

# COURSE DESCRIPTIONS

## ACC—Accounting

### ACC 101 Accounting Principles I 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.

### ACC 102 Accounting Principles II 3-0-3

**Prerequisites:** ACC 101

This course emphasizes managerial accounting theory and practice in basic accounting and procedures for cost accounting, budgeting, cost-volume analysis, and financial statement analysis.

### ACC 124 Individual Tax Procedures 3-0-3

**Prerequisites:** ACC 101

This course is a study of the basic income tax structure from the standpoint of the individual, including the preparation of individual income tax returns.

### ACC 125 Advanced Individual Tax Proc 3-0-3

**Prerequisites:** ACC 124

This course expands the concept of the basic income tax structure from the standpoint of the individual, including the preparation of individual income tax returns and related schedules to include alternative minimum tax, property transactions, and business schedules.

### ACC 150 Payroll Accounting 3-0-3

**Prerequisites:** ACC 101 or AOT 239

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 201 Intermediate Accounting I 3-0-3

**Prerequisites:** ACC 101

This course explores fundamental processes of accounting theory, including the preparation of financial statements.

### ACC 202 Intermediate Accounting II 3-0-3

**Prerequisites:** ACC 201

This course covers the application of accounting principles and concepts to account evaluation and income determination, including special problems peculiar to corporations and the analysis of financial reports.

### ACC 240 Computerized Accounting 3-0-3

**Prerequisites:** ACC 101

This course is a study of using the computer to design and implement various accounting functions, including financial transactions, records, statements, reports and documents.

### ACC 245 Accounting Applications 3-0-3

**Prerequisites:** ACC 101

This course introduces microcomputer accounting using data base software and/or electronic spreadsheets.

### ACC 291 Cert Bookkeeper Review 3-0-3

**Prerequisites:** ACC 101

This course is designed to help students prepare for the Certified Bookkeeper Exam.

## ACR—Air Conditioning Refrig

### ACR 102 Tools and Service Techniques 2-3-3

This course is a basic study of the uses of tools and service equipment used in the installation and repair of HVAC equipment.

### ACR 106 Basic Electricity for HVAC/R 3-3-4

This course includes a basic study of electricity, including Ohm's law and series and parallel circuits as they relate to heating, ventilating, air conditioning and/or refrigeration systems.

### ACR 108 Refrigeration Fundamentals 3-0-3

This course is an introduction to the principles of refrigeration.

### ACR 110 Heating Fundamentals 3-3-4

**Prerequisites:** ( ACR 140 and ACR 102 and ACR 106 and ACR 108 and ACR 118 )

This course covers the basic concepts of oil, gas, and electric heat, their components and operation.

### ACR 118 Air Conditioning Fundamentals 1-6-3

This course is an introduction to the principles of air conditioning.

### ACR 131 Commercial Refrigeration 3-3-4

**Prerequisites:** ACR 210

This course is a study of maintenance and repair of commercial refrigeration systems.

### ACR 140 Automatic Controls 2-3-3

This course is a study of the adjustment, repair and maintenance of a variety of pressure and temperature sensitive automatic controls.

### **ACR 160 Service Customer Relations 3-0-3**

**Prerequisites:** ( ACR 102 and ACR 106 and ACR 108 and ACR 118 and ACR 140 )

This course covers how to deal with different types of customers, selling techniques, and correct record keeping.

### **ACR 201 Troubleshooting and Maint 2-3-3**

**Prerequisites:** ACR 210

This course is a study of troubleshooting and maintenance of air conditioning equipment.

### **ACR 206 Adv Electricity for HVAC/R 1-3-2**

**Prerequisites:** ( ACR 140 and ACR 102 and ACR 106 and ACR 108 and ACR 118 )

This course includes a practical application of electrical and electronic components and circuits used to control HVAC and/or refrigeration systems.

### **ACR 207 Advanced Refrigeration Electri 3-0-3**

**Prerequisites:** ACR 210

This course covers the theory and application of electrical circuits and starting components in commercial and industrial refrigeration.

### **ACR 210 Heat Pumps 2-6-4**

**Prerequisites:** ( ACR 118 and ACR 140 and ACR 102 and ACR 106 and ACR 108 )

**Corequisites:** ACR 110, ACR 160, ACR 206

This course is a study of theory and operational principles of the heat pump.

### **ACR 250 Duct Fabrication 2-3-3**

**Prerequisites:** ( ACR 102 and ACR 106 and ACR 108 and ACR 118 and ACR 140 )

**Corequisites:** ACR 110, ACR 160, ACR 206

This course covers the design, fabrication, and installation of air duct systems.

## **AET—Const Mgmt & Int Design**

### **AET 101 Building Systems I 2-3-3**

This course is a study of the fundamental concepts of design and construction techniques in residential, commercial, and industrial buildings.

### **AET 201 Building Systems II 2-3-3**

**Prerequisites:** BCT 223

This course covers mechanical systems, electrical systems and code requirements for residential, commercial, and industrial buildings.

## **AHS—Allied Health Science**

### **AHS 102 Medical Terminology 3-0-3**

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

### **AHS 106 Cardiopulmonary Resuscitation 1-0-1**

This course provides a study of the principles of cardiopulmonary resuscitation.

### **AHS 110 Patient Care Procedures 2-0-2**

**Prerequisites:** BIO 210

This course provides a study of the procedures and techniques used in the general care of the patient.

### **AHS 113 Head and Neck Anatomy 1-0-1**

This course provides a detailed study of the structure of the head and neck with special emphasis on structure as it pertains to the study of dental science.

### **AHS 141 Phlebotomy for HealthCare Prov 2-3-3**

This course contains the essential theory, skills, and special procedures required to meet the venipuncture needs in hospitals, clinics, and other health care settings.

### **AHS 145 Electrocardiography 2-0-2**

This course provides the basic skills necessary to perform ECGs in a hospital, physician's office or other health care setting. The student will be able to perform and interpret basic ECGs.

### **AHS 163 Long-Term Care 3-6-5**

This course emphasizes the basic skills needed to care for residents in the long-term care setting. Students will apply practical use of these skills through clinical experiences in a long-term care facility.

### **AHS 167 Phlebotomy Capstone Experience 1-6-3**

**Corequisites:** BIO 110, BIO 112, BIO 210, BIO 211, AHS 141

This course provides the opportunity for the student to function as a team member during a phlebotomy clinical experience and provides the knowledge and skills needed to pass the national certification exam.

### **AHS 175 Multi-Skilled Clinical Prac 3-3-4**

This course offers clinical experiences across health related disciplines exposing students to a variety of patient care areas such as cardiac monitoring, EKG, patient transport, and medical and surgical asepsis.

### **AHS 176 Patient Care Clerical Prin 4-0-4**

This course provides a study of the practical applications related to receptionist and patient care clerical duties such as data entry, transferring physician orders, and coordinating unit communications in a variety of health care settings.

## **AHS 180 Health Careers Preparation 3-0-3**

This course includes selected topics such as study skills, test-taking skills, critical thinking, problem solving, ethics, health careers test preparation and other topics to promote student success.

## **AHS 206 Cross-Sectional Anat for MI 2-0-2**

This course is a study of human anatomy as viewed in cross-sectional planes. This is used in medical imaging modalities such as computed tomography, Magnetic Resonance Imaging, and Ultrasound.

## **AMF — Aircraft Manufacturing**

### **AMF 101 Intro to Aviation Maintenance 1-0-1**

This course introduces students to the role of the Federal Aviation Administration and their regulations regarding aviation power plant and aviation airframe. Topics include a study of aircraft industry terminology and basic safety requirements, as well as a brief history of aviation.

## **AMT — Automated Mftg Tech**

### **AMT 102 Computer Controlled Machinery 2-6-4**

**Prerequisites:** AMT 105

This course covers the fundamentals of robot geometry, controls mechanisms, sensors, programming, installation, safety and maintenance, and other computer controlled systems.

### **AMT 105 Robotics & Automated Control I 1-6-3**

This course includes assembling, testing, and repairing equipment used in automation. Concentration is on connecting, testing, and evaluating automated controls and systems.

### **AMT 205 Robotics & Automated Ctrl II 2-3-3**

**Prerequisites:** AMT 105

This course covers installation, testing, troubleshooting, and repairing of automated systems.

## **ANT — Anthropology**

### **ANT 101 General Anthropology 3-0-3**

This course is the study of physical and cultural anthropology. This course explores subfields of anthropology to examine primatology, human paleontology, human variation, archeology and ethnology.

## **AOT — Administrative Office Tec**

### **AOT 105 Keyboarding 3-0-3**

This course focuses on the mastery of touch keyboarding.

### **AOT 110 Document Formatting 3-0-3**

**Prerequisites:** AOT 105

This course emphasizes speed, accuracy, and developing document formatting skills using keyboarding competencies.

### **AOT 134 Office Communications 3-0-3**

This course is a study of grammar, punctuation, and written communication skills for the office environment.

### **AOT 165 Information Processing Softwar 3-0-3**

This course includes applications of information processing software. Emphasis is placed on functions for acceptable document formatting and processing.

### **AOT 180 Customer Service 3-0-3**

This course is a study of issues in the workplace relating to effective customer service. The course includes topics such as oral, written, verbal and nonverbal communication skills, effective telephone techniques and cultural diversity in the workplace.

### **AOT 210 Document Production 3-0-3**

**Prerequisites:** AOT 110

This course emphasizes the production of documents found in typical business offices. The major focus is on productivity and excellence in document production.

### **AOT 220 Medical Office Administrative 4-0-4**

**Prerequisites:** HIM 103

This course provides a study of insurance processing, medical insurance coding, electronic health records, computer applications and the use of other business machines for the medical receptionist and other front-office medical personnel.

### **AOT 234 Admin Office Communications 3-0-3**

**Prerequisites:** AOT 105 and AOT 134

This course emphasizes communication skills necessary in the business environment. It includes composing business correspondence, developing and giving oral presentations, practicing recording and translating information using the latest technology, and developing effective communication skills.

### **AOT 239 Computerized Office Accounting 3-0-3**

This course covers specialized accounting functions performed on a computer.

## **AOT 270 SCWE in Admin Office Technolog 0-12-3**

**Prerequisites:** AOT 134 and AOT 180

**Corequisites:** AOT 210, AOT 220

This course integrates office skills within an approved work site related to administrative office technology.

## **ART — Art**

### **ART 101 Art History and Appreciation 3-0-3**

This is an introductory course to the history and appreciation of art, including the elements and principles of the visual arts. (This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.)

### **ART 105 Film As Art 3-0-3**

This course provides an introduction to the appreciation of film and covers the elements and principles of cinema with historical and contemporary examples. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

## **ARV — Digital Arts**

### **ARV 110 Computer Graphics I 3-0-3**

This course is a study of the fundamentals of computer assisted graphic design.

### **ARV 121 Design 3-0-3**

This course covers basic theories, vocabulary, principles, techniques, media and problem-solving in basic design.

### **ARV 162 Graphic Reproduction I 3-0-3**

**Prerequisites:** ARV 121

**Corequisites:** ARV 210

This course is a study of the principles and practices used in print preparation and print reproduction.

### **ARV 163 Graphic Reproduction II 3-0-3**

**Prerequisites:** ARV 162

**Corequisites:** ARV 261

This course covers the development of the practices and skills used in print preparation and print reproduction.

### **ARV 210 Computer Graphics II 3-0-3**

**Prerequisites:** ARV 110

This course is an advanced computer art course which includes a study of the creation of graphic design using electronic imagery.

