

COURSE DESCRIPTIONS

COURSE OFFERINGS AND SCHEDULES

A tentative schedule of the times in which courses will be offered is available in Student Services or on WebAdvisor. This schedule may be affected by demand for classes, cancellation of classes, instructor availability or other situations beyond the control of the College. Some courses which are available to students through the South Carolina Online Consortium are not included in the course description listing here. Students can find course descriptions and related information at www.netc.edu in the distance education section.

COURSE NUMBERS

Course designations consist of a three-letter prefix, a number, and the title of the course. The three-letter prefix indicates the area of study. Courses numbered 101–299 are generally applicable toward the Associate Degree, Diploma, or Certificate. Courses numbered 001–099 are developmental courses, which do not apply toward graduation requirements. Courses numbered 100 are prerequisite courses.

For a course description, please visit www.netc.edu or contact the Office of Academic Affairs.

COURSE HOURS AND CREDITS

Following the prefix, number and title of the course, the number of lecture, laboratory and credit hours are shown in parentheses.

The number of lecture hours in each class each week and/or the number of laboratory hours in class each week combine to make up the total contact hours required for the class each week. The credit for the course is shown beside the course title and by the last number in the parentheses.

PREREQUISITES/COREQUISITES

Course prerequisites are courses required before enrolling in a course, and are identified following each course description. Corequisites are also indicated. Many prerequisite courses require a grade of “C” before the subsequent course may be taken. The grade of “D” may be assigned for G.P.A. purposes; however, prerequisite must be repeated.

TRANSFER LIST

Courses that are marked with an asterisk (*) are included on the South Carolina Senior Public College Transfer List. The student is responsible for checking with the college/university selected for transfer to determine which courses will be accepted in transfer. Other courses, although not marked, may transfer to many colleges and universities. Advisor will provide information.

ACCOUNTING

ACC 100: Basic Accounting—3 Credit Hours (3-0-3) Non-Degree Credit

This course introduces basic accounting principles, including the accounting cycle, bookkeeping, the debit-credit procedure, journals, ledgers and trial balances.

***ACC 101: Accounting Principles I—3 Credit Hours (3-0-3)**

This course introduces basic accounting procedures for analyzing, recording, and summarizing financial transactions, adjusting and closing the financial records at the end of the accounting cycle, and preparing financial statements.

Prerequisite: ACC 100 or instructor permission.

***ACC 102: Accounting Principles II—3 Credit Hours (3-0-3)**

This course emphasizes managerial accounting theory and practice in basic accounting and procedures for cost accounting, budgeting, cost-volume analysis, and financial statement analysis. **Prerequisite:** ACC 101 or ACC 112 with grade of “C” or better.

ACC 111: Accounting Concepts—3 Credit Hours (3-0-3)

This course is a study of the principles of the basic accounting functions—collecting, recording, analyzing, and reporting information. **Prerequisite:** ACC 100 with grade of “C” or better or instructor permission.

ACC 112: Organizational Accounting—3 Credit Hours (3-0-3)

This course is a study of financial accounting with specific emphasis on partnerships and the corporate form of organization. **Prerequisite:** ACC 111 with grade of “C” or better.

ACC 115: Managerial Accounting—3 Credit Hours (3-0-3)

This course is a study of the types and uses of internal accounting information for management decision-making, including cost determination, cost control, performance evaluation, and financial planning. **Prerequisite:** ACC 102 with a grade of “C” or better.

ACC 116: Practical Accounting Applications I—3 Credit Hours (3-0-3)

This course is a study of the principles of adjusting entries, correction of accounting errors, and payroll in accounting practice. **Prerequisite:** ACC 102 with a grade of “C” or better.

ACC 117: Practical Accounting Applications II—3 Credit Hours (3-0-3)

This course is a study of the principles of depreciation and inventory in accounting practice. **Prerequisite:** ACC 116 with a grade of “C” or better.

ACC 120: Federal Income Tax—3 Credit Hours (3-0-3)

This course is a study of the income tax structure from the standpoint of the individual, partnership, and corporation.

ACC 150: Payroll Accounting—3 Credit Hours (3-0-3)

This course introduces the major tasks of payroll accounting, employment practices, federal, state, and local governmental laws and regulations, internal controls, and various forms and records.

ACC 230: Cost Accounting I—3 Credit Hours (3-0-3)

This course is a study of the accounting principles involved in job order cost systems. *Prerequisite:* ACC 101 or ACC 112 with grade of “C” or better.

ACC 240: Computerized Accounting—3 Credit Hours (3-0-3)

This course is a study of using the computer to design and implement various accounting functions, including financial transactions, records, statements, reports and documents. *Prerequisite:* ACC 101 or 111 with grade of “C” or better.

ADMINISTRATIVE OFFICE TECHNOLOGY

AOT 105: Keyboarding—3 Credit Hours (3-2-3)

This course focuses on the mastery of touch keyboarding.

AOT 110: Document Formatting—3 Credit Hours (3-2-3)

This course emphasizes speed, accuracy, and development of document-formatting skills using keyboarding competencies. *Prerequisite:* AOT 105 with a grade of “C” or better.

AOT 115: Medical Office Terminology—3 Credit Hours (3-0-3)

This course is a study of root derivations of terms and terminology for the medical office.

AOT 121: Transcription—3 Credit Hours (3-0-3)

This course provides experience in transcribing documents from dictation. Emphasis is placed on development of accuracy, effective listening techniques, and proper punctuation of business documents. *Prerequisite:* AOT 110 with grade of “C” or better.

AOT 122: Medical Transcription I—3 Credit Hours (3-0-3)

This course provides experience in transcribing medical documents from dictation. *Prerequisite:* AOT 115 and 165 with a “C” or better.

AOT 123 – Legal Transcription—3 Credit Hours (3-0-3)

This course focuses on the development of speed and accuracy in transcribing legal documents from dictation. *Prerequisites:* AOT 110 and AOT 144 with a grade of “C” or better.

AOT 134: Office Communications—3 Credit Hours (3-0-3)

This course is a study of grammar, punctuation, and written communication skills for the office environment. *Prerequisite:* ENG 100 with a grade of “C” or better, or permission of instructor.

AOT 141: Office Procedures I—3 Credit Hours (3-0-3)

This is an introductory course to a variety of office procedures and tasks using business equipment, systems and procedures. *Prerequisite:* AOT 105 with grade of “C” or better.

AOT 142: Advanced Office Procedures II—3 Credit Hours (3-0-3)

This course covers the application of office procedures necessary to perform effectively and efficiently in the office environment. *Prerequisite:* AOT 141 with grade of “C” or better.

AOT 144: Legal Office Procedures—3 Credit Hours (3-0-3)

This course covers the application of office procedures necessary to perform effectively and efficiently in the office environment. Law including courts, terminology, and procedures will also be introduced with emphasis on ethics and the role of the legal assistant in a legal system. *Prerequisite:* BUS 121 with grade of “C” or better.

AOT 161: Records Management—3 Credit Hours (3-0-3)

This course emphasizes records management functions and various types of storage methods, technology, and procedures. *Prerequisite:* AOT 267 with grade of “C” or better.

AOT 162: Basic Information Processing—3 Credit Hours (3-0-3)

This is an entry level course to introduce the user to basic computer information processing software applications.

AOT 164: Medical Information Processing—3 Credit Hours (3-0-3)

This course emphasizes development of proficiency in producing medical documents typical of those used in health care settings. *Prerequisite:* AOT 105 and 165 with a grade of “C” or better.

AOT 165: Information Processing Software—3 Credit Hours (3-0-3)

This course includes applications of information processing software. Emphasis is placed on functions for acceptable document formatting and processing. *Prerequisite:* AOT 100 or AOT 105 with grade of “C” or better.

AOT 170: Speedwriting—3 Credit Hours (3-0-3)

This is an introductory course using the alphabet for rapid note taking. Dictation and transcription of familiar material are included. *Prerequisite:* AOT 105 with grade of “C” or better.

AOT 196 - Office Confidentiality and Security—3 Credit Hours (3-0-3)

This course is the study of legal issues encountered in the office environment to include accessibility, interviewing, HIPAA, and other rules as they apply to specific types of offices; office security issues and basic response to crisis are also reviewed.

