivalent: SPN 110

Emphasis will be on applied business/industrial terms associated with performing business transactions in a Spanish-speaking environment. Fiscal matters, political/legal environment, and routine applications important to business success will be explored. (Technical Career Course)

**Spanish 2201. Intermediate Spanish I 3-0-3**

Prerequisite: Spanish 1102 or two high school units in Spanish.

Quarter Equivalent: SPN 103

Offers intensive review of Spanish grammar, verb forms, and idioms. Involves reading texts of moderate difficulty and more advanced conversation exercises. Classes contingent upon enrollment.

**Spanish 2202. Intermediate Spanish II 3-0-3**

Prerequisite: Spanish 2201 or its equivalent

Quarter Equivalent: None

Continues the reading of texts of moderate difficulty in the literature and culture of Spanish-speaking peoples; advanced conversation exercises. Classes contingent upon enrollment.

**Welding 1100. Principles of Welding 0-4-2**

Quarter Equivalent: WLD 100

A basic course in welding. Welding processes are studied with emphasis on MIG welding, oxyacetylene welding, cutting and brazing. Application of these principles will consist of projects in the Welding Laboratory. (Technical Certificate Course)

**Welding 1101. Welding I 1-9-4**

Quarter Equivalent: WLD 101

Introduces history and principles of oxyacetylene welding and cutting, oxyacetylene equipment, development of the puddle, running beads in different positions with or without filler rods. Also a brief history of arc welding, basic welding processes, and their applications. Includes welding tasks in the flat, horizontal, and vertical positions with different types of electrodes. Personal safety and safe work procedures are stressed in the course. (Technical Certificate Course)

**Welding 1102. Welding II 1-9-4**

Quarter Equivalent: WLD 102

A continuation of Welding 1101 with emphasis on the vertical, and overhead positions with different types of electrodes. Teaches operation of AC transformers and DC motor generator arc welding machines, welding polarities, heats and electrodes for use in joining mild steel by the shield metal arc welding process in different positions. (Technical Certificate Course)

**Welding 1103. Blueprint I 3-0-3**

Quarter Equivalent: WLD 103

A beginning course in the study of blueprints and drawings to enable the student to understand the purpose and makeup of prints, types of lines, basic views, structural shapes, and sections as they apply to industrial trades. (Technical Certificate Course)

**Welding 1104. Metallurgy I 2-0-2**

Quarter Equivalent: WLD 104

A beginning course in the study of metals which explores the ways that metals behave when they are heated and cooled. Practical uses of metallurgy, composition of steel, the steel numbering system, the steel-making process, crystal structure, and heat treating are also covered. (Technical Certificate Course)

**Welding 1111. Welding II 1-9-4**

Quarter Equivalent: WLD 111

Introduces practical operation in the uses of Gas Metal Arc Welding (M.I.G.) and Gas Tungsten Arc welding (T.I.G.). Discusses equipment, safety operations, and welding practice in the various positions on ferrous and non-ferrous metals. (Technical Certificate Course)

**Welding 1112. Welding II 1-9-4**

Quarter Equivalent: WLD 112

An advanced course in welding stainless steel with the Shielded Metal Arc Process and preparation for the American Welding Society welder certification test. (Technical Certificate Course)

**Welding 1113. Blueprint II 3-0-3**

Quarter Equivalent: WLD 113

A continuation of Welding 1103 with emphasis on detail and assembly prints, welding symbols and abbreviations, basic joints for welding fabrications, pipe-welding symbols, and inspection and testing. (Technical Certificate Course)

**Welding 1114. Metallurgy II 2-0-2**

Quarter Equivalent: WLD 114

An advanced study of metals including annealing, quenching, tempering, and surface hardening. Also covers techniques and practices of testing welding joints using destructive and non-destructive testing. (Technical Certificate Course)

**Welding 1126. Pipe Welding 1-8-5**

Quarter Equivalent: WLD 126

An advanced course in welding mild steel pipe with the Shielded Metal Arc Process. Included in the course are pipe preparation, electrode selection, and practice welding in various positions. (Technical Certificate Course)

**Welding 1128. Pipe Welding 1-8-5**

Prerequisite: Welding 1126.

Quarter Equivalent: WLD 128

An advanced course in welding ferrous and non-ferrous metals with the Shielded Metal Arc Welding Process. Practice welds will be made in all positions using the different welding processes. (Technical Certificate Course)