### **ARV 212 Digital Photography 2-3-3**

This course is a study of the principles, terminology, techniques, tools, and materials of basic digital photography. Images produced in this course will address the needs of the visual communication industry.

### **ARV 219 Multimedia Techniques 3-0-3**

**Prerequisites:** ARV 163

This course is an introduction to the production of current audio-visual media.

### **ARV 227 Web Site Design I 3-0-3**

**Prerequisites:** ARV 162 and CGC 106

This course is an introduction to the production of an interactive world wide web site.

### **ARV 232 Digital Photography II 2-3-3**

**Prerequisites:** ARV 212

This course incorporates advanced projects in digital photography, including studio as well as computer lab work.

### **ARV 261 Advertising Design I 3-0-3**

**Prerequisites:** ARV 121 and ARV 210 and ARV 162 and CGC 106

**Corequisites:** ARV 163

This course is an introduction to the advertising arts, including the principles, techniques, media, tools, and skills used in the visual communication field.

### **ARV 262 Advertising Design II 3-0-3**

**Prerequisites:** ARV 261

This course covers advanced knowledge, practices, and skills in the visual communication field.

### **ARV 264 Special Proj in Graphics Art 3-0-3**

**Prerequisites:** ARV 261

This course includes an advanced project as assigned from conception to final production.

### **ARV 276 Studio Practicum I 2-3-3**

**Prerequisites:** ARV 162 and CGC 106

**Corequisites:** ARV 280

This course includes advanced practical projects in graphic design, multimedia, animation, web design, photography, and/or computer imagery.

### **ARV 280 Visual Arts Exit Portfolio 2-3-3**

**Prerequisites:** ARV 162 and CGC 106

**Corequisites:** ARV 276

This course covers the preparation of students' job-seeking or academic placement portfolios. The course includes lectures, demonstrations and studio work.

## AST — Astronomy

### AST 101 Solar System Astronomy 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### AST 102 Stellar Astronomy 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

## AUT — Automotive

### AUT 102 Engine Repair 1 - 9 - 4

This course is a basic study of the diagnostic procedures used to locate and repair internal engine malfunctions.

### AUT 112 Braking Systems 2 - 6 - 4

This course covers hydro-boost power brakes and vacuum power brakes as well as master cylinders and caliper rebuilding.

### AUT 115 Manual Drive Train and Axle 2 - 3 - 3

This course is a basic study of clutches, gearing, and manual transmission operation, including the basic study of rear axles and rear axle set up.

### AUT 124 Steering, Suspension & Alignment 2 - 6 - 4

This course is the study of the fundamentals of steering, suspension and alignment and includes inspection, diagnostics, maintenance and repair of systems.

### AUT 131 Electrical Systems 1 - 6 - 3

This course is a study of the individual systems and components that when combined form the entire automobile electrical system. The course includes starting and charging systems, ignition, engine, chassis, and accessory systems as well as instruction in the proper use of electrical schematics.

### AUT 142 Heating and Air Conditioning 2 - 3 - 3

This course covers the purpose, construction, operation, diagnosis, and repair of automotive ventilation, heating, and air conditioning systems.

### AUT 146 Emission Systems 2 - 3 - 3

This course is a study of the various emission systems currently in use with emphasis placed on the importance of proper system operations, the effects of improper operation on engine performance, and diagnostic equipment.

### AUT 149 Ignition and Fuel Systems 3 - 3 - 4

This course is a study of ignition system operation and how it relates to fuel systems for proper engine operation.

### AUT 152 Automatic Transmission 2 - 6 - 4

This course is a basic study of power flow and hydraulics, including torque converter operation.

### AUT 156 Automotive Diagnosis & Repair 2 - 6 - 4

This is a basic course for general diagnostic procedures and minor repairs.

## BAF — Banking and Finance

### BAF 101 Personal Finance 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.

### BAF 240 Municipal Finance 3 - 0 - 3

**Prerequisites:** ( ENG 101 or ENG 155 ) and ( MAT 101 or MAT 155 )

This course provides a comprehensive understanding of financial principles, practices, and grant management for local government. Students will blend theory with practical skills to understand municipal finance and its role in effective government operations.

### BAF 260 Financial Management 3 - 0 - 3

This course is a study of financial analysis and planning. Topics include working capital management, capital budgeting, and cost of capital.

## BCT — Const Mgt/Timber Harvest

### BCT 105 Tool Usage and Safety 1 - 3 - 2

This course covers tool skills and their safe use in construction.

### BCT 200 SCWE IN BUILDING CONST TECH 0 - 2 - 4 - 6

**Prerequisites:** AET 101 or CET 127

This course integrates building construction skills within an approved work site related to the construction industry.

### BCT 223 Residential Mechanical Sys 2 - 3 - 3

This course is a study of the workings of the basic HVAC, electrical, and plumbing systems found in residential structures.

## BIO — Biology

### BIO 101 Biological Science I 3-3-4

This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### BIO 102 Biological Science II 3-3-4

**Prerequisites:** BIO 101

This course is a study of the 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### BIO 105 Principles of Biology 3-3-4

This is an introductory biology course, unifying biology concepts and principles at all levels. This course introduces basic chemistry, cell structure and function, DNA, genetics, evolution, ecology, and animal and plant structure and function.

### BIO 110 General Anatomy & Physiology 3-0-3

This course is a general introduction to the anatomy and physiology of the human body. Emphasis is on the organ systems of the human and their interrelationships.

### 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 127 Principles of Animal Science 3-0-3

**Prerequisites:** ( BIO 101 or BIO 105 )

This course is an introduction to biological principles of animals under the control of human kind. Topics include: nutrition, health, and breeding.

### BIO 209 Principles of Environmental Sc 3-3-4

**Prerequisites:** BIO 101 or BIO 105

This course focuses on the investigation and analysis of environmental elements. Scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world will be explored. Students will analyze natural and man-made environmental problems and solutions.

### BIO 210 Anatomy and Physiology I 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### BIO 211 Anatomy and Physiology II 3-3-4

**Prerequisites:** BIO 210

This is a continuation of a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### BIO 225 Microbiology 3-3-4

**Prerequisites:** ( BIO 102 or BIO 211 )

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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

## BKP — Baking & Pastry

### BKP 101 Introduction to Baking 3-0-3

This course introduces the basic techniques of baking of leavened dough and breads.

### BKP 112 Intro to Baking Science 1-0-1

This course is the study of ingredient functions, product identification, weights and measures as they apply to baking. Students learn to identify various types of flours, leaveners, and pastry ingredients that affect the outcomes of their finished baked goods.

### BKP 119 Intro to Baking & Pastry 2-3-3

**Prerequisites:** or CUL 104

**Corequisites:** BKP 101

This course introduces baking fundamentals and classical baking techniques in a laboratory setting.

### BKP 120 Bakeshop Production 1-6-3

**Prerequisites:** BKP 101 and BKP 119

This course covers the applications of fundamentals and principles of basic baking. Emphasis is placed on skill development for quality commercial bakery products.

### BKP 121 Cake Decorate & Finish Tech 2-3-3

**Corequisites:** CUL 104

This course covers the techniques and assembling used in finishing theme cakes and international cakes with a variety of mediums used in commercial bakeshops.



**BKP 125 Hot and Cold Desserts 2-3-3**

This course covers the principles of hot and cold desserts to include bombes, parfaits, baked Alaska, ice cream, sorbets, sherbets, granitas, hand-stretched strudel, crepes and souffles. Students will prepare desserts with suitable sauces and garnishes.

**BKP 181 Candies & Confectionaries 2-3-3**

This course focuses on the elements of making candies and confections. Students will develop a complete understanding of all components of chocolates, sugar, pastillage and marzipan, using basic patisserie principles.

**BKP 182 Artisan Breads 1-6-3**

This course introduces the fundamental skills, concepts and techniques of artisan bread baking. Use of sponges, wild yeast, bigas and poolish will be incorporated in making authentic rustic bread. Students will make an assortment of international breads as well as breads for special occasions.

**BKP 183 Plated Desserts 2-3-3**

**Prerequisites:** BKP 125 and BKP 222 and BKP 181 and BKP 210

This course focuses on the elements of modern dessert production and consumption. It stresses a thorough understanding and creation of all components of plated dessert production, using basic pastry principles.

**BKP 210 Advanced Cakes 2-3-3**

This course prepares students for advanced specialty cake production.

**BKP 220 Advanced Bakeshop 1-6-3**

**Prerequisites:** BKP 120

This course is a study of the preparation of advanced, classical, and international pastries. Emphasis is placed on producing quality, commercial baked goods.

**BKP 222 Chocolate and Sugar 2-3-3**

This course is a study of chocolate artistry and sugar work to include tempering various types of chocolate for modeling and display work, as well as molding, pulling, and blowing sugar.

**BKP 236 Baking & Pastry Capstone 2-3-3**

**Prerequisites:** BKP 125 and BKP 222 and BKP 181 and BKP 210

This course includes capstone competencies for baking and pastry students. Students work in a retail bakery producing an assortment of baked goods while managing and selling their products to the public.

## **BUS — Business**

**BUS 101 Introduction to Business 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 121 Business Law I 3-0-3**

**Prerequisites:** ( BUS 101 )

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 125 Business Software Applications 3-0-3**

**Corequisites:** MAT 155, ENG 155

This course prepares students with skills in word processing, spreadsheets, and presentation software for success in modern business environments. The combination of theoretical knowledge and practical hands-on exercises will lead to proficiency usage of industry-standard software applications.

**BUS 130 Business Communications 3-0-3**

**Prerequisites:** ( ENG 155 or ENG 101 ) and ( MAT 155 or MAT 101 )

This course covers the application of communication skills to situations routinely encountered in business environments.

**BUS 135 Wage and Salary Admin 3-0-3**

This course is a study of the proper recording and reporting of payroll with special emphasis on internal controls.

**BUS 136 Compensation & Benefits Analy 3-0-3**

This course offers a practical exploration of the systems, methods and procedures involved in establishing, administering and controlling compensation and benefits systems within the organization.

**BUS 152 Service Culture Development 3-0-3**

This course is a study of the philosophy, principles, processes and behavior, both individual and group, necessary to create and maintain a service culture in an organization.

**BUS 180 Social Media in Business 3-0-3**

**Prerequisites:** ( ENG 155 or ENG 101 ) and ( MAT 155 or MAT 101 )

This course is a study of social media use in business. Students explore different social media outlets and interact with a variety of social media platforms that support business strategies.

**BUS 190 Business Analytics I 3-0-3**

This course introduces basic concepts and applications of business analytics. Topics include an overview of the analytical process and the role of the analyst, applied descriptive statistics, and exploratory data analysis.

**BUS 210 Intro to E-Commerce in Bus 3-0-3**

This course is the study of electronic commerce and the operations and applications from the business perspective. Emphasis is placed on business concepts and strategies and how they apply to the process of buying and selling goods and services online.

**BUS 220 Business Ethics 3-0-3**

This course includes an exploration of ethical issues arising in the context of doing business. Representative topics: employee rights and responsibilities, corporate regulations and rights, discrimination, truth in advertising, employee privacy, environmental exploitation and free enterprise.

**BUS 240 Business Statistics 3-0-3**

This course is a study of statistical methods related to business, including descriptive statistics, probability, binomial and normal distributions, and hypothesis testing.

**BUS 270 SCWE in Business 0-12-3**

**Prerequisites:** MKT 101 or MGT 101 or ACC 101 or BUS 190

This course includes the integration of business skills within an approved work site related to business and industry.

## CET — Civil Engineering Tech

**CET 115 Mechanical & Elect Sys 0-6-2**

This course is a study of mechanical and electrical design criteria for residential and light commercial structures.