AOT 210: Document Production—3 Credit Hours (3-2-3)

This course emphasizes the production of documents found in typical business offices. The major focus is on productivity and excellence in document production. *Prerequisite:* AOT 110 and AOT 267 with a grade of “C” or better.

AOT 213: Legal Document Production—3 Credit hours (3-2-3)

This course introduces legal terminology and covers the production of documents found in the legal office environment. Emphasis is on productivity and excellence in legal document production. *Prerequisite:* AOT 110 and AOT 267 with a “C” or better.

AOT 221: Advanced Transcription—3 Credit Hours (3-0-3)

This course emphasizes accuracy and speed development in transcribing business applications from dictation. *Prerequisite:* AOT 121 with grade of “C” or better.

AOT 250: Advanced Information Processing—3 Credit Hours (3-0-3)

This course emphasizes complex applications of information processing software using advanced features and concepts. *Prerequisite:* AOT 165 with a grade of “C” or better.

AOT 252 – Medical Systems and Procedures—3 Credit Hours (3-0-3)

This course emphasizes development of proficiency in integrating skills commonly performed in medical offices. *Prerequisites:* AOT 105, AOT 115 and AOT 165 with a grade of “C” or better.

AOT 253 - Legal Systems and Procedures—3 Credit Hours (3-0-3)

This course emphasizes development of proficiency in integrating knowledge and skills performed in legal offices. *Prerequisites:* AOT 196 and AOT 213 with a grade of “C” or better.

AOT 267: Integrated Information Processing—3 Credit Hours (3-0-3)

This course emphasizes the application of integrated computer software. *Prerequisite:* AOT 105 with a grade of “C” or better.

ALLIED HEALTH

AHS 101: Intro To Health Professions—2 Credit Hours (2-0-2)

This course provides a study of the health professions and the health care industry.

AHS 102: Medical Terminology—3 Credit Hours (3-0-3)

This course covers medical terms, including roots, prefixes, and suffixes, with emphasis on spelling, definition and pronunciation.

AHS 107: Clinical Computation—2 Credit Hours (2-0-2)

This course is a study of the principles and applications of computations used in the clinical setting. *Prerequisite:* PNR 110

AHS 126: Health Calculations—1 Credit Hour (1-0-1)

This course is a study of the mathematical concepts needed in health science studies. *Prerequisite:* MAT 150 with a grade of “C” or better.

ART

***ART 101: Art History And Appreciation—3 Credit Hours (3-0-3)**

This is an introductory course to the history and appreciation of art, including the elements and principles of the visual arts.

ASTRONOMY

***AST 101: Solar System Astronomy—4 Credit Hours (3-3-4)**

This course is a descriptive survey of the universe with emphasis on basic physical concepts and the objects in the solar system. Related topics of current interest are included in the course. *On-line. Prerequisite:* MAT 102

***AST 102: Stellar Astronomy—4 Credit Hours (3-3-4)**

This course is a descriptive survey of the universe with emphasis on basic physical concepts and galactic and extra-galactic objects. Related topics of current interest are included in the course. *On-line. Prerequisite:* AST 101.

BIOLOGY

***BIO 101: Biological Science I—4 Credit Hours (3-3-4)**

This course is the first of a sequence introducing Biology. Topics include the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology.

***BIO 102: Biological Science II—4 Credit Hours (3-3-4)**

This is a continuation of introductory Biology which includes classification of organisms and structural and functional considerations of all kingdoms (particularly major phyla as well as viruses). Vertebrate animals and vascular plants are emphasized.

BIO 112: Basic Anatomy And Physiology (3-3-4)

This course is a basic integrated study of the structure and function of the human body.

***BIO 210: Anatomy And Physiology I—4 Credit Hours (3-3-4)**

This is the first in a sequence of courses, including an intensive coverage of the body as an integrated whole. All body systems are studied. *Prerequisite:* BIO 112 or BIO 101 with grade of “C” or better, or high school biology within 10 years of admission.

***BIO 211: Anatomy And Physiology II—4 Credit Hours (3-3-4)**

This is a continuation of BIO 210 including intensive coverage of the body as an integrated whole. All body systems are studied. *Prerequisite:* BIO 210 with grade of “C” or better.

***BIO 225: Microbiology—4 Credit Hours (3-3-4)**

This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. *Prerequisite:* BIO 101 or BIO 210 with grade of “C” or better.

BUSINESS

BAF 101: Personal Finance—3 Credit Hours (3-0-3)

This course includes the practical applications of concepts and techniques used in managing personal finances. Major areas of study include financial planning, budgeting, credit use, housing, insurance, investments, and retirement planning.

BUS 101: Introduction To Business—3 Credit Hours (3-0-3)

This course is a study of the nature of business activity in relation to the economic society, including how a business is owned, organized, managed, and controlled.

BUS 105: Business Economics Applications—3 Credit Hours (3-0-3)

This course includes the practical applications of economics used in marketing, retailing and management and the study of supply/demand, market structure, price regulations and trade.

BUS 121: Business Law I—3 Credit Hours (3-0-3)

This course is a study of legal procedures, law and society, classifications and systems of law, the tribunals administering justice and their actions, contracts, sales, transfer of titles, rights and duties of the parties, conditions, and warranties.

BUS 123: Business Law II—3 Credit Hours (3-0-3)

This course is a study of negotiable instruments, law of property, acquisition and transfer of title, bailments, duties and liabilities of common carriers, innkeepers, warehousemen, and agencies.

BUS 124: Business Law III—3 Credit Hours (3-0-3)

This course is a study of the principal agent, employment relationships, partnerships, special ventures, corporations, and law as related to real property.

BUS 130: Business Communications—3 Credit Hours (3-0-3)

This course covers the application of communication skills to situations routinely encountered in business environments. *Prerequisite:* ENG 100 or higher with grade of “C” or better or equivalent placement score.

BUS 140: Business Mathematics—3 Credit Hours (3-0-3)

This course provides applications of business mathematics in the study of discounting, marking up, inventory and insurance. Other topics may include payrolls and commission computations, introduction to stocks and bonds and other accepted business practices. *Prerequisite:* MAT 150 with grade of “C” or better or equivalent placement score.

CHEMISTRY

CHM 100: Introductory Chemistry—4 Credit Hours (4-0-4)

This is an introductory course in general chemistry and principles of chemistry. Emphasis is placed on mathematical solutions and laboratory techniques. *Prerequisite:* MAT 150. **Non-degree credit.**

***CHM 110: College Chemistry I—4 Credit Hours (3-3-4)**

This is the first course in a sequence which includes the following topics: atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. *Prerequisite:* CHM 100 with a grade of “C” or better or high school chemistry within 10 years of admission, MAT 101 with a grade of “C” or better.

***CHM 111: College Chemistry II—4 Credit Hours (3-3-4)**

This course is a continuation of the study of atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. Other topics included are kinetics, thermodynamics, and electrochemistry. *Prerequisite:* CHM 110 with a grade of “C” or better.

***CHM 112: College Chemistry II—4 Credit Hours (3-3-4)**

This course is a continuation of the study of atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. Other topics included are organic chemistry and biochemistry. *Prerequisite:* CHM 110 with a grade of “C” or better.

COLLEGE ORIENTATION

COL 103: College Skills—3 Credit Hours (3-0-3)

This course includes selected topics such as career planning, study skills, stress management, tutoring, group guidance, and other subjects to facilitate student success.

COMPUTER TECHNOLOGY

CPT 101: Introduction To Computers—3 Credit Hours (3-0-3)

This course covers basic computer history, theory and applications, including word processing, spreadsheets, data bases, and the operating system. *Prerequisite:* Keyboarding skills or permission of instructor.

CPT 114: Computers And Programming—3 Credit Hours (3-0-3)

This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level procedural language. *Prerequisite:* Keyboarding skills or permission of instructor.

CPT 115: COBOL Programming I—3 Credit Hours (3-0-3)

This course introduces the nature and use of the common business-oriented language—COBOL. *Prerequisite:* CPT 114 with grade of “C” or better.