**CET 127 Building Const & Print Reading 3-3-4**

This course is a study of construction methods and print reading.

**CET 140 Construction Financial Managem 3-0-3**

This course is the study of the fundamental financial management principles and accounting systems used to manage a construction company.

**CET 210 Strength of Materials 2-3-3**

**Prerequisites:** EGR 190 or EGR 260

This course covers the effects of applying various types of loads to structural members and makes comparisons of allowable stresses and strains.

**CET 216 Soil Mechanics 2-3-3**

This course covers soil types, their engineering properties, and techniques of field and laboratory identification and testing.

**CET 218 Hydraulics 2-3-3**

**Prerequisites:** EGR 270

This course includes the fundamentals of flow, control, disposal of water, and flow through open and closed conduits, orifices, and weirs.

**CET 230 Construction Management 2-3-3**

**Prerequisites:** EGR 170 and CET 127

This course covers the study of management of construction firms, including one or more of the following areas: bidding process, contracts, job costs, labor costs, and labor relations.

**CET 242 Concrete Design 2-3-3**

**Prerequisites:** CET 210 or EGR 190 or EGR 260

This course covers the design of concrete structural members according to the ACI codes, quality control of concrete, and structural inspection.

**CET 245 Cost Estimating 2-3-3**

This course includes a study of project cost and scheduling through the use of proven construction estimating techniques.

**CET 246 Environmental Systems Tech 2-3-3**

This course covers a study of the sources, treatment, collection and distribution of water and waste water.

**CET 251 Highway Design 2-3-3**

This course covers a study of the design and construction of a highway.

**CET 260 Constr Manag Senior Project 2-3-3**

**Prerequisites:** CET 230

This capstone course promotes the integration of the knowledge and skills of the construction management technology field.

## CGC — Commercial Graphics

**CGC 106 Typography I 3-0-3**

**Prerequisites:** ARV 110 and ARV 121

This course covers typographic design, history, technologies and functions including terminology, letterforms, type specifications and visual hierarchy.

**CGC 250 Special Projects in Comm Graph 3-0-3**

**Prerequisites:** ARV 261 and ARV 163

This course consists of special projects related to the commercial graphics industry.

## CHM — Chemistry

**CHM 105 Gen Organic and Biochemistry 3-3-4**

This course is a study of the fundamental principles of chemistry, including atomic and molecular structure, common substances and reactions, introduction to organic chemistry and biochemistry.

**CHM 110 College Chemistry I 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.



**CHM 111 College Chemistry II 3-3-4****Prerequisites:** CHM 110

(For students continuing in chemistry) 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. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

**CHM 211 Organic Chemistry I 3-3-4****Prerequisites:** CHM 111

This is the first in a sequence of courses that includes nomenclature, structure and properties, and reaction mechanisms of basic organic chemistry. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

**CHM 212 Organic Chemistry II 3-3-4****Prerequisites:** CHM 211

This course is a continuation of basic organic chemistry. Topics include nomenclature, structure and properties, reaction mechanisms of basic organic chemistry, biochemistry, and spectroscopy. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

## CNC—Comp Numerical Control Pro

**CNC 206 Additive Mfg for Non-Metals 0-3-1**

This course is an introduction to the photo polymerization, extrusion, and jetting systems in additive manufacturing. The student will set-up and operate a variety of additive machines.

## COS—Cosmetology/Esthetics

**COS 106 Facials and Makeup 1-6-3****Prerequisites:** COS 155

This is an introductory course to the procedures for various skin treatments, including anatomy, chemistry, and safety.

**COS 108 Nail Care 1-6-3****Prerequisites:** COS 155

This course is a study of nail structure and manicuring techniques, including anatomy, chemistry and safety.

**COS 110 Scalp and Hair Care 0-9-3****Prerequisites:** COS 155

This course is a study of the structure and composition of hair, including the analysis and treatment of certain conditions of the hair and scalp.

**COS 112 Shampoo and Rinses 1-9-4****Prerequisites:** COS 155

This course is a study of procedures and safety precautions in the application of shampoo and rinses.

**COS 114 Hair Shaping 1-9-4**

This is an introductory course to the techniques of hairshaping. Emphasis is given to the correct use and safety of implements, proper hair sectioning, and various techniques used in hair design in relationship to body structure.

**COS 116 Hair Styling I 0-12-4**

This course is a study of the fundamentals of hair design, including principles, techniques, safety precautions, and chemistry.

**COS 130 Professional Image 1-3-2****Prerequisites:** COS 155

This course is an introductory course that includes an overview of professionalism. Emphasis is on conduct, ethics, appearance and interpersonal skills.

**COS 151 Dermatology 1-6-3**

This course is the study of the structure, functions, conditions and disorders of the skin.

**COS 152 Hygiene and Sanitation 2-0-2**

This course is a study of professional hygiene and various methods of sanitation for facial implements and equipment used in the salon.

**COS 155 Sanitation Proc in Cosmetology 1-3-2**

This course is the study of methods for sanitation and hygiene, with emphasis placed on the requirements and guidelines of the cosmetology profession.

**COS 156 Fundamentals of Massage 0-6-2**

This is an introductory course in the theory, preparation, manipulations, and safety measures of massage.

**COS 157 Elec Currents and Hair Removal 3-0-3**

This course is a study of electrical currents as they relate to hair removal services. Emphasis is placed on the types of electrical currents associated with varying equipment. Topics also include proper procedures, safety measures, and sanitation practice.

**COS 158 Facial Treatments 0-6-2**

This is an introductory course in the procedures for various skin treatments and safety.

**COS 164 Basic Makeup and Application 3-0-3**

This is an introductory course in makeup application, including purpose, effects, supplies, implements, preparation, procedures, and safety.

**COS 167 Professional Prac Estheticians 1 - 0 - 1**

This course is a study of job preparation techniques such as interviewing skills and resume development as well as employment opportunities within the esthetics field. Topics also include payment structure, maintaining a license and state requirements for opening and operating a business.

**COS 201 Salon Management 1 - 6 - 3**

**Prerequisites:** COS 155

This course is a study of salon management, including rules, regulations, and codes governing the practice of cosmetology.

**COS 206 Chemical Hair Waving 1 - 6 - 3**

**Corequisites:** COS 155

This course is a study of methods of permanently waving the hair, including product, chemistry, and safety.

**COS 210 Hair Coloring 0 - 9 - 3**

**Corequisites:** COS 155

This course is a study of the science and art of coloring the hair, including methods, procedures, safety precautions, and chemistry.

**COS 220 Cosmetology Clinical Pract I 0 - 9 - 3**

This course is an integration of cosmetology skills in a simulated salon environment.

**COS 221 Facial Practice I 0 - 6 - 2**

This course is an integration of massage and facial skills in a simulated salon environment.

**COS 222 Cosmetology Clinical Pract II 0 - 9 - 3**

**Prerequisites:** COS 220 and COS 106 and COS 108

This course is an integration of cosmetology skills in a simulated salon environment to provide additional practical hours in skill development.

**COS 223 Facial Practice II 0 - 6 - 2**

This course provides for the integration of corrective and preservative facials, massage, and makeup application skills in a simulated salon environment.

**COS 225 Advanced Spa Services 1 - 0 - 1**

This course includes the study of several different types of body treatments and wraps, including their purposes and effects. Through demonstration and practice, students will explore the preparation of clients, treatment tables and products using methods that ensure client safety

**COS 251 Advanced Dermatology 3 - 0 - 3**

This course includes advanced information on skin pigmentation, inflammation, the aging process, hormonal issues affecting skin, identifying and controlling enemies of the skin, as well as an introduction to clinical esthetics.

## CPT — Computer & Info Systems

**CPT 114 Computers and Programming 2 - 3 - 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 language.

**CPT 162 Intro to Web Page Publishing 2 - 3 - 3**

**Prerequisites:** IST 226 and CPT 187

This course is a study of the fundamentals of web page design and implementation.

**CPT 168 Programming Logic and Design 2 - 3 - 3**

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

**CPT 187 Object-Oriented Logic & Design 2 - 3 - 3**

**Prerequisites:** CPT 168

This is a study in the planning and implementation of object-oriented programs.

**CPT 208 Special Topics in Comp Tech 2 - 3 - 3**

This course focuses on changes in computer technology.

**CPT 230 C# Programming I 2 - 3 - 3**

**Prerequisites:** CPT 187

This course introduces designing, coding, testing and debugging C# programs. Topics include procedural, functional and object oriented techniques; programming; IDEs; .NET; processing data; data types; I/O; decision processing; control structures; modularized coding with methods; and arrays.

**CPT 231 C# Programming II 2 - 3 - 3**

**Prerequisites:** IST 271

This course focuses on advanced programming concepts for C#. Topics include advanced string and character processing, user defined classes and advanced .NET, multiform projects, inheritance and polymorphism, database processing, exception handling, and GUIs with Windows Forms.

**CPT 240 Internet Prog with Databases 2 - 3 - 3**

**Prerequisites:** CPT 162

**Corequisites:** CPT 262, CPT 264

This course is a study of the implementation of dynamic web pages focusing on the development of web sites that interact with databases utilizing current server-side technologies along with the databases to deliver dynamic content to client browser.

**CPT 242 Database 2 - 3 - 3**

**Prerequisites:** IST 192

This course introduces database models and the fundamentals of database design. Topics include database structure, database processing, and application programs which access a database.

**CPT 262 Advanced Web Page Publishing 2-3-3****Corequisites:** CPT 242, CPT 240, CPT 264

This course is a study of advanced techniques in web page design and implementation.

**CPT 264 Systems and Procedures 2-3-3****Prerequisites:** and CPT 242**Corequisites:** CPT 262, IST 261

This course covers the techniques of system analysis, design, development, and implementation.

**CPT 278 Computer Software Applications 2-3-3**

This course is designed to guide the student from beginner to advanced in spreadsheets, databases and word processing.

**CPT 280 SCWE in Computer Technology 0-12-3****Prerequisites:** IST 190

This course integrates computer technology skills within an approved work site related to the computer industry.

**CPT 282 Info Systems Security 2-3-3**

This course is the study of the protection of information and equipment in computer systems. Topics include all aspects of systems protection, including physical security, hardware, software and communications security. Addresses technical, legal and ethical issues.

## CRJ — Criminal Justice

**CRJ 101 Intro to Criminal Justice 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 3-0-3**

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.

**CRJ 120 Constitutional Law 3-0-3**

This course covers the analysis of the historical development of the U.S. Constitution and the relationship of rights contained therein to the State and the individual. The application of the Bill of Rights to federal and state systems is examined.

**CRJ 125 Criminology 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 3-0-3**

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

**CRJ 145 Juvenile Delinquency 3-0-3**

This course includes a survey of the sociological, biological, and psychological theories involved in juvenile delinquency, modern trends in prevention, and treatment.

**CRJ 201 Fingerprint Science 2-3-3**

This course includes a basic, practical approach to fingerprint classification, identification, and filing system for the police officer, investigator, or beginning fingerprint technician.

**CRJ 202 Criminalistics 2-3-3**

This course covers an introduction to investigative techniques which stress the examination of questioned documents, fingerprint techniques, polygraph examinations, firearms' identifications, pathology, toxicology, ballistics, and clandestine operations.

**CRJ 203 Forensic Photography 2-3-3**

This course is designed to introduce students to procedures for photographic documentation of crime scenes and physical evidence, including preparation of court exhibits and in-court presentations.

**CRJ 218 Crisis Intervention 3-0-3**

This course is a study of the situational procedures and techniques necessary in defusing situations identified as crises.

**CRJ 220 The Judicial Process 3-0-3**

This course includes an overview of the law-making function of the courts, the growth of common law, the structure and organization of the courts, court processes and procedures involved in criminal and civil cases, and the question of reform for the administration of justice.

**CRJ 222 Ethics in Criminal Justice 3-0-3**

This course is a study of the application of ethical theories to the criminal justice profession.

**CRJ 224 Police Community Relations 3-0-3**

This course is a study of the importance of two-way communication between the criminal justice system and the community to foster a working relationship to control crime. A variety of topics are studied, including citizen involvement in crime prevention and police officer interpersonal relations.

**CRJ 229 Bloodstain Pattern Analysis 2-3-3**

This course is an introduction to the theoretical foundations and scientific principles of bloodstain pattern analysis in the investigation of crimes of violence, including the properties, flight characteristics and bloodstain patterns, documentation and investigative significance of bloodstains.

**CRJ 230 Criminal Investigation I 3-0-3**

This course is a study of the fundamentals of interviewing witnesses and interrogating suspects. Different methods of conducting crime scene searches and methods used in investigating various crimes are studied in the course.

**CRJ 235 Practical Crime Scene Investig 2-3-3**

This course is the study of practical, hands-on instruction in methodology and policies for the identification, interpretation, collection, packaging, preservation, and chain of custody of crime scenes and evidence taken from the crime scenes.

**CRJ 236 Criminal Evidence 3-0-3**

This course studies established rules of evidence from arrest to release in the administration of criminal justice.

**CRJ 242 Correctional Systems 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.

**CRJ 260 Seminar in Criminal Justice 3-0-3**

This course includes a study of new trends in criminal justice.

**CRJ 271 Correctional Science I 3-0-3**

This course covers security procedures, stress management, booking & admissions, DT use of force, classification procedures, and searches and security.

**CRJ 272 Correctional Science II 3-0-3**

This course covers defensive tactics, including countermeasures, pressure point control, handcuffing, joint manipulations, considerations for special needs and diversity, report writing, Naloxone administrator, interpersonal communications, disciplinary, emergency and transportation procedures.

**CRJ 273 Correctional Science III 3-0-3**

This course covers fingerprinting, release procedures, street gang recognition, ethics, and spontaneous knife defense.

**CRJ 281 Police Science I 3-0-3**

Course topics include but are not limited to: Intro to Criminal Law, Courts, Crimes, and Procedures, First Amend., Basic Patrol Operations, and Traffic Law. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.

**CRJ 282 Police Science II 3-0-3**

Course topics include but are not limited to: Domestic Violence, Juv. Procedures, and Victimology. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.

**CRJ 283 Police Science III 3-0-3**

Course topics include but are not limited to: Report Writing, Interviewing, Officer Survival, Drug Enforcement, and Crime Scene and Physical Evidence. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.

**CRJ 284 Police Science IV 3-0-3**

Course topics include but are not limited to: Basic Collision Investigation, Uniform Traffic Ticket, Vehicle Tactics, and Mind Armor. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.

## CUL—Culinary Arts

**CUL 104 Intro to Culinary Arts 3-0-3**

This survey course introduces students to the world of culinary arts. Students will be exposed to culinary history, culinary organizations and branches of the culinary field that offer different opportunities in the profession.

**CUL 105 Kitchen Fundamentals 2-3-3**

**Corequisites:** CUL 104

This course introduces students to the foundations of sanitation, basic measurements, equipment identification and basic costing.

**CUL 112 Classical Found of Cooking 2-3-3**

**Corequisites:** CUL 104, CUL 105

This course introduces classical cooking techniques that include stock, soup and sauce making. Students apply moist and dry heat classical cooking techniques while working with grains, vegetables and proteins.

**CUL 113 Success in Hospitality Studies 1-0-1**

This course provides an orientation on resources and academic skills to achieve success in a hospitality program. Emphasis is placed on technical, interpersonal and study skills, ethics, professionalism and time management.

**CUL 118 Nutritional Cooking 2-3-3**

**Corequisites:** CUL 104

This course focuses on the principles of food nutrition (based on ADA standards) and international food pyramids. Students will create menus, prepare and cook meals while adhering to the principles of a balanced diet.

**CUL 123 American Bistro 1-6-3**

Students will apply cooking techniques and theories while producing soups, salads, sandwiches and specials in a fast-paced delivery system.

**CUL 128 Culinary Mgmt & Human Resource 2-3-3**

This course is the study of the theories and concepts of management with an emphasis on human relations skills and managerial techniques as applied to chefs and kitchen managers. Legal aspects of the industry are introduced as part of human resources and executive team responsibilities.

**CUL 129 Storeroom & Purchasing 2-3-3**

This course combines purchasing theory with practical experience in the storeroom. Students develop skills in purchasing, developing requisitions, food transfers, inventory and organization of the storeroom.

**CUL 171 Food & Beverage Controls 3-0-3**

**Prerequisites:** (

**Corequisites:** CUL 235, MAT 155, MAT 101, MAT 110

This course covers the principles and procedures involved in an effective food and beverage control system including standards determination, operating budgets, cost-volume-profit analysis, income and cost control, menu pricing, labor cost control, and computer applications related to these concepts.

**CUL 186 Mediterranean Cuisine 2-3-3**

This course is the study of the cuisine of the Mediterranean and the Mediterranean Dietary Pyramid, including Spain, France, Italy, Middle East, and North Africa. Emphasis is on the culture, cooking methods, food products and beverages of the various countries.

**CUL 187 Cuisines of Asia 2-3-3**

This course covers the basic influences, ingredients, utensils, and cooking techniques of various Asian cuisines. Students will identify the influence of Asian cuisines on western cooking and the development of East meets West cooking.

**CUL 215 Cuisine of the Americas 2-3-3**

This course is a study of the cuisine of the culinary regions of the United States, South and Central America, Mexico and the Caribbean.

**CUL 220 Intro to Garde Manger 2-3-3**

This production course provides students with skills and knowledge of the organization, equipment and responsibilities of the cold kitchen. Students are introduced to classical Garde Manger techniques.

**CUL 235 Menu Planning 3-0-3**

**Corequisites:** CUL 113

This course is a study of the principles of menu planning and design with application of basic nutrition, organization plans, and record keeping techniques.

**CUL 236 Restaurant Capstone 1-6-3**

This course will include capstone competencies for culinary arts students. Students will manage and work multiple stations, develop food specials, cost menus, take inventories, produce a menu analysis and expedite food from the kitchen to the dining room.

**CUL 238 Culinary Marketing 2-3-3**

This course is a study of marketing strategies to promote the chef, the menu and the restaurant or food-service establishment.

**CUL 277 SCWE in Culinary Arts 0-12-3**

This course integrates culinary skills at an approved work site related to the culinary industry.

**CUL 299 Special Topics in Cul Studies 1-6-3**

This course will focus on a special topic in culinary or baking pastry arts such as regional world cuisines, food history, or current trends.

## CWE — Cooperative Work Exp

**CWE 101 Coop Work Exp Preparation 0-5-1**

**Prerequisites:** This course includes cooperative work experience in an approved setting. Course numbers vary per semester.

CWE may be taken for 1 to 8 credit hours, depending on weekly hours of student employment. CWE courses require 5 contact hours for one credit hour. Enrollment in CWE courses must be approved by the faculty advisor. (varying credit)

This course includes preparation for cooperative work experience. .

## DAT — Dental Assisting

**DAT 113 Dental Materials 3-3-4**

**Corequisites:** DAT 118, DAT 127, DAT 154

This course is a study of physical and chemical properties of matter and identification, characteristics, and manipulation of dental materials.

**DAT 115 Ethics and Professionalism 1-0-1**

**Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154 and DAT 174

**Corequisites:** DAT 121, DAT 122, DAT 123, DAT 183, DAT 177

This course introduces a cursory history of dental assisting, professional associations, scope of service in dentistry, and ethical, legal and professional considerations. The state dental practice act is reviewed.



**DAT 118 Dental Morphology 1-3-2****Corequisites:** DAT 113, DAT 127, DAT 154, DAT 174

This course emphasizes the development, eruption, and individual characteristics of each tooth and surrounding structures.

**DAT 121 Dental Health Education 2-0-2****Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154 and DAT 174**Corequisites:** DAT 122, DAT 123, DAT 183, DAT 115, DAT 177

This course defines the responsibilities of the dental assistant in individual and community dental health education with emphasis on the etiology of dental disease, methods for prevention, and principles of nutrition in relationship to oral health and preventive dentistry.

**DAT 122 Dental Office Management 1-3-2****Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154 and DAT 174**Corequisites:** DAT 121, DAT 123, DAT 183, DAT 115, DAT 177

This course provides a study of the business aspect of a dental office.

**DAT 123 Oral Medicine/Oral Biology 3-0-3****Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154**Corequisites:** DAT 121, DAT 122, DAT 183, DAT 174, DAT 115

This course presents a basic study of oral pathology, pharmacology, nutrition, and common emergencies as related to the role of the Dental Assistant.

**DAT 127 Dental Radiography 3-3-4****Corequisites:** DAT 113, DAT 118, DAT 154, DAT 174

This course provides the fundamental background and theory for the safe and effective use of x-radiation in dentistry. It encompasses the history of x-rays, production and uses of radiation, radiographic film, exposure factors, interpretation of radiographs and radiation hygiene.

**DAT 154 Clinical Procedures I 1-9-4****Corequisites:** DAT 113, DAT 118, DAT 127, DAT 174

This course includes preparation to assist a dentist efficiently in four-handed dentistry. Emphasis is on the names and functions of all dental instruments, the principles involved in their use, and the assistants' role in dental instrumentation.

**DAT 174 Office Rotations 1-9-4****Corequisites:** DAT 113, DAT 118, DAT 127, DAT 154

This is an introductory course to a general office with emphasis placed on chair side assisting and office management.

**DAT 177 Dental Office Experience 0-21-7****Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154 and DAT 174**Corequisites:** DAT 115, DAT 121, DAT 122, DAT 123, DAT 183

This course consists of practice in the dental office or clinic with rotation of assignments to encompass experiences in office management and clinical experience in all areas of dentistry.

**DAT 183 Specialty Functions 2-3-3****Prerequisites:** DAT 113 and DAT 118 and DAT 127 and DAT 154 and DAT 174**Corequisites:** DAT 121, DAT 122, DAT 123, DAT 115, DAT 177

This course is an introduction to dental specialties, the refinement, the roles served by assistants in the dental specialties, and the expanded legal functions for qualified assistants.

## DHG – Dental Hygiene

**DHG 121 Dental Radiography 2-3-3****Prerequisites:** AHS 113 and BIO 211 and BIO 225 and DHG 125 and DHG 151**Corequisites:** DHG 141, DHG 165, DHG 243, SPC 205

This course provides the application of the principles of radiology with emphasis on exposing, processing, mounting, evaluating, and interpreting dental radiographs. Radiation safety is stressed.

**DHG 125 Tooth Morphology and Histology 2-0-2****Prerequisites:** BIO 210 and ( CHM 105 or CHM 110 ) and ENG 101 and MAT 101**Corequisites:** AHS 113, BIO 211, BIO 225, DHG 151

This course covers the embryogenesis and histology of the head and neck structures with primary emphasis on the oral cavity. The formation, eruption patterns, and morphology of primary and permanent dentitions are studied.

**DHG 140 General and Oral Pathology 2-0-2****Prerequisites:** DHG 175 and DHG 239 and PSY 201**Corequisites:** DHG 143, DHG 230, DHG 241, DHG 255

This course provides a correlation of basic pathologic principles of disease processes in the oral cavity. The role of the dental hygienist in early disease detection is emphasized. Diagnosis, treatment and prognosis of disease affecting the head and neck are discussed.