CPT 168: Programming Logic And Design—3 Credit Hours (3-0-3)

This course examines problem-solving techniques applied to program design. Topics include a variety of documentation techniques as means of solution presentation.

CPT 172: Microcomputer Data Base—3 Credit Hours (3-0-3)

This course introduces microcomputer database concepts, including generating reports from databases, creating, maintaining, and modifying databases. *Prerequisite:* CPT 101 or CPT 114 with grade of “C” or better.

CPT 174: Microcomputer Spreadsheets—3 Credit Hours (3-0-3)

This course introduces the use of spreadsheet software on the microcomputer. Topics include creating, editing, using formulas, using functions, and producing graphs. *Prerequisite:* CPT 101 or CPT 114 with grade of “C” or better.

CPT 202: SQL Programming I—3 Credit Hours (3-0-3)

This course is an introduction to the writing of basic Structured Query Language (SQL) used in creating tables, inserting data, retrieving data, and manipulating data from database. *Prerequisite:* CPT 114 with grade of “C” or better.

CPT 203: SQL Programming II—3 Credit Hours (3-0-3)

This course is the study of advanced SQL programming by creating constraints, views, indexes, synonyms, and data security through SQL projects. *Prerequisite:* CPT 202 with grade of “C” or better.

CPT 209: Computer Systems Management—3 Credit Hours (3-0-3)

This course examines the methods and procedures used in maintaining microcomputer systems. Topics include hardware and software installation, configuration, operations, and troubleshooting. *Prerequisite:* CPT 285 with grade of “C” or better.

CPT 212: Visual Basic Programming—3 Credit Hours (3-0-3)

This course focuses on Windows programming using Visual Basic to create graphical user interfaces. The course examines forms, controls, graphical controls, loops, control arrays, database and traditional file processing, and application class scheduling. *Prerequisite:* CPT 114 with grade of “C” or better.

CPT 215: COBOL Programming II—3 Credit Hours (3-0-3)

This course emphasizes file maintenance and tables using advanced concepts in COBOL. *Prerequisite:* CPT 115 with grade of “C” or better.

CPT 220: E-Commerce—3 Credit Hours (3-0-3)

This course is a study of fundamental computer and business concepts applied to the world of e-commerce. *Pre/corequisite:* IST 226 with grade of “C” or better.

CPT 232: C++ Programming I—3 Credit Hours (3-0-3)

This introductory course in C++ programming emphasizes the designing, coding, testing, and debugging of C++ programs involving input/output operations, data types, storage classes, decision structures, looping, functions, arrays, simple pointers, and strings. *Prerequisite:* CPT 114 with grade of “C” or better.

CPT 233: C++ Programming II—3 Credit Hours (3-0-3)

This course introduces object-oriented design techniques using C++. Topics include classes, overloading operators, inheritance, and virtual functions. *Prerequisite:* CPT 232 with grade of “C” or better.

CPT 255: Operating System Fundamentals—3 Credit Hours (3-0-3)

This course examines popular operating systems of several different types of computers. Topics include command languages, utility programs, and screen design. *Prerequisite:* CPT 101 or CPT 114 with grade of “C” or better.

**CPT 260: Fundamentals of Operating Systems and Web Servers—
3 Credit Hours (3-0-3)**

This course is a study of operating techniques needed for setting up and maintaining web servers. *Prerequisite:* CPT 255 with grade of “C” or better.

CPT 264: Systems and Procedures—3 Credit Hours (3-0-3)

This course covers the techniques of system analysis, design, development, and implementation. *Prerequisite:* CPT 115 with a grade of “C” or better.

CPT 270: Advanced Microcomputer Applications—3 Credit Hours (3-0-3)

This course emphasizes the integration of popular microcomputer software packages using advanced concepts in microcomputer applications software. *Prerequisite:* CPT 101 or CPT 114 with grade of “C” or better.

CPT 276: CPT Internship—3 Credit Hours (3-0-3)

This course is an intensive application development experience in an approved business setting. *Prerequisite:* CPT 215 with grade of “C” or better.

CPT 285: PC Hardware Concepts—3 Credit Hours (3-0-3)

This course focuses on installing and upgrading microcomputer hardware and identifying malfunctions. *Prerequisite:* CPT 114 with grade of “C” or better.

CRIMINAL JUSTICE

CRJ 101: Introduction To Criminal Justice—3 Credit Hours (3-0-3)

This course includes an overview of the functions and responsibilities of agencies involved in the administration of justice to include police organizations, court systems, correctional systems, and juvenile justice agencies.

CRJ 115: Criminal Law I—3 Credit Hours (3-0-3)

This course covers the development of criminal law in America. The basic elements of specific criminal offenses, criminal defenses, and various legal principles upon which criminal law is established are reviewed. *Prerequisite:* CRJ 101 with grade of “C” or better.

CRJ 125: Criminology—3 Credit Hours (3-0-3)

This course is a study of the various theories of criminal causation and control, the identification of criminal typologies, and the reaction of society to crime and criminals.

CRJ 130: Police Administration—3 Credit Hours (3-0-3)

This course is a study of the organization, administration, and management of law enforcement agencies.

CRJ 135: Correctional Administration—3 Credit Hours (3-0-3)

This course is a study of the structure, organization, and management of adult and juvenile correctional facilities.

CRJ 242: Correctional Systems—3 Credit Hours (3-0-3)

This course is an introduction to aspects of the correctional function in criminal justice, including organization, process, procedure and clients incarcerated and on conditional release.

EARLY CHILDHOOD DEVELOPMENT

ECD 101: Introduction To Early Childhood—3 Credit Hours (3-0-3)

This course includes an overview of the history, theories and curriculum models of early education. Emphasis is on current trends/issues, with a review of state/national regulations. Characteristics of quality programs and professional teachers are explored in this course.

ECD 102: Growth and Development I—3 Credit Hours (3-0-3)

This course is an extensive study of philosophies and theories of growth and development of infants/toddlers. Focus is on “total” development of the child with emphasis on physical, social, emotional, cognitive and nutritional areas. Developmental tasks and appropriate activities are explored in the course.

ECD 105: Guidance-Classroom Management—3 Credit Hours (3-0-3)

This course is an overview of developmentally appropriate, effective guidance and classroom management techniques for the teacher of young children. A positive pro-active approach is stressed in the course.

ECD 107: Exceptional Children—3 Credit Hours (3-0-3)

This course includes an overview of special-needs children and their families. Emphasis is on prevalence of disorders, treatment modalities, community

resources serving exceptional children, the teacher's role in main streaming and early identification, and on federal legislation affecting exceptional children.

ECD 131: Language Arts—3 Credit Hours (3-0-3)

This course is a study of methods and materials in age-appropriate language experiences. Opportunities are provided to develop listening, speaking, pre-reading and pre-writing skills through planning, implementation, and evaluation of media, methods, techniques and equipment. Methods of selection, evaluation and presentation of children's literature are included. **Prerequisite:** English Placement scores of 53 or higher or ENG 032 with grade of "C" or better.

ECD 132: Creative Experiences—3 Credit Hours (3-0-3)

In this course, the importance of creativity and independence in creative expression are stressed. A variety of age-appropriate media, methods, techniques and equipment are utilized. Students plan, implement and evaluate instructional activities.

ECD 133: Science and Math Concepts—3 Credit Hours (3-0-3)

This course includes an overview of pre-number and science concepts developmentally appropriate for young children. Emphasis is on the planning, implementation and evaluation of developmentally appropriate activities utilizing a variety of methods and materials. **Prerequisite:** Pre-Algebra Placement score of 40 or higher or MAT 032 with grade of "C" or better.

ECD 135: Health, Safety and Nutrition—3 Credit Hours (3-0-3)

This course covers a review of health/safety practices recommended for child-care and includes information on common disease and health problems. Certification preparation is provided in pediatric safety, CPR and first aid. Guidelines and information on nutrition and developmentally-appropriate activities are also studied in the course.

ECD 203: Growth and Development II—3 Credit Hours (3-0-3)

This course is an in-depth study of preschool children growing and developing in today's world. Focus is on "total" development of the child with emphasis on physical, social, emotional, cognitive and nutritional areas of development. Developmental tasks and appropriate activities are explored in the course. **Prerequisite:** ECD 102.

ECONOMICS

***ECO 210: Macroeconomics—3 Credit Hours (3-0-3)**

This course includes the study of fundamental principles and policies of a modern economy to include markets and prices, national income accounting, cycles, employment theory and fiscal policy, banking and monetary controls, and the government's role in economic decisions and growth.

***ECO 211: Microeconomics—3 Credit Hours (3-0-3)**

This course includes the study of the behavior of households and firms, including supply and demand, elasticity, price/input in different market structures, pricing of resources, regulations, and comparative advantage and trade.

ELECTRONICS

- EEM 105: Basic Electricity—2 Credit Hours (3-3-2)**
This course is a survey of basic electrical principles, circuits, and measurements.
- EEM 115: DC Circuits—4 Credit Hours (3-3-4)**
This course is a study of atomic theory related to electronics and circuit theory. It covers electrical parameters and units, OHM's law, Kirchhoff's voltage and current laws, power, and energy. It also includes inductance, capacitance, and DC instruments. Circuits are constructed and tested.
- EEM 116: AC Circuits—4 Credit Hours (3-3-4)**
This course is a study of the characteristics of alternating current and voltage in resistors, capacitors and inductors. Series, parallel, and complex circuits are covered. Circuits are constructed and tested. **Corequisite:** MAT 155 or permission of instructor.
- EEM 140: National Electrical Code—3 Credit Hours (2-3-3)**
This course is a study of the National Electrical Code and is based on the latest codes as published by the National Fire Protection Association (NFPA).
- EEM 151: Motor Controls I—4 Credit Hours (3-3-4)**
This course is an introduction to motor controls, including a study of the various control devices and wiring used in industrial processes.
- EEM 160: Industrial Instrumentation—3 Credit Hours (2-3-3)**
This course covers the basic principles of instrumentation, including a discussion of various instruments employed in industrial applications.
- EEM 165: Residential/Commercial Wiring—4 Credit Hours (3-3-4)**
This course is a study of wiring methods and practices used in residential and commercial applications.
- EEM 201: Electronic Devices I—3 Credit Hours (2-3-3)**
This course is a study of the fundamental principles of common electronic devices and circuits. Emphasis is placed on solid-state principles and applications. **Prerequisite:** EEM 105 or EEM 115
- EEM 202: Electronic Devices II—3 Credit Hours (2-3-3)**
This course is a continuation of the study of electronic devices and circuits. Components and circuit configurations are analyzed to achieve a more comprehensive coverage of electronic devices and circuits. **Prerequisite:** EEM 201.
- EEM 231: Digital Circuits I—3 Credit Hours (2-3-3)**
This course is a study of the logic elements, mathematics, components, and circuits utilized in digital equipment. Emphasis is placed on the function and operation of digital integrated circuit devices. **Prerequisite:** EEM 201.
- EEM 241: Microprocessors I—3 Credit Hours (2-3-3)**
This course is an introduction to basic microprocessor concepts such as microprocessor structure, numbering systems, computer arithmetic, programming, architecture, and basic interfacing techniques. **Prerequisite:** EEM 201.

EEM 242: Microprocessors II—3 Credit Hours (2-3-3)

This course is a continuation of the study of microprocessor programming and interfacing techniques. *Prerequisite:* EEM 241.

EEM 251: Programmable Controllers—3 Credit Hours (2-3-3)

This course is an introduction to programmable control systems with emphasis on basic programming techniques. A variety of input/output devices and their applications are covered. *Corequisite:* EEM 151.

EEM 252: Programmable Controllers Applications—3 Credit Hours (2-3-3)

This course covers the application of programmable controller theories and operation procedures. Topics such as interfacing data manipulation and report generation are covered. Programmable controller projects are constructed, operated, and tested. *Prerequisite:* EEM 251.

EEM 275: Technical Troubleshooting—3 Credit Hours (2-3-3)

This course consists of a systematic approach to troubleshooting. Techniques used to analyze proper circuit operation and malfunctions are studied. *Prerequisite:* EEM 117 or EEM 115 and EEM 116

EEM 276: Applied Troubleshooting—3 Credit Hours (2-3-3)

This course is an application of electronic troubleshooting methods. The student analyzes, troubleshoots, and repairs circuits. *Prerequisite:* EEM 201.

ENGINEERING GRAPHICS/DRAFTING

AET 110: Architectural Graphics I—3 Credit Hours (3-0-3)

This course is an introduction to the skills of architectural manual drafting.

AET 111: Architectural Computer Graphics I—3 Credit Hours (3-0-3)

This course includes architectural/construction, basic computer-aided design commands, and creation of construction industry symbols and standards.

AET 120: Architectural Graphics II—3 Credit Hours (2-3-3)

This course requires the production of a set of working drawings of a residential or commercial building. Exercises incorporate construction methods, materials, building code requirements, site development, and technical skills required to draw and graphically present projects.

AET 221: Architectural Computer Graphics II—4 Credit Hours (4-0-4)

This course includes a study of cad commands with architectural applications and routines. A complete set of working drawings of a residential or commercial building using the computer as the drafting tool is produced.

EGT 106: Print Reading and Sketching—3 Credit Hours (3-0-3)

This course covers the interpretation of basic engineering drawings and sketching techniques for making multi-view pictorial representations.

EGT 110: Engineering Graphics I—4 Credit Hours (3-3-4)

This is an introductory course in engineering graphics science which includes beginning drawing techniques and development of skills to produce basic technical drawings.

EGT 111: Mechanical Drawing I—2 Credit Hours (1-3-2)

This course is an introduction to the principles and practices of mechanical drawing. Not for EGT majors. **Prerequisite:** EGT 106 with a grade of “C” or better.

EGT 115: Engineering Graphics II—4 Credit Hours (3-3-4)

This course in engineering graphics science includes additional drawing techniques for industrial applications. **Prerequisite:** EGT 110 with a grade of “C” or better.

EGT 151: Introduction to CAD—3 Credit Hours (3-0-3)

This course covers the operation of a computer-aided drafting system. The course includes interaction with a CAD station to produce technical drawings.

EGT 152: Fundamentals of CAD—3 Credit Hours (3-0-3)

This course includes a related series of problems and exercises utilizing the computer graphics station as a drafting tool. **Prerequisite:** EGT 151 with a grade of “C” or better.

EGT 210: Engineering Graphics III—4 Credit Hours (4-0-4)

This advanced course in engineering graphics science covers the production of technical working drawings. **Prerequisite:** EGT 115 with a grade of “C” or better.

EGT 251: Principles of CAD—3 Credit Hours (3-0-3)

This course includes the additional use of CAD software for production of technical drawings and related documentation. **Prerequisite:** EGT 151 with a grade of “C” or better.

EGT 252: Advanced CAD—3 Credit Hours (3-0-3)

This course covers advanced concepts of CAD software and applications. **Prerequisite:** EGT 251 with a grade of “C” or better.

EGT 280: Intro. To Rapid Prototyping—3 Credit Hours (0-3-1)

This course provides an overview of rapid prototyping technologies and applications.

ENGLISH

ENG 032: Developmental English—3 Credit Hours (3-0-3)

Intended for students who must develop better English skills in order to be successful in a curriculum program. Concentration is mainly on proper usage, grammar and diction, punctuation, capitalization, sentence structure. *Non-Degree Credit.* COMPASS: 15-52

ENG 100: Introduction To Composition—3 Credit Hours (3-0-3)

Non-Degree Credit.

This course is a study of basic writing and different modes of composition and may include a review of usage. This is a required course for students completing English Essentials. *Non-Degree Credit.* **Prerequisite:** Acceptable placement scores (COMPASS: 53-67) or satisfactory completion of English 032.

***ENG 101: English Composition I—3 Credit Hours (3-0-3)**

This is a college transfer course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented. **Prerequisite:** Acceptable English placement scores (COMPASS: 68-100) or ENG 100 with grade of “C” or better and completion of RDG requirements.