**DHG 141 Periodontology 2-0-2****Prerequisites:** AHS 113 and BIO 211 and BIO 225 and DHG 125 and DHG 151**Corequisites:** DHG 121, DHG 165, DHG 243, SPC 205

This course presents a study of the principles, etiologies, classifications and treatments of periodontal disease with emphasis on the role of the dental hygienist.



**DHG 143 Dental Pharmacology 2-0-2**

**Prerequisites:** DHG 175 and DHG 239 and PSY 201  
**Corequisites:** DHG 140, DHG 230, DHG 241, DHG 255

This course provides a study of drugs used in dentistry. Emphasis is placed on the physical and chemical properties of the drugs, dosages and therapeutic effects, methods of administration, and indications/contraindications for the use of the drug. A study of dental anesthetics is included. .

**DHG 151 Dental Hygiene Principles 3-6-5**

**Prerequisites:** BIO 210 and ( CHM 105 or CHM 110 ) and ENG 101 and MAT 101  
**Corequisites:** AHS 113, BIO 211, BIO 225, DHG 125

This course is a study of the principles of infection control and hazardous waste communication; instrumentation, instrument design; operator and patient positioning; operation of basic dental equipment; patient evaluation and medical history review.

**DHG 165 Clinical Dental Hygiene I 2-9-5**

**Prerequisites:** AHS 113 and DHG 125 and DHG 151 and BIO 211 and BIO 225  
**Corequisites:** DHG 121, DHG 141, DHG 243, SPC 205

This is an introductory course to the clinical setting for application of dental hygiene skills for patient care.

**DHG 175 Clinical Dental Hygiene II 2-9-5**

**Prerequisites:** DHG 121 and DHG 141 and DHG 165 and DHG 243  
**Corequisites:** SPC 205, DHG 239, PSY 201

This course provides for the continued development of the skills necessary to perform dental hygiene care. Emphasis is placed on total patient care and treatment planning.

**DHG 230 Public Health Dentistry 2-3-3**

**Prerequisites:** DHG 175 and DHG 239 and PSY 201  
**Corequisites:** DHG 140, DHG 143, DHG 241, DHG 255

This course provides a study of oral health and the prevention of oral disease in a community. Emphasis is on assessment of community groups and dental health needs, planning, implementation, and evaluation of community programs.

**DHG 239 Dental Assisting for DHGs 1-3-2**

**Prerequisites:** DHG 121 and DHG 141 and DHG 165 and DHG 243  
**Corequisites:** SPC 205, DHG 175, PSY 201

This course introduces the dental assisting role and responsibilities. Emphasis is on four-handed dentistry, the use and manipulations of dental materials, and office management.

**DHG 241 Integrated Dental Hygiene I 1-0-1**

**Prerequisites:** DHG 175 and DHG 239 and PSY 201  
**Corequisites:** DHG 140, DHG 143, DHG 230, DHG 255

This course provides for the integration of the basic and dental hygiene sciences with current concepts of clinical dental hygiene practice.

**DHG 242 Integrated Dental Hygiene II 1-0-1**

**Prerequisites:** DHG 140 and DHG 143 and DHG 230 and DHG 241 and DHG 255  
**Corequisites:** DHG 265, SOC 101

This course provides for the integration of the basic and dental sciences with current dental hygiene concepts. Emphasis is placed on ethical/legal aspects of dental hygiene practice and practice management techniques.

**DHG 243 Nutrition and Dental Health 2-0-2**

**Prerequisites:** AHS 113 and DHG 125 and DHG 151 and BIO 211 and BIO 225  
**Corequisites:** DHG 121, DHG 141, DHG 165, SPC 205

This course provides a study of nutrients, their nature, source and utilization. Emphasis is placed on the relationship between diet and oral health. Oral manifestations of nutritional deficiencies are also studied.

**DHG 255 Clinical Dental Hygiene III 0-15-5**

**Prerequisites:** DHG 175 and DHG 239 and PSY 201  
**Corequisites:** DHG 140, DHG 143, DHG 230, DHG 241

This course provides for the development of proficiency in the clinical dental hygiene setting with emphasis on the implementation of treatment plans to meet the individual patient's oral health needs.

**DHG 265 Clinical Dental Hygiene IV 0-15-5**

**Prerequisites:** DHG 140 and DHG 143 and DHG 230 and DHG 241 and DHG 255  
**Corequisites:** DHG 242, SOC 101

This course permits refinement of clinical techniques and skills, technology and current procedural practices of the dental hygienist with emphasis on self-evaluation and quality assurance.

## DHM — Diesel Mechanics

**DHM 105 Diesel Engines I 1-6-3**

This course covers the basic study of diesel engine design and operating principles.

**DHM 111 Introduction to Caterpillar 1-3-2**

This course provides instruction and lab experience in shop safety, shop operations and how to obtain caterpillar service information.

**DHM 121 Intro to Diagnostic Testing 2-0-2**

This course is an introduction to basic theory and practical application of diagnostic testing equipment in trouble-shooting procedures. Content includes the study of diagnostic software and generic diagnostic readers for all major engine manufacturers.

**DHM 125 Diesel Fuel Systems 1 - 6 - 3****Corequisites:** DHM 273, DHM 265, DHM 108, DHM 205

This course is a basic study of diesel engine fuel systems including pumps, governors, and injectors.

**DHM 156 Fund of Transmissions & Torque 2 - 3 - 3****Corequisites:** DHM 255

This course is a study of various transmissions, torque converters, and differentials used in caterpillar equipment, including constant mesh, sliding gear, hydrostatic, and synchromesh and newer transmissions involving planetaries.

**DHM 159 Shop Orientation: Tools, Equip 1 - 6 - 3**

This course is the study of shop layout, vehicle lifts, basic hand tools, special tools and equipment, precision measuring tools, and vehicle repair information systems.

**DHM 173 Electrical Systems I 2 - 3 - 3**

This course is a study of basic electrical theory as applied to truck and heavy equipment batteries, starters, and alternators.

**DHM 205 Diesel Engines II 1 - 6 - 3****Prerequisites:** ( DHM 105**Corequisites:** DHM 273, DHM 265, DHM 108, DHM 125

This course covers the practical application of diesel engine repair, including engine disassembly, unit repair, reassembly, and testing.

**DHM 231 Diesel Air Conditioning 1 - 3 - 2**

This course is a study of diesel air conditioning theory, maintenance, troubleshooting, and repair procedures.

**DHM 255 Air Brakes Systems 1 - 6 - 3****Corequisites:** DHM 156

This course is a study of air compressors, valves, electrical controls and brake designs

**DHM 265 Hydraulic Systems 2 - 3 - 3****Corequisites:** DHM 273, DHM 108, DHM 125, DHM 205

This course is a study of the theory, application, testing, and repair of diesel and heavy equipment hydraulic systems.

**DHM 273 Electrical Systems II 3 - 0 - 3****Prerequisites:** ( DHM 173**Corequisites:** DHM 265, DHM 108, DHM 125, DHM 205

This course covers advanced electrical/electronic controls for diesel trucks and heavy equipment. Troubleshooting and repair techniques are included.

**DHM 275 Hybrid/Electric Drive Systems 2 - 3 - 3**

This course is a study of the hybridization of conventional propulsion systems along with the development of battery electric vehicles and their propulsion systems. Parameters of various battery technologies will be addressed.

## DMS — Diag Med/Vasc Sonography

**DMS 101 Ultrasound Physics and Instr I 2 - 0 - 2**

This course is a study of fundamental principles of acoustic physics including sound waves, sound wave propagation, sound wave interactions, image production, ultrasound transducers, transducer arrays, transducer operation, imaging modes, and biological effects.

**DMS 110 Sonographic Instrumentation I 3 - 0 - 3****Prerequisites:** PHY 118

This course is a study of sonographic propagation principles, transducer parameters, interactive properties with human tissues, possible biologic effects, basic types of equipment, instrumentation, and quality control.

**DMS 112 Ob/Gyn Sonography I 2 - 3 - 3**

This course studies sonographic imaging methods of the female pelvis, the fetus and the gravid uterus, emphasizing anatomy, physiology, pathology, and embryology.

**DMS 114 DMS Cross Sectional Anatomy 2 - 3 - 3****Prerequisites:** AHS 110

This course is a study of cross-sectional and sagittal anatomy of the abdomen along with basic scanning techniques.

**DMS 115 Vascular Anatomy & Physiology 1 - 0 - 1****Corequisites:** DMS 200, DMS 136, DMS 137

This course is a study of the anatomy of the blood vessels with emphasis on normal sonographic appearance.

**DMS 116 Abdominal Ultrasound 3 - 3 - 4****Prerequisites:** DMS 114

This course is an in-depth study of abdominal ultrasound including anatomy, physiology, and pathology. The sonographic appearance of normal anatomical structures and the more common abnormalities affecting the abdomen are also discussed.

**DMS 120 Sonographic Instrumentation II 3 - 0 - 3****Prerequisites:** DMS 101

This course is an advanced study of machine instrumentation, including display modes, components of an ultrasound system, quality control, an introduction to Doppler, the biological effects of ultrasound, artifacts, and future trends.

**DMS 122 Abdominal Sonography 0 - 3 - 1****Prerequisites:** DMS 101

This course is a study of the less common but significant pathological conditions of the abdominal organs and systems, advanced disease processes, differential diagnosis associated with these pathologies, and advanced scanning methods.

**DMS 124 Ob/Gyn Sonography II 1-3-2****Prerequisites:** DMS 112

This course is an advanced study of the gynecological pathologic processes, including fetal anomalies/abnormalities and advanced fetal gestational age testing.

**DMS 126 Advanced Sonographic Topics 1-3-2****Corequisites:** DMS 122

This course is a detailed study of the abdomen, superficial structures and neurosonography with emphasis on the anatomy, physiology, and pathological conditions seen with sonographic imaging.

**DMS 130 Selected Topics in Sonography 1-3-2****Prerequisites:** DMS 126

This course is a study of thyroid, breast, testicular and other superficial structures of the body by ultrasound with emphasis on anatomy, physiology, and pathological conditions associated with these organs.

**DMS 135 Breast Ultrasound 1-0-1****Prerequisites:** DMS 126

This course is a study of breast ultrasound to include, anatomy, physiology, and pathology. The sonographic appearance of normal anatomical structures and the more common pathologies affecting the breast are also discussed.

**DMS 136 Intro to Vascular Ultrasound 0-3-1****Corequisites:** DMS 200, DMS 115, DMS 137

This course is an introduction to sonographic evaluation of the blood vessels to include types of studies performed and basic scanning techniques for peripheral vascular ultrasound.

**DMS 137 Vascular Applications 3-3-4****Corequisites:** DMS 200, DMS 136, DMS 115

This course is a supervised clinical experience and practice designed to continue the student's development of vascular ultrasound scanning skills and techniques.

**DMS 150 Clinical Applications I 0-21-7**

This course is an introduction to the diagnostic ultrasound department, including initial examination performances, machine operation, and administrative/record keeping procedures.

**DMS 160 Clinical Applications II 0-21-7****Prerequisites:** DMS 175

This course covers routine sonography procedures in the clinical environment.

**DMS 164 Intro to Clinical Education 0-6-2**

This course is a supervised clinical experience and practice designed to introduce the student to the Diagnostic Ultrasound Department.

**DMS 166 Advanced Clinical Education 0-21-7****Prerequisites:** DMS 150

This course is supervised clinical experience and practice designed to continue and advance the student's ultrasound scanning skills and techniques.