***ENG 102: English Composition II—3 Credit Hours (3-0-3)**

This is a college transfer course in which the following topics are presented: development of writing skills through logical organization, effective style, literary analysis and research. An introduction to literary genre is also included. **Prerequisite:** ENG 101, with a grade of “C” or better.

ENG 155: Communications I—3 Credit Hours (3-0-3)

This course introduces the principles of expository writing and public speaking through practice and development of communication skills. **Prerequisite:** Acceptable placement scores (COMPASS: 68-100) or ENG 100 with grade of “C” or better and completion of RDG requirements.

ENG 165: Professional Communications—3 Credit Hours (3-0-3)

This course develops practical written, and oral professional communication skills. **Prerequisite:** ENG 155 with a grade of “C” or better.

***ENG 201: American Literature I—3 Credit Hours (3-0-3)**

This course is a study of American literature from the colonial period to the Civil War. **Prerequisite:** ENG 102 with a grade of “C” or better.

***ENG 202: American Literature II—3 Credit Hours (3-0-3)**

This course is a study of American literature from the Civil War to the present. **Prerequisite:** ENG 102 with a grade of “C” or better.

***ENG 205: English Literature I—3 Credit Hours (3-0-3)**

This is a college transfer course in which the following topics are presented: the study of English literature from the Old English period to the Romantic period with emphasis on major writers and periods. **Prerequisite:** ENG 102 with a grade of “C” or better.

***ENG 206: English Literature II—3 Credit Hours (3-0-3)**

This is a college transfer course in which the following topics are presented: the study of English literature from the Romantic period to the present with emphasis on major writers and periods. **Prerequisite:** ENG 102 with a grade of “C” or better.

***ENG 208: World Literature I—3 Credit Hours (3-0-3)**

This course is a study of masterpieces of world literature in translation from the ancient world to the sixteenth century. **Prerequisite:** ENG 102 with a grade of “C” or better.

***ENG 209: World Literature II—3 Credit Hours (3-0-3)**

This course is a study of masterpieces of world literature in translation from the seventeenth century to the present. **Prerequisite:** ENG 102 with a grade of “C” or better.

FOREIGN LANGUAGES

French, German or Spanish are available via distance education. Advisors will provide specific information.

- **French** 101, 102, 201, 202
- **German** 101, 102
- **Spanish** 101, 102, 201, 202

GEOGRAPHY

GEO 102: World Geography—3 Credit Hours (3-0-3)

This course includes a geographic analysis of the regions of the world, I.E., North and South America, Europe, Australia, and Africa. Diversity of each region is emphasized by examining its physical environment, natural resources, social, cultural, economic and political systems. (*Distance Learning*)

HISTORY

***HIS 101: Western Civilization To 1689—3 Credit Hours (3-0-3)**

This course is a survey of Western civilization from ancient times to 1689, including the major political, social, economic, and intellectual factors shaping Western cultural tradition.

***HIS 102: Western Civilization Post 1689—3 Credit Hours (3-0-3)**

This course is a survey of Western civilization from 1689 to the present, including major political, social, economic, and intellectual factors which shape the modern Western world.

HIS 104: World History I—3 Credit Hours (3-0-3)

This course covers world history from prehistory to circa 1500 A.D., focusing on economic, social, political, and cultural aspects of people before the onset of western dominance and identifying major patterns and trends which characterized the world in each era.

HIS 115: African-American History—3 Credit Hours (3-0-3)

This course is a study of the history of African Americans, including African heritage, American history, and significant contributions by individuals or groups.

***HIS 201: American History: Discovery To 1877—3 Credit Hours (3-0-3)**

This course is a survey of U.S. history from discovery to 1877. This course includes political, social, economic, and intellectual developments during this period.

***HIS 202: American History: 1877 To Present—3 Credit Hours (3-0-3)**

This course is a survey of U.S. history from 1877 to the present. This course includes political, social, economic, and intellectual developments during this period.

HOSPITALITY

HOS 140: The Hospitality Industry—3 Credit Hours (3-0-3)

This course is a survey of the hospitality industry and the principles of operations of both lodging and food service industries.

HUMANITIES

HSS 205: Technology and Society—3 Credit Hours (3-0-3)

This course is an investigation of the impact of modern technological changes in America on the individual, society, and the physical environments.

INDUSTRIAL MANAGEMENT

IET 223: Industrial Safety—3 Credit Hours (3-0-3)

This course involves safety fundamentals and their relationship to accident prevention. The importance of safe behavior through careful training of both employees and supervisors is stressed. A survey of the occupational safety and health (OSHA) is included.

IET 229: Statistical Quality Control—3 Credit Hours (3-0-3)

This course includes statistical sampling plans, the nature of variation in industrial processes, and the methods of statistically analyzing their variation. Quality assurance functions, variable sampling, control charts for variable and attributes are also topics covered in this course.

INDUSTRIAL MAINTENANCE

IMT 101: Introduction to Industrial Maintenance—2 Credit Hours (2-0-2)

This course is an introduction to industrial maintenance.

IMT 102: Industrial Safety—2 Credit Hours (2-0-2)

This course covers safety awareness and practices found in industry.

IMT 111: Industrial Tools—5 Credit Hours (3-6-5)

This course covers the proper use of hand and power tools. (IMT 112 Hand Tool Operations—3 Credit Hours plus IMT 113, Power Tool Operations—2 Credit Hours).

IMT 131: Hydraulics and Pneumatics—4 Credit Hours (4-0-4)

This course covers the basic technology and principles of hydraulics and pneumatics (IMT 132 plus IMT 133).

IMT 161: Mechanical Power Applications—4 Credit Hours (3-3-4)

This course covers mechanical transmission devices, including procedures for installation, removal, and maintenance.

INFORMATION SYSTEMS

IST 201: CISCO Internetworking Concepts—3 Credit Hours (3-0-3)

This course is a study of current and emerging computer networking technology. Topics covered include safety, networking, network terminology, and protocols, network standards, LANS, WANS, OSI model, cabling, cabling tools, Cisco routers, router programming, star topology, IP addressing, and network standards. **Prerequisite:** IST 220 with a “C” or better.

IST 202: CISCO Router Configuration—3 Credit Hours (3-0-3)

This course is a study of LANS, WANS, OSI models, Ethernet, Token Ring, Fiber Distributed Data Interface, TCP/IP addressing protocol, dynamic routing, routing, and the network administrator’s role and function. **Prerequisite:** IST 201 with a “C” or better.

IST 203: Advanced CISCO Router Configuration—3 Credit Hours (3-0-3)

This course is a study of configuring Cisco routers. *Prerequisite:* IST 202 with a “C” or better.

IST 204: CISCO Troubleshooting—3 Credit Hours (3-0-3)

This course is a study of troubleshooting Cisco routers. *Prerequisite:* IST 203 with a “C” or better.

IST 220: Data Communications—3 Credit Hours (3-0-3)

This course is a study of the fundamentals of Data Communications, Basic signaling, networking, and various transmission media are covered. *Prerequisite:* CPT 114 with a “C” or better.

IST 226: Internet Programming—3 Credit Hours (3-0-3)

This course covers designing Internet pages and applications for personal/business use, writing the required program code in languages such as HTML, JAVA, and VRML, testing and debugging programs, uploading and maintaining Internet pages and application. *Prerequisite:* CPT 101 or 114 with a “C” or better.

IST 227: Internet Operations and Management—3 Credit Hours (3-0-3)

This course covers the duties/responsibilities of an Intranet Webmaster, appropriate hardware, software and telecommunications technology, designing implementing and maintaining a web site, and utilizing security mechanisms. *Prerequisite:* CPT 101 or 114 with a “C” or better.

IST 228: Intranet Operations and Management—3 Credit Hours (3-0-3)

This course covers the duties and responsibilities of an Intranet WebMaster, selecting appropriate hardware, software and telecommunications technology, designing, implementing and maintaining an Intranet site. Describing issues relating to interconnection of Internet to an Intranet, and utilizing security mechanisms. *Prerequisite:* IST 226 with a “C” or better.