**DMS 167 Imaging Practicum 0-24-8****Prerequisites:** DMS 165 or DMS 166

This course is supervised clinical experience and practice designed to continue and advance the student's ultrasound scanning skills and techniques. This clinical course also provides an opportunity for students to explore advancements in sonography.

**DMS 175 Clinical Education III 0-18-6**

This course is a supervised clinical experience and practice designed to continue the student's development of ultrasound scanning skills and techniques.

**DMS 200 Seminars in Sonography 2-0-2****Corequisites:** DMS 137, DMS 136, DMS 115

This course is an in-depth review of ultrasound physics, anatomy, physiology, and pathology and provides test preparation for the national certification exams. Emphasis is placed on the interpretation of clinical tests and scanning techniques relative to the development of a differential diagnosis.

## ECD — Early Childhood Dev

**ECD 101 Intro to Early Childhood 3-0-3**

This course is an overview of growth and development, developmentally appropriate curriculum, positive guidance techniques, regulations, health, safety, and nutrition standards in early care and education. Professionalism, family/cultural values and practical applications based on historical and theoretical models in early care and education are highlighted in this course.

**ECD 102 Growth and Development I 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 3-0-3**

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 3-0-3**

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 mainstreaming and early identification, and on federal legislation affecting exceptional children.

**ECD 108 Family and Community Relations 3-0-3**

This course is an overview of techniques and materials for promoting effective family/program partnerships to foster positive child development. Emphasis is on availability and accessibility of community resources and on developing appropriate communication skills.

**ECD 109 Administration & Supervision 3-0-3**

**Prerequisites:** ECD 101

This course is a study of the role and responsibilities of an early childhood administrator. Special focus is on program monetary matters, space management, curriculum, health and food services, and relations among the public, staff and parents.

**ECD 131 Language Arts 2-3-3**

This course is a study of methods and materials in age-appropriate language experiences. Opportunities are provided to develop listening, speaking, prereading and prewriting skills through planning, implementation, and evaluation of media, methods, techniques and equipment. Methods of selection, evaluation, and presentation of children's literature are included.

**ECD 132 Creative Experiences 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 2-3-3**

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.

**ECD 135 Health Safety and Nutrition 3-0-3**

This course covers a review of health/safety practices recommended for child care and includes information on common diseases 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 200 Curr Issues in Infant/Todd Dev 3-0-3**

This course is a study of infant and toddler care. Emphasis is on brain development and its implications for caring for infants and toddlers. Planning and teaching strategies as they relate to child development, curriculum and environment are included in the course.

**ECD 201 Prin of Ethics & Leadership 3-0-3**

This course includes an overview of historical views on leadership and issues and challenges of leadership in early care and education. Emphasis is on current trends and issues. This course also reviews ethical principles as they relate to children, families, colleagues, and the community and society.

**ECD 203 Growth and Development II 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.

**ECD 205 Socialization & Group Care of 3-0-3**

**Prerequisites:** ECD 101

This course is the study of the socialization and group care of infants and toddlers. Emphasis is on guidance and management, understanding behavior, temperament, the importance of routines, primary care and continuity of care, and examining the elements of quality environments.

**ECD 237 Methods and Materials 2-3-3**

This course includes an overview of developmentally-appropriate methods and materials for planning, and evaluating environments. Emphasis is on integrating divergent activities in each curriculum area.

**ECD 243 Supervised Field Experience I 2-3-3**

This course includes emphasis on planning, implementing, and evaluating scheduled programs, age appropriate methods, materials, activities, and environments of early childhood principles and practices.

**ECD 252 Divers Iss in Early Care & Edu 3-0-3**

This course meets the growing need for students in early care and education to learn how to interact with people who are different from them. It also allows students to examine and appreciate the differences that exist because of diversity from race, language, ethnicity, age and socio-economic levels.

## ECO — Economics

### ECO 210 Macroeconomics 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 3-0-3

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.

## EDU — Education

### EDU 102 Professional Prep for Ed Caree 2-3-3

This course is designed to prepare students for careers in the education profession, including information literacy skills, PRAXIS preparation, academic and education career goals, recognition of appropriate resources for education majors, and preparation for professional program admission/success.

### EDU 110 Careers in Education 3-0-3

This course introduces students to the role of the teacher, the nature of the teaching profession and assists students in personal and professional development. Topics addressed include an overview of the teaching profession: curriculum, instruction, environment, students, resources, and trends and pressures facing educators today.

### EDU 200 Foundations of Special Educ 3-0-3 Corequisites: EDU 110

This course provides knowledge of basic concepts in special education related to the education of individuals with disabilities. Content includes historical factors, legislation, etiology, educational strategies, identification procedures, support services and the impact on academic performance.

### EDU 201 Classroom Inquiry w/ Technolog 3-0-3

This course explores teaching as a data driven, reflective practice. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university.

### EDU 241 Learners & Diversity 4-0-4

This course is a study of lifespan development and learning with an emphasis on individual & group diversity. The students are required to participate in a field experience. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university.

### EDU 242 Adolescent Growth & Develop 3-0-3

This course is an investigation of the various patterns and theories related to intellectual, social, emotional, and physical growth and development of preadolescent and adolescent learners. Emphasis is placed on developmental applications in educational settings.

### EDU 290 Children's Literature 3-0-3

This course is a study of literature for children from birth through elementary school (age 13) with emphasis on the evaluation, selection, and use of those materials to meet the educational, cultural, and recreational needs of children.

## EEM — Electronics Technology

### EEM 105 Basic Electricity 2-0-2

This course is a survey of basic electrical principles, circuits, and measurements.

### EEM 117 AC/DC Circuits I 3-3-4

This course is a study of direct and alternating theory, Ohm's Law, series, parallel, and combination circuits. Circuits are constructed and tested.

### EEM 118 AC/DC Circuits II 3-3-4 Prerequisites: EEM 117

This course is a continuation of the study of direct and alternating current theory to include circuit analysis using mathematics and verified with electrical measurements

### EEM 121 Electrical Measurements 1-6-3 Prerequisites: EEM 117 and EEM 140

This course covers the basic principles of electrical measuring instruments and how they are used in industries.

### EEM 140 National Electrical Code 3-0-3

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). Students will learn how the NEC is divided and subdivided so that appropriate codes applying to specific electrical install scenarios may easily be found, interpreted, and applied.

### EEM 145 Control Circuits 3-0-3 Prerequisites: EEM 117 and EEM 140

This course covers the principles and applications of component circuits and methods of motor control.

### EEM 151 Motor Controls I 2-6-4 Prerequisites: EEM 118

This course is an introduction to motor controls, including a study of the various control devices and wiring used in industrial processes.

**EEM 165 Residential/Commercial Wiring 2-6-4**

This course is a study of wiring methods and practices used in residential and commercial applications.

**EEM 170 Electrical Installation 1-6-3**

**Prerequisites:** EEM 117 and EEM 140

This course covers electrical wiring techniques commonly used in commercial, industrial, and residential wiring.

**EEM 172 Electrical Print Reading 4-0-4**

This course is a study of electrical prints as they pertain to layout, planning, and installation of wiring systems in residential, commercial and/or industrial complexes.

**EEM 204 SCWE in Residential/Comm Elec 0-12-3**

**Prerequisites:** EEM 165

This course integrates residential/commercial electrical skills with an approved job environment related to the residential/commercial industry.

**EEM 215 DC/AC Machines 2-3-3**

This course is a study of applications, operations, and construction of DC and AC machines.

**EEM 221 DC/AC Drives 2-3-3**

This course covers the principles of operation and application of DC drives and AC drives.

**EEM 231 Digital Circuits I 1-6-3**

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.

**EEM 235 Power Systems 3-0-3**

**Prerequisites:** EEM 117 and EEM 140

This course is a study of the design, operation, and installation of power distribution applications. Load analysis rate and power economics are covered.

**EEM 251 Programmable Controllers 1-6-3**

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.

**EEM 252 Programmable Controllers Appli 1-6-3**

**Prerequisites:** EEM 251

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.

**EEM 274 Technical/Sys Troubleshoot 2-6-4**

This course is a study of systematic approaches to troubleshooting and repair of electronic, electrical, and electromechanical systems.

**EEM 275 Technical Troubleshooting 1-6-3**

This course consists of a systematic approach to troubleshooting. Techniques used to analyze proper circuit operation and malfunctions are studied.

## EET — Electronics Engr Tech

**EET 113 Electrical Circuits I 2-6-4**

This course is a study of direct and alternating currents, covering resistance and impedance in series, parallel, and series-parallel circuits using Ohm's Law, Kirchhoff's laws, and basic circuit theorems. Circuits are analyzed using mathematics and verified using electrical instruments.

**EET 114 Electrical Circuits II 2-6-4**

**Prerequisites:** EET 113

This course is a continuation in electrical circuits, including advanced network theorems. Circuits are analyzed using mathematics and verified using electrical instruments.

**EET 131 Active Devices 3-3-4**

**Prerequisites:** EET 114

This course is a study of semiconductor theory and principles, diodes and diode circuits, transistors, transistor circuits, and other components. Circuits are modeled, constructed, and tested.

**EET 145 Digital Circuits 3-3-4**

This course is a study of number systems, basic logic gates, Boolean algebra, logic optimization, flip-flops, counters and registers. Circuits are modeled, constructed, and tested.

**EET 147 I. C. Circuits 1-3-2**

**Prerequisites:** EET 131

**Corequisites:** EET 220

This course covers constructing and troubleshooting a series of applicable circuits using integrated circuit chips and other components, including the use of data books and test equipment.

**EET 210 Digital Integrated Circuits 3-3-4**

**Prerequisites:** EET 145

This course is a study of digital integrated circuits, including multiplexers, demultiplexers, buffers, decoders, encoders, converters, memory devices, and programmable logic devices. Circuits are modeled, constructed, and tested.



**EET 218 Electrical Power Systems 2-6-4****Prerequisites:** EET 114

This course is a study of power generation, transmission, transformers, distribution, and motor controls.

**EET 220 Analog Integrated Circuits 2-3-3****Prerequisites:** EET 131

This course includes analysis, application, and experiments involving such integrated circuits as op-amps, timers and IC regulators. Circuits are modeled, constructed, and tested.

**EET 227 Electrical Machinery 2-3-3****Prerequisites:** EET 114

This course is a study of AC and DC electro-mechanical energy conversion devices, theory, applications and control. Devices are tested and verified using electrical instruments.

**EET 231 Industrial Electronics 3-3-4****Prerequisites:** EET 227 or EET 114

This course is a survey of topics related to industrial application of electronic devices and circuits. The course covers switches, DC and AC motor controls, sensors and transducers, open and closed loop control circuits and voltage converting interfaces. Circuits are constructed and tested.

**EET 235 Programmable Controllers 2-3-3****Prerequisites:** EET 145

This course is a study of relay logic, ladder diagrams, theory of operation, and applications. Loading ladder diagrams, debugging, and trouble-shooting techniques are applied to programmable controllers.

**EET 236 PLC Systems Programming 2-3-3****Prerequisites:** EET 235

This course covers advanced topics in programmable logic controllers (PLC) systems and programming including timing, conversions, analog operations, PID control, auxiliary commands and functions, and PLC to PLC systems communications.

**EET 243 Data Communications 2-3-3****Prerequisites:** EET 114 and EET 210

This course is a study of the techniques for sending and receiving information. Topics include media characteristics, modulation/demodulation, signal conversions, multiplexing and demultiplexing, protocols, industrial standards, networks, and error detection and correction. Circuits are modeled, constructed and tested.

**EET 253 Microprocessors 3-3-4****Prerequisites:** EET 210 or EET 114

This course is a study of software and hardware interfacing techniques. Circuits are modeled, constructed, and tested.

**EET 275 Intro to Robotics Manuf Tech 2-3-3****Prerequisites:** EET 113

This course introduces required skills for robotics manufacturing technicians. Instruction includes integrated content from electrical, mechanical, photonic, and geospatial systems. Students will experience industry simulations and practical application of content.

## EGR — Engineering

**EGR 170 Engineering Materials 3-0-3**

This course is a study of the properties, material behaviors, and applications of materials used in engineering structures and products.

**EGR 190 Statics 3-0-3**

This course is a study of forces and the effect of forces acting on bodies in equilibrium without motion.

**EGR 260 Engineering Statics 3-0-3****Prerequisites:** MAT 175 or MAT 110**Corequisites:** MAT 111

(Transfer course) this course is an introduction to the principles of engineering mechanics as applied to forces and force systems. The techniques of vector mathematics are employed.

**EGR 270 Intro to Engineering 2-3-3**

(Transfer course) This course covers the applications of computers in engineering practices, including the use of an appropriate operating system, programming in a high level language, spread sheets, and word processing applications.

**EGR 275 Intro to Eng/Computer Graphics 2-3-3**

(Transfer course) this course is a study of basic graphical concepts needed for engineering applications.

**EGR 282 Intro to Civil Engineering 2-0-2**

This course covers the engineering process from problem formulation to creative design through practical solutions of civil engineering problems.

**EGR 285 Engineering Surveying I 3-0-3****Corequisites:** MAT 175, MAT 111, EGR 295

This course covers linear measurements, leveling, compass and transit/theodolite, Theory of Errors, areas, stadia, coordinate geometry, state plane coordinates, and standard map projections.

**EGR 286 Engineering Survey II 3-0-3****Prerequisites:** EGR 285 and EGR 295**Corequisites:** EGR 296

This course covers land surveying and boundary laws, public land surveys, topographic mapping, horizontal and vertical curves, lot calculations, and engineering astronomy.

**EGR 288 Drainage Design 2-3-3****Prerequisites:** EGR 275 and MAT 175 and CET 218

This course covers a study of hydrology and drainage design specifically to the local municipality.

**EGR 289 SCWE in Engineering 0-12-3****Prerequisites:** EGR 275 or ( EGR 285 and EGR 295 )

This course integrates engineering skills with an approved job environment related to the engineering industry.

**EGR 295 Engineering Surveying Lab I 0-3-1****Corequisites:** EGR 285

This course covers horizontal control, including distance and angular measurements, traversing, and preparation of a plat. Vertical control includes the performance of a level loop.

**EGR 296 Engineering Surveying Lab II 0-3-1****Corequisites:** EGR 286

This course covers locating buildings and other objects within a boundary survey, performing a topographic survey, preparing a topographic map, and staking out a horizontal curve.

## EGT — CAD/Drafting

**EGT 101 Basic Technical Drawing 0-6-2**

This course covers the basics of drafting, emphasizing line quality, lettering, and basic drafting conventions.

## ELW — Electrical Lineman Worker

**ELW 110 Electrical Computations 1-3-2**

This course introduces the fundamental applications of mathematics that are used by an electrical line technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and use of a scientific calculator.

**ELW 111 Intro to Electrical Line Work 2-3-3**

This course introduces basic principles of electricity, safety standards and basic line worker tools. Topics include electrical distribution systems and components, line installation and maintenance applications.

**ELW 112 Intro to Electricity 2-3-3**

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronic majors. Topics include basic DC and AC principles, components and operation of test equipment.

**ELW 114 Overhead Line Construction I 2-3-3**

This course introduces the basics of overhead power line construction. Topics include safe work habits, protective equipment and pole climbing techniques.

**ELW 211 Underground Line Const I 2-3-3**

This course introduces underground line distribution systems, including terminators, elbows, transformers, underground installations and safety practices.

**ELW 231 Electrical Power Systems 2-3-3**

This course examines the basic principles of electrical power systems, including transmission lines, generator and transformer characteristics, fault detection and correction, interpretation of line diagrams and performance of per-unit calculations for circuit performance analysis.

## EMS — Emergency Med Services

**EMS 104 Emergency Care I 6-3-7**

This course is a study of the preparatory, pharmacology, airway management, patient assessment, trauma and shock modules as it relates to the provision of pre-hospital emergency medical care to critically ill and injured patients.

**EMS 109 Emergency Care II 6-3-7****Prerequisites:** EMS 104**Corequisites:** EMS 212

This course is a study of medical emergencies, operations, pediatrics and other special populations as it relates to the provision of pre-hospital emergency medical care to critically ill and injured patients.

**EMS 113 Advanced Mgmt of Trauma Patient 1-0-1****Prerequisites:** EMS 109 and EMS 212**Corequisites:** EMS 119, EMS 150, EMS 223, BIO 112

This course is a study of the knowledge and skills necessary to rapidly evaluate, stabilize, and transport a trauma patient including advanced patient management and best practice in pre-hospital trauma patient assessment and care.

**EMS 116 Adv Cardiac Life Support 0-3-1****Prerequisites:** EMS 113 and EMS 119 and EMS 150 and EMS 223**Corequisites:** EMS 224, EMS 230, EMS 238

This course is designed to educate the experienced healthcare provider in dealing with critical cardiac patients in an acute, emergency setting. An understanding of cardiac equipment, basic pharmacology and cardiovascular function is necessary. Current American heart association guidelines will be followed.

**EMS 117 Pediatric Adv Life Support 1-0-1****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 118, EMS 240, EMS 241, EMS 248, EMS 272

This course is designed to educate the experienced healthcare provider in dealing with critical pediatric patients suffering from acute cardiac and respiratory problems in an emergency setting. An understanding of cardiac equipment, basic pharmacology and cardiovascular function is necessary.

**EMS 118 Adv Medical Life Support 1-0-1****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 117, EMS 240, EMS 241, EMS 248, EMS 272

This course is designed to present students with a practical method for the management of adult patients suffering from various medical emergencies. Students will be provided with the practical knowledge and skills to effectively manage on-scene, adult medical emergencies.

**EMS 119 Emergency Medical Services Ops 2-0-2****Prerequisites:** EMS 109 and EMS 212**Corequisites:** EMS 150, EMS 113, EMS 223, BIO 112

This course is a multi-faceted approach to theory of EMS operations. Topics include expanded provider roles, EMS systems overview, medical/legal aspects, theory of ambulance operations, mass casualty incident management, rescue awareness, crime scenes, terrorism, and weapons of mass destruction.

**EMS 150 Intro to Advanced Care 4-3-5****Prerequisites:** EMS 109 and EMS 212**Corequisites:** EMS 119, EMS 113, EMS 223, BIO 112

This course covers advanced care preparatory material, trauma, advanced airway material, and shock management.

**EMS 212 EMS Field Internship 0-6-2****Prerequisites:** EMS 104**Corequisites:** EMS 109

This course includes experiences with advanced life support emergency medical services.

**EMS 223 Paramedic Clinical I 0-6-2****Prerequisites:** EMS 109 and EMS 212**Corequisites:** EMS 113, EMS 119, EMS 150, BIO 112

This course includes hospital clinical experiences in many areas, such as the emergency center, surgery, labor and delivery, and pediatric centers.

**EMS 224 Paramedic Clinical II 0-6-2****Prerequisites:** EMS 113 and EMS 119 and EMS 150 and EMS 223**Corequisites:** EMS 116, EMS 230, EMS 238

This course is a study of emergency medical care procedures for the paramedic provider, including concepts and skills related to medical emergencies. Emphasis is on pathophysiology and treatment modalities related to the major systems of the body such as the respiratory and cardiovascular systems. This course includes compressed content from EMS 213.

**EMS 230 Adv Emergency Medical Care I 3-6-5****Prerequisites:** EMS 113 and EMS 119 and EMS 150 and EMS 223**Corequisites:** EMS 116, EMS 224, EMS 238

This course provides an introduction to pre-hospital pharmacology and cardiology as they relate specifically to patient care. Emphasis is placed on the appropriate methods for patient physical exams and solicitation of medical history to maximize patient outcomes.

**EMS 238 Paramedic Ambulance Fld Exp I 0-9-3****Prerequisites:** EMS 113 and EMS 119 and EMS 150 and EMS 223**Corequisites:** EMS 116, EMS 230, EMS 224

This course introduces the concept of emergency medical care in the E-911 ambulance setting.

**EMS 240 Adv Emergency Medical Care II 3-6-5****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 117, EMS 118, EMS 241, EMS 248, EMS 272

This course is a study of complex recurring emergency medical conditions that encompass all stages of the patient's life span.

**EMS 241 Paramedic Clinical III 0-6-2****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 117, EMS 118, EMS 240, EMS 248, EMS 272

This course is an advanced clinical experience and provides an overview of holistic patient care from the point of entry into the emergency department until patient discharge.

**EMS 248 Paramedic Amb Field Exp II 0-6-2****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 117, EMS 118, EMS 240, EMS 241, EMS 272

This course will emphasize the knowledge and skills of emergency care in an E-911 ambulance setting. Focus is on the student and their ability to apply classroom knowledge during an emergency situation while treating a wide variety of patients.

**EMS 272 Paramedic Capstone 0-12-4****Prerequisites:** EMS 116 and EMS 230 and EMS 224 and EMS 238**Corequisites:** EMS 117, EMS 118, EMS 240, EMS 241, EMS 248

This course provides the opportunity for the student to function as a team leader in a 911 response agency by managing and accounting for all aspects of the emergency scene and patient care.

## ENG — English

### ENG 011 Dev English Basics Workshop 0-3-1

**Corequisites:** ENG 155

This course provides support for basic English competencies (e.g., may include, but is not limited to, laboratory work, computerized instruction, and/or projects). Students will participate in an intensive review of grammar and mechanics and the writing process; planning, organizing, drafting, editing, and revising are emphasized in this lab course.

### ENG 012 Developmental English Workshop 0-3-1

This course provides support for mastery of English competencies (e.g., may include, but is not limited to, laboratory work, computerized instruction, and/or projects.) Students will participate in an intensive review of grammar and mechanics and the writing process; planning, organizing, drafting, editing, and revising are emphasized in this lab course.

### ENG 101 English Composition I 3-0-3

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate reading and multimedia selections, with frequent assignments to reinforce effective writing. A review of the basic techniques of research are also presented.

### ENG 102 English Composition II 3-0-3

**Prerequisites:** ENG 101

This is a (college transfer) course in which the following topics are presented: development of writing skills through logical organization, effective style, critical reading and research.

### ENG 155 Communications I 3-0-3

This course introduces the principles of expository writing and public speaking through practice and development of communication skills.

### ENG 160 Technical Communications 3-0-3

**Prerequisites:** ENG 155 or ENG 101

This course is a study of various technical communications such as definitions, processes, instructions, descriptions, and technical reports. Students will understand, assess, and manipulate these documents in digital, mobile, and print contexts for the modern world.

### ENG 201 American Literature I 3-0-3

**Prerequisites:** ENG 102

This course is a study of American literature from the colonial period to the civil war.

### ENG 202 American Literature II 3-0-3

**Prerequisites:** ENG 102

This course is a study of American literature from the civil war to the present.

### ENG 205 English Literature I 3-0-3

**Prerequisites:** ENG 102

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.

### ENG 206 English Literature II 3-0-3

**Prerequisites:** ENG 102

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.

### ENG 208 World Literature I 3-0-3

**Prerequisites:** ENG 102

This course is a study of masterpieces of world literature in translation from the ancient world to the sixteenth century.