IST 237: Intermediate Website Design—3 Credit Hours (3-0-3)

This course is a study of server-side (CGI; Dynamic HTML) and client-side (Javascript) dynamic web design, including the incorporation of database applications and content into web pages. *Prerequisite:* CPT 101 or 114 with a “C” or better.

IST 238: Advanced Tools for Website Design—3 Credit Hours (3-0-3)

This course is a study of an advanced (4th Generation) web authoring tool (such as Dreamweaver) to develop increased efficiency and sophistication in website design and web project management. *Prerequisite:* CPT 101 or 114 with a “C” or better.

MATH

MAT 032: Developmental Math—3 Credit Hours (3-0-3)

Developmental mathematics includes a review of arithmetic skills and focuses on the study of measurement and geometry, basic algebraic concepts, and data analysis. Application skills are emphasized. *Non-Degree Credit.* COMPASS: Pre-Algebra 22-39.

MAT 150: Fundamentals of Math—3 Credit Hours (3-0-3)

This course includes the following topics: elementary number theory, basic algebra and geometry, English and SI measurements, ratio and proportion, statistics, and graph interpretation. *Non-Degree Credit. Prerequisite:* COMPASS Pre-Algebra 40-100 or MAT 032 with grade of “C” or better.

MAT 101: Beginning Algebra—3 Credit Hours (3-0-3)

This course includes the following topics: operations with signed numbers; addition, subtraction, multiplication, and division with algebraic expressions; factoring; techniques for solving linear and fractional equations; and an introduction to graphing. *Prerequisite:* COMPASS Algebra 28-36 or MAT 150 with grade of “C” or better.

MAT 102: Intermediate Algebra—3 Credit Hours (3-0-3)

This course includes the following topics: properties of numbers; fundamental operations with algebraic expressions; polynomials; systems of equations; ratio and proportion; factoring; functions; graphs; solutions of linear inequalities; and linear and quadratic equations. *Prerequisite:* COMPASS Algebra 37-68 or MAT 101 with grade of “C” or better.

***MAT 110: College Algebra—3 Credit Hours (3-0-3)**

This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; simple linear programming; solutions of higher degree polynomials; combinatorial algebra, including the binomial theorem; and introduction to probability. *Prerequisite:* COMPASS Algebra 69-100 or College Algebra 1-56 or MAT 102 with grade of “C” or better.

***MAT 111: College Trigonometry—3 Credit Hours (3-0-3)**

This course includes the following topics: circular functions; trigonometric identities; solution of right and oblique triangles; solution of trigonometric equations; polar coordinates; complex numbers, including Demoiivre’s theorem; vectors; conic sections; sequences; and series. *Prerequisite:* MAT 110 or COMPASS College Algebra 1-56 with grade of “C” or better.

***MAT 120: Probability And Statistics—3 Credit Hours (3-0-3)**

This course includes the following topics: introductory probability and statistics, including organization of data, sample space concepts, random variables, counting problems, binomial and normal distributions, central limit theorem, confidence intervals, and test hypothesis for large and small samples; type I and ii errors; linear regression; and correlation. *Prerequisite:* COMPASS Algebra 69-100 or College Algebra 1-56 or MAT 102 with grade of “C” or better.

***MAT 122: Finite College Mathematics—3 Credit Hours (3-0-3)**

This course includes the following topics: logic; sets; Venn diagrams; counting problems; probability; matrices; systems of equations; linear programming, including the simplex method and applications; graphs; and networks. *Prerequisite:* COMPASS College Algebra 1-56 or MAT 101 with grade of “C” or better.

***MAT 130: Elementary Calculus—3 Credit Hours (3-0-3)**

This course includes the following topics: differentiation and integration of polynomials; rational, logarithmic, and exponential functions; and interpretation and application of these processes. *Prerequisite:* COMPASS Trig. 40-100 or MAT 111 with grade of “C” or better.

***MAT 140: Analytical Geometry and Calculus I—4 Credit Hours (4-0-4)**

This course includes the following topics: derivatives and integrals of polynomials; rational, logarithmic, exponential, trigonometric, and inverse trigonometric functions; curve sketching; maxima and minima of functions; related rates; work; and analytic geometry. *Prerequisite:* COMPASS Trig. 40-100 or MAT 111 with a grade of “C” or better.

***MAT 141: Analytical Geometry and Calculus II—4 Credit Hours (4-0-4)**

This course includes the following topics: continuation of calculus of one variable, including analytic geometry, techniques of integration, volumes by integration, and other applications; infinite series, including Taylor series and improper integrals. *Prerequisite:* MAT 140 with a grade of “C” or better.

MAT 155: Contemporary Mathematics—3 Credit Hours (3-0-3)

This course includes techniques and applications of the following topics: elementary number theory; algebra; geometry; measurement; graph sketching and interpretations; and descriptive statistics. *Prerequisite:* COMPASS Algebra 28-36 or MAT 150 with grade of “C” or better.

MAT 168: Geometry and Trigonometry—3 Credit Hours (3-0-3)

This course includes the following topics: points, lines, angles, and angle measure; triangles; polygons; circles; geometric solids; trigonometric solution of triangles; graph of the sine function; and vectors. *Prerequisite:* COMPASS Algebra 37-68 or College Algebra 1-56 or MAT 155 with grade of “C” or better.

MAT 211: Math For Elementary Education—3 Credit Hours (3-0-3)

This course includes the following topics: logic, set theory, properties of and operations on counting numbers, integers, rational numbers, and real numbers. *Prerequisite:* MAT 102 with grade of “C” or better or COMPASS Algebra 69-100 or College Algebra 1-56.

MAT 212: Math For Elementary Education—3 Credit Hours (3-0-3)

This course includes the following topics: basic algebra, introductory geometry, probability, and statistics. *Prerequisite:* MAT 102 with grade of “C” or better or COMPASS Algebra 69-100.

***MAT 240: Analytical Geometry and Calculus III—4 Credit Hours (4-0-4)**

This course includes the following topics: multivariable calculus, including vectors; partial derivatives and their applications to maximum and minimum problems with and without constraints; line integrals; multiple integrals in rectangular and other coordinates; and Stokes’ and Green’s theorems. *Prerequisite:* MAT 141 with grade of “C” or better.

MANAGEMENT

MGT 101: Principles of Management—3 Credit Hours (3-0-3)

This course is a study of management theories, emphasizing the management functions of planning, decision making, organizing, leading, and controlling.

MGT 110: Office Management—3 Credit Hours (3-0-3)

This course is a study of various approaches to office organization and management, personnel selection and training, and ergonomics in the modern office.

MGT 120: Small Business Management—3 Credit Hours (3-0-3)

This course is a study of small business management and organization, forms of ownership, and the process of starting a new business.

MGT 150: Fundamentals of Supervision—3 Credit Hours (3-0-3)

This course is a study of supervisory principles and techniques required to effectively manage human resources in an organization. First-line management is emphasized.

MGT 201: Human Resource Management—3 Credit Hours (3-0-3)

This course is a study of personnel administration functions within a business organization. Major areas of study include job analysis; recruitment, selection and assessment of personnel; and wage, salary and benefit administration.

MGT 255: Organizational Behavior—3 Credit Hours (3-0-3)

This course is a study of effective individual and group behavior in an organization to maximize productivity, and psychological and social satisfaction.

MARKETING

MKT 101: Marketing—3 Credit Hours (3-0-3)

This course covers an introduction to the field of marketing with a detailed study of the marketing concept and the processes of product development, pricing, promotion, and marketing distribution.

MKT 110: Retailing—3 Credit Hours (3-0-3)

This course is a study of the importance of retailing in American business and covers the concepts of store location, layout, merchandising, display, pricing, inventory control, promotional programs and profit management.

MKT 120: Sales Principles—3 Credit Hours (3-0-3)

This course is a study of the personal selling process with special emphasis on determining customer needs and developing effective communications and presentation skills.

MKT 240: Advertising—3 Credit Hours (3-0-3)

This course is a study of the role of advertising in the marketing of goods and service, including types of advertising, media, how advertising is created, agency functions, and regulatory aspects of advertising.

MACHINE TOOL

MTT 101: Introduction To Machine Tool—2 Credit Hours (1-3-2)
This course covers the basics in measuring tools, layout tools, bench tools and basic operations of lathes, mills, and drill presses.