### ENG 209 World Literature II 3-0-3

**Prerequisites:** ENG 102

This course is a study of masterpieces of world literature in translation from the seventeenth century to the present.

### ENG 230 Women in Literature 3-0-3

**Prerequisites:** ENG 102

This course is a critical study of women's writings examined from historical, social, and psychological points of view.

### ENG 234 Survey in Minority Literature 3-0-3

**Prerequisites:** ENG 102

This course is a critical study of minority writings, examined from historical, social, and psychological points of view.

### ENG 236 African American Literature 3-0-3

**Prerequisites:** ENG 102

This course is a critical study of African American literature examined from historical, social, and psychological perspectives.

## FOR — Forestry Management Tech

### FOR 102 Multiple Use of Forest Lands 3-0-3

**Corequisites:** ENG 101, ENG 155

This course is a study of how the forest serves the multiple purposes of recreation, wildlife, watershed and range, as well as producing timber crops. It examines the relationship between the public and private sectors in achieving these different demands placed on the forest community.

**FOR 130 Dendrology 2-3-3**

This course is a study of the characteristics and uses of important trees, shrubs, and lesser vegetation of the southern forest. It includes collecting, mounting, and identifying approximately 115-130 species by leaf, twig, bark, and growth characteristics.

**FOR 154 Mensuration 2-3-3**

This course is a study of the techniques and instruments used in the measurement of standing or harvested trees. The use of log rules, volume tables, yield tables, and elementary statistics are included.

**FOR 156 Timber Cruising and Marketing 2-3-3**

**Prerequisites:** FOR 154

This course is a study of the three systems of estimating volumes and values of standing timber--strip, plot, and prism. Stand analysis, dominant tree data, and statistical data are also collected and analyzed.

**FOR 206 Forest Ecology 2-3-3**

This course is a study of the nature of forests and forest trees, how they grow, reproduce, and their relationships to the physical and biological environment.

**FOR 220 SCWE in Forestry 0-20-5**

**Prerequisites:** FOR 154 and FOR 130

This course is a study of the problems of day to day natural resource operations. Employment in an approved forest or natural resource related industry or agency is required.

**FOR 222 Forestry Portfolio 0-9-3**

**Corequisites:** FOR 220

This course is an integrated study and comprehensive report related to the materials and curriculum requirements of the student work experience to include forestry management practices, planning and human resources.

**FOR 263 Forest Management 2-6-4**

**Prerequisites:** FOR 271

This course examines the tools and techniques used in constructing formal management plans for forests. Subdivision of the forest for management purposes, regulation, and regeneration are included.

**FOR 265 Equip and Timber Harvesting 3-3-4**

**Prerequisites:** FOR 156

**Corequisites:** FOR 269, MAT 120

This course covers the analysis of logging situations and decision-making regarding timber harvesting. A study of the various equipment and tools used in forestry operations, techniques of operating and maintaining equipment, and harvesting operations and the costs involved are included.

**FOR 268 Forest Protection Practices 2-6-4**

This course covers forest fires and the major insects and diseases which attack southern forests. Methods of prevention and control are explored.

**FOR 269 Forestry Stat & Data Proc 2-3-3**

**Corequisites:** FOR 156

This course covers measuring, recording, and summarizing various forestry field data and its presentation in technical form. Basic statistical and finance computations, interest, and discount computations are included.

**FOR 271 Silviculture 3-3-4**

**Prerequisites:** FOR 156

This course covers the treatment of forest stands to achieve prescribed objectives. Specific topics include intermediate forest management practices, the four basic harvest methods, and regeneration of trees.

**FRE — French****FRE 101 Elementary French I 4-0-4**

This course consists of a study of the four basic language skills: listening, speaking, reading and writing, including an introduction to French culture.

**FRE 102 Elementary French II 4-0-4**

**Prerequisites:** FRE 101

This course continues the development of basic language skills and includes a study of French culture.

**GEO — Geography****GEO 101 Introduction to Geography 3-0-3**

This course is an introduction to the principles and methods of geographic inquiry.

**GEO 102 World Geography 3-0-3**

This course includes a geographic analysis of the regions of the world, i.e., North and South America, Europe, Australia, Asia and Africa. Diversity of each region is emphasized by examining its physical environment, natural resources, social, cultural, economic and political systems.



## GMT — Geographic Mapping

### GMT 101 Intro to Geographic Info Sys 2-3-3

**Prerequisites:** CPT 187

This course is a study of the development of digital techniques to portray mapping/spatial data, hardware and software components of digital mapping systems, and review of basic procedures in creating, maintaining and utilizing digital mapping.

## HIM — Health Information Mgmt

### HIM 103 Intro to Health Info & Coding 3-0-3

This course focuses on the principles of health information management and explores basic concepts in diagnostic and procedural coding and classification systems.

### HIM 130 Billing and Reimbursement 3-0-3

**Prerequisites:** ( HIM 103

This course provides an introduction to medical insurance billing and reimbursement practices with emphasis on the primary payers such as Medicare and Medicaid.

### HIM 135 Medical Pathology 3-0-3

**Prerequisites:** BIO 112 or BIO 210 or BIO 211 or BIO 110 and AHS 102

This course is a study of disease processes, general classification of disease, including signs and symptoms, systems affected by disease, diagnostic measures, types of treatment, including surgical and/or chemical intervention, and terminology.

### HIM 140 Current Procedural Terminology I 2-3-3

**Prerequisites:** ( ( BIO 210 or BIO 110 or BIO 211 or BIO 112 ) and HIM 103 and AHS 102  
**Corequisites:** HIM 216

This course provides a basic study of the CPT and HCPCS coding and classification systems particular to the physician's office setting. Students will learn how to assign codes to capture the professional component of services provided.

### HIM 141 Current Procedural Terminology II 2-3-3

**Prerequisites:** ( HIM 140 and HIM 216  
**Corequisites:** HIM 225

This course provides an intermediate study of the CPT and HCPCS coding and classification systems with respect to surgical outpatient facilities and hospitals.

### HIM 153 Electronic Health Record Clinical Experience 0-9-3

**Prerequisites:** HIM 141 and HIM 225 and HIM 250  
**Corequisites:** HIM 264

This course expands on the application of theoretical principles of the electronic health record. Focus is on the management of patient information in a digital environment.

### HIM 216 Coding and Classification I 2-3-3

**Prerequisites:** ( BIO 210 or BIO 110 or BIO 110 or BIO 110 or BIO 112 and HIM 103 and AHS 102  
**Corequisites:** HIM 140

This course includes a study of disease and procedural coding and classification systems.

### HIM 225 Coding and Classification II 2-3-3

**Prerequisites:** HIM 140 and HIM 216  
**Corequisites:** HIM 141

This course provides a study of advanced coding and classification systems.

### HIM 250 Coding and Classification III 2-3-3

**Prerequisites:** HIM 140 and HIM 216 and HIM 130 and HIM 135  
**Corequisites:** HIM 141, HIM 225

This course is a study of ICD-10-CM, ICD-10-PCS and the coding guidelines and procedures associated with this classification system.

### HIM 264 Clinical Practice IV 0-12-4

**Prerequisites:** HIM 141 and HIM 225  
**Corequisites:** HIM 153

This course provides clinical practice in the application of health information system theory in selected health care facilities.

## HIS — History

### HIS 101 Western Civilization to 1689 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 3-0-3

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 201 American History: Discovery to 1877 3-0-3

This course is a survey of U.S. history from European discovery to 1877. This course considers various developments during this time, such as the political, social, economic, cultural, and intellectual.

### HIS 202 American History: 1877 to Present 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.



## HMT — Hazardous Materials Technology

### HMT 210 Contingency Plans & Emer. Resp 4-0-4

**Prerequisites:** ENG 101 or ENG 155

This course covers the preparation, implementation, and evaluation of contingency plans and emergency response procedures. Through simulated emergencies, the student will assess an incident, respond to the emergency, supervise the clean-up, and provide public relations information.

## HOS — Hospitality

### HOS 140 The Hospitality Industry 3-0-3

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

### HOS 150 Hotel Management 3-0-3

This course covers the management of the lodging phase of the hospitality industry, including front office, housekeeping, and engineering.

### HOS 159 Hospitality Accounting App 3-0-3

**Prerequisites:** HOS 140

This course covers financial accounting concepts and their application to the hospitality industry. Included are the major hospitality classifications of accounts and computerized hospitality financial applications.

### HOS 161 Event Management 3-0-3

This course provides an introduction to the event management industry. Topics include planning, implementation and evaluation of special events and festivals.

### HOS 162 Housekeeping Administration 1-6-3

This course is a study of the housekeeping functions and management in the hospitality industry. Emphasis is placed on the training of housekeepers and assistants. Staffing, scheduling, and laundry operations are covered in the course.

### HOS 164 Travel & Tourism 3-0-3

This course covers the history, development, concepts, and principles of the travel and tourism industry.

### HOS 168 Front Office Management 1-6-3

**Prerequisites:** HOS 140

This course is a study of the total hotel organization as it relates to the front office management. The course covers methods of statistical analysis as applied to price structure, occupancy patterns, and computer management.

### HOS 252 Adv Food & Beverage Service 2-3-3

This course is an advanced food and beverage management course requiring conception, operation and management of a small quantity food and beverage operation in an applied lab setting.

### HOS 256 Hospitality Mgmt Concepts 3-0-3

**Prerequisites:** HOS 140

This course is a study of the theory and principles of management as applied to the hospitality industry.

### HOS 258 Convention Management 3-0-3

**Prerequisites:** HOS 140

This course is a study of acquiring, soliciting and servicing convention or individual properties in the hospitality industry.

### HOS 265 Hotel Rest & Travel Law 3-0-3

**Prerequisites:** HOS 140

This course covers legal foresight for hospitality management. Topics include litigation involving innkeepers and legal responsibilities of the innkeeper.

### HOS 272 SCWE in Hosp/Tourism Mgmt 0-12-3

**Prerequisites:** HOS 140

This course integrates hospitality skills at an approved work site related to the hospitality industry.

### HOS 298 Special Topics in Hosp & Touri 1-6-3

**Prerequisites:** HOS 140 and HOS 252

This course explores advanced concepts, trends and issues in hospitality and tourism.

## HRT — Golf Mgt, Horticulture

### HRT 110 Plant Form and Function 3-3-4

This course is a study of morphology, anatomy, and physiology of higher plants. Emphasis is on plant structure, functions of plant parts, plant processes, plant growth and development, and plant inheritance.

### HRT 113 Plant Materials 2-3-3

This course is a study of herbaceous and woody plant materials used in the landscaping and nursery trade.

### HRT 125 Soils 3-3-4

This course is a study of soils and plant nutrition. Emphasis is on physical and chemical properties, water, organic matter, and life of soils. Materials and methods for supplying nutrients to horticulture plants are also included.

### HRT 150 Arboriculture I 2-3-3

This course is a study of tree maintenance. Topics covered are tree physiology and anatomy, ropework, tree climbing techniques pruning, fertilization, planting, and watering.

## **HRT 154 Grounds Maintenance** 2-3-3

**Prerequisites:** HRT 113

This course covers cost estimation of a landscape design and its maintenance, preparation of contracts, and development and implementation of maintenance schedules.

## **HRT 255 Urban Tree Care** 2-3-3

**Corequisites:** ENG 101, ENG 155

This course is a study of selection, installation and maintenance of trees in the urban landscape. Emphasis will be placed on industry standards and municipality requirements. Topics also covered are basic tree anatomy and proper tree pruning and health management.

## **HSM — Homeland Security Management**

### **HSM