MTT 105: Machine Tool Math Applications—3 Credit Hours (3-0-3)
This course is a study of shop math relevant to the machine tool trade.

MTT 112: Machine Tool Theory and Practice —5 Credit Hours (3-6-5)
This course is a combination of the basic theory and operation of machine shop equipment.

MTT 121: Machine Tool Theory I—3 Credit Hours (3-0-3)
This course covers the principles involved in the production of precision metal parts.

MTT 122: Machine Tool Practice I—4 Credit Hours (0-12-4)
This course covers practical experiences using the principles in Machine Tool Theory I. *Corequisite:* MTT 121.

MTT 123: Machine Tool Theory II—3 Credit Hours (3-0-3)
This course covers the principles involved in machining parts using machine tools, including lathes, mills, drill presses, jig bores, and the attachments for each. *Prerequisite:* MTT 121

MTT 124: Machine Tool Practice II—4 Credit Hours (0-12-4)
This course covers the practical application of the principles in Machine Tool Theory II. *Corequisite:* MTT 123.

MTT 126: Machine Tool Practice III—4 Credit Hours (1-9-4)
This course covers the practical application of the principles in Machine Tool Theory III. *Prerequisite:* MTT 124.

MTT 141: Metals and Heat Treatment—3 Credit Hours (3-0-3)
This course is a study of the properties, characteristics, and heat treatment procedures of metals.

MTT 147: Tool and Cutter Grinding—2 Credit Hours (2-0-2)
This course covers theoretical and practical training in cutting tools, cutting tool angles, the mechanics of material removal, and the operations of tool and cutter grinding equipment.

MTT 211: Die Theory—3 Credit Hours (3-0-3)
This course is a study of die components as they relate to the complete die. *Prerequisite:* MTT 124, MTT 141 and MAT 168.

MTT 231: Tool and Diemaking I—5 Credit Hours (2-9-5)
This course covers the manufacture and use of a simple blanking or piercing die or tools. *Prerequisite:* MTT 126 and MTT 211.

MTT 232: Tool and Diemaking II—5 Credit Hours (2-9-5)
This course covers the manufacture and use of a compound die or tools. *Prerequisite:* MTT 231.

MTT 233: Tool and Diemaking III—5 Credit Hours (2-9-5)

This course covers the manufacture and use of a progressive die or tools. *Prerequisite:* MTT 232.

MTT 241: Jigs and Fixtures I—2 Credit Hours (0-6-2)

This course includes the theory necessary to design working prints of simple jigs and fixtures. *Prerequisite:* EGT 111 and MTT 124.

MTT 242: Jigs and Fixtures II—2 Credit Hours (0-6-2)

This course includes the theory necessary to design a complex jig or fixture for piece part production. *Prerequisite:* MTT 241.

MTT 251: CNC Operations—3 Credit Hours (2-3-3)

This course is a study of CNC machine controls, setting tools, and machine limits, and capabilities. *Prerequisite:* EGT 111, MAT 168 and MTT 124.

MTT 252: CNC Setup and Operations—4 Credit Hours (3-3-4)

This course covers CNC setup and operations. *Prerequisite:* MTT 251.

MTT 253: CNC Programming and Operation—3 Credit Hours (2-3-3)

This course is a study of the planning, programming, selecting tooling, determining speeds and feeds, setting up, operating, and testing of CNC programs on CNC machines. *Prerequisite:* MTT 252 or instructor permission.

MTT 254: CNC Programming I—3 Credit Hours (2-3-3)

This course is a study of CNC programming, including machine language and computer-assisted programming. *Prerequisite:* MTT 251 or MTT 253.

MTT 255: CNC Programming II—3 Credit Hours (2-3-3)

This course includes CNC programming with simulated production conditions. *Prerequisite:* MTT 254.

MUSIC

***MUS 105: Music Appreciation—3 Credit Hours (3-0-3)**

This course is an introduction to the study of music with focus on the elements of music and their relationships, the musical characteristics of representative works and composers, common musical forms and genres of various western and non-western historical style periods, and appropriate listening experiences.

NURSING

NUR 101: Fundamentals of Nursing—6 Credit Hours (4-6-6)

This course facilitates the development of beginning technical competency in the application of the nursing process to assist in meeting the needs of selected patients of varying ages. *Corequisite:* BIO 210 with a grade of “C” or better.

NUR 106: Pharmacology—2 Credit Hours (2-0-2)

This introductory course outlines the basic concepts of pharmaceuticals, pharmacokinetics, pharmacodynamics and pharmacotherapeutics. The process of clinical calculations is introduced as well as the major drug classifications. *Prerequisite:* BIO 210 and NUR 101 with a grade of “C” or better.

NUR 120: Basic Nursing Concepts—7 Credit Hours (5-6-7)

This course introduces the application of the nursing process in the care of persons throughout the lifespan who are experiencing selected common health problems. **Prerequisite:** BIO 210 and NUR 101 with a grade of “C” or better.

NUR 163: Nursing Across The Lifespan—2 Credit Hours (2-0-2)

This course is an overview of concepts related to nursing care of clients across the lifespan. Communication, basic mental health, growth and development, and gerontology are included in the course.

NUR 201: Transition Nursing—3 Credit Hours (2-3-3)

This course facilitates the transition of the practical nurse graduate to the role of the associate degree nursing student.

NUR 210: Complex Health Problems—5 Credit Hours (3-6-5)

This course expands application of the nursing process in meeting the needs of patients with complex health problems. **Prerequisite:** BIO 211, NUR 220 and NUR 163 with a grade of “C” or better.

NUR 214: Mental Health Nursing—4 Credit Hours (2.5-4.5-4)

This course facilitates the utilization of the nursing process to assist in meeting the needs of patients with common mental health problems. Focus is on the dynamics of human behavior ranging from normal to extreme. **Prerequisite:** PSY 201, BIO 211, NUR 163 and NUR 220 with a grade of “C” or better.

NUR 217: Trends and Issues In Nursing—2 Credit Hours (2-0-2)

This course is an exploration of health care trends and issues. **Prerequisites:** BIO 211, NUR 210 and NUR 214 with a grade of “C” or better. **Corequisites:** NUR 221

NUR 220: Family Centered Nursing—7 Credit Hours (5-6-7)

This course facilitates the application of the nursing process in the care of persons during the childbearing years and from birth through adolescence to promote optimal individual health and development at any stage of the health continuum. **Prerequisites:** BIO 211 and NUR 120 with a grade of “C” or better.

NUR 221: Advanced Nursing Concepts—5 Credit Hours (2-9-5)

This course expands the application of the nursing process in the care of persons throughout the lifespan who are experiencing complex health problems. **Prerequisite:** BIO 211, NUR 214 and NUR 210 with a grade of “C” or better. **Corequisites:** NUR 217

PHILOSOPHY

***PHI 101: Introduction To Philosophy—3 Credit Hours (3-0-3)**

This course includes a topical survey of the three main branches of philosophy—epistemology, metaphysics, and ethics—and the contemporary questions related to these fields.

PHYSICAL SCIENCE

PHS 101: Physical Science I—4 Credit Hours (3-3-4)

This is the first of a sequence of courses in physical science and includes an introduction to science with emphasis on science terminology and investigations of the physical world. Topics are selected from astronomy, chemistry, geology, and physics. *Prerequisite:* MAT 101.

PHS 102: Physical Science II—4 Credit Hours (3-3-4)

This is a continuation of the introduction to science with emphasis on science terminology and investigations of the physical world. Topics are selected from astronomy, chemistry, geology, and physics. *Prerequisite:* PHS 101, Corequisite: MAT 102.

PHS 111: Conceptual Physics I—3 Credit Hours (3-0-3)

This course is an introduction to the mechanical concepts of distance, time, mass, force, energy, and power. *Prerequisite:* MAT 155 with grade of “C” or better.

POLITICAL SCIENCE/GOVERNMENT

***PSC 201: American Government—3 Credit Hours (3-0-3)**

This course is a study of national governmental institutions with emphasis on the constitution, the functions of executive, legislative and judicial branches, civil liberties and the role of the electorate.

PSC 205: Politics and Government—3 Credit Hours (3-0-3)

This course is a study of the concepts and problems involved in man’s relationships with government and political change. This course emphasizes comparative institutions of government, analysis of political behavior, and political ideology.

***PSC 215: State and Local Government—3 Credit Hours (3-0-3)**

This course is a study of state, county, and municipal government systems, including interrelationships between these systems and within the federal government.

PSC 220: Introduction to International Relations—3 Credit Hours (3-0-3)

This course introduces the major forces and factors influencing world affairs, with emphasis on the role of the United States in the global community and the impact of growing interdependence on daily living.

PRACTICAL NURSING

PNR 110: Fundamentals Of Nursing—5 Credit Hours (4-3-5)

This course provides an introduction to basic principles and beginning skills necessary to the nursing process. Concepts are integrated relating to physiological and psychosocial needs of the individual. Legal and ethical roles of the practical nurse are emphasized. *Must be admitted to Practical Nursing Program.*

PNR 122: Pharmacology—3 Credit Hours (3-0-3)

This is an introductory course to the concepts of pharmacology and medication administration. Emphasis is on calculation of dosages, administration of medications, and correct use of abbreviations. Effects of specific drugs are presented. *Prerequisite:* PNR 123 with a grade of “C” or better.

PNR 123: Medical Surgical Nursing I—4 Credit Hours (2-6-4)

This course is a beginning study utilizing the nursing process. Concepts include physiological, psychosocial, pharmacological, nutritional and health and safety needs of the adult patient. Clinical experiences address selected commonly occurring health problems having predictable outcomes. *Prerequisite:* PNR 110 with a grade of “C” or better.

PNR 130: Medical Surgical Nursing II—5 Credit Hours (3-6-5)

This course is a continuation of the study of the nursing process. Concepts include the physiological, psychosocial, nutritional and health and safety needs of the adult. Clinical experiences address selected commonly occurring health problems having predictable outcomes. *Prerequisite:* PNR 122 with a grade of “C” or better.

PNR 140: Medical Surgical Nursing III—5 Credit Hours (3-6-5)

This course is a continuation of the study of the nursing process. Concepts include physiological, psychosocial, nutritional, and health and safety needs of the adult. Clinical experiences address selected commonly occurring health problems having predictable outcomes. *Prerequisite:* PNR 130 with a grade of “C” or better.

PNR 154: Maternal/Infant/Child—5 Credit Hours (3-6-5)

This course is a study utilizing the nursing process and integrating pediatrics to meet the needs of the child-bearing family. Clinical experiences address the care of the mother, newborn, and the care of the child with commonly occurring illnesses. *Prerequisite:* PNR 130 and 122 with a grade of “C” or better.

PNR 170: Nursing of Older Adults—2 Credit Hours (2-0-2)

This course is a study utilizing the nursing process. Concepts include physiological, psychosocial, nutritional and health and safety needs of the older patient. Clinical experiences address selected commonly occurring health problems having predictable outcomes. *Prerequisite:* PNR 122 and 130 with a grade of “C” or better.

PNR 175: Practical Nursing Skills—4 Credit Hours (3-3-4)

This course provides refinement of skills used in the nursing process. Organizational skills, legal and ethical aspects of practical nursing, and career opportunities are emphasized. *Prerequisite:* PNR 123 with a grade of “C” or better.

PSYCHOLOGY

PSY 103: Human Relations—3 Credit Hours (3-0-3)

This course is a study of human relations, including the dynamics of behavior, interrelationships, and personality as applied in everyday life; includes human relations in organizations and skills for the workplace.

***PSY 201: General Psychology—3 Credit Hours (3-0-3)**

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology.

***PSY 203: Human Growth and Development—3 Credit Hours (3-0-3)**

This course is a study of the physical, cognitive, and social factors affecting human growth, development, and potential across the lifespan.

***PSY 212: Abnormal Psychology—3 Credit Hours (3-0-3)**

This course is a study of the nature and development of behavioral disorders, including the investigation of contemporary treatment procedures.

READING

RDG 032: Developmental Reading (3-0-3) Non-Degree Credit.

Developmental Reading is intended for students who need improvement in basic reading skills. Based on assessment of student needs, instruction includes vocabulary, comprehension, use of reference materials, and an introduction to analysis of literature. *Prerequisite:* COMPASS: 43-65

RDG 100: Critical Reading (3-0-3) Non-Degree Credit.

This course covers the application of basic reading skills to improve critical comprehension and higher order thinking skills. *Prerequisite:* COMPASS: 66-80 or RDG 031 with a grade of “C” or better.

NOTE: COMPASS score of 81 or higher, no reading course required.

RELIGION

REL 101: Introduction To Religion (3-0-3)

This course provides a study of religion and the nature of religious belief and practice.

SOCIOLOGY

***SOC 101: Introduction To Sociology—3 Credit Hours (3-0-3)**

This course emphasizes the fundamental concepts and principles of sociology, including culture, socialization, interaction, social groups and stratification, effects of population growth, and technology in society and social institutions.

***SOC 102: Marriage and the Family—3 Credit Hours (3-0-3)**

This course introduces the institutions of marriage and the family from a sociological perspective. Significant forms and structures of family groups are studied in relation to current trends and social change.

***SOC 205: Social Problems—3 Credit Hours (3-0-3)**

This course is a survey of current social problems in America, stressing the importance of social change and conflicts as they influence perceptions, definitions, etiology, and possible solutions.

***SOC 206: Social Psychology—3 Credit Hours (3-0-3)**

This course examines the behaviors of individuals in interaction in terms of the personality system (attitudes, needs, traits, feelings, learning, and perception), the social system (relations between/among persons), and the cultural system (agreed-upon ideas about the social and non-social world).

SPEECH

SPC 105: Effective Speaking—3 Credit Hours (3-0-3)

This course is a study of oral communication in professional and social environments. *Prerequisite:* Eng 155 with grade of C or better.

***SPC 205: Public Speaking—3 Credit Hours (3-0-3)**

This course is an introduction to principles of public speaking with application of speaking skills. *Prerequisite:* ENG 101 with grade of “C” or better.

THEATRE

***THE 101: Introduction To Theatre—3 Credit Hours (3-0-3)**

This course includes the appreciation and analysis of theatrical literature, history, and production.

WELDING

WLD 102: Introduction To Welding—2 Credit Hours (1-3-2)

This course covers the principles of welding, cutting, and basic procedures for safety in using welding equipment.

WLD 103: Print Reading I—1 Credit Hour (0-3-1)

This is a basic course which includes the fundamentals of print reading, the meaning of lines, views, dimensions, notes, specifications, and structural shapes. Welding symbols and assembly drawings as used in fabrication work are also covered.

WLD 104: Gas Welding And Cutting—2 Credit Hours (1-3-2)

This course covers gas welding, brazing, soldering, and cutting of metals.

WLD 106: Gas and Arc Welding—4 Credit Hours (2-6-4)

This course covers the basic principles and practices of oxyacetylene welding, cutting, and electric arc welding. Emphasis is placed on practice in fundamental position welding and safety procedures.

WLD 111: Arc Welding I—4 Credit Hours (2-6-4)

This course covers the safety, equipment, and skills used in the shielded metal arc welding process. Fillet welds are made to visual criteria in several positions.

WLD 113: Arc Welding II—4 Credit Hours (2-6-4)

This course is a study of arc welding of ferrous and/or non-ferrous metals. *Prerequisite:* WLD 111 or permission of instructor.

WLD 115: Arc Welding III—4 Credit Hours

(2-6-4)

This course covers the techniques used in preparation for structural plate testing according to appropriate standards. *Prerequisite:* WLD 113 or permission of instructor.

WLD 132: Inert Gas Welding Ferrous—4 Credit Hours

(2-6-4)

This course covers set-up and adjustment of equipment and fundamental techniques for welding ferrous metals.

WLD 134: Inert Gas Welding Non-Ferrous—3 Credit Hours

(1-6-3)

This course covers fundamental techniques for welding non-ferrous metals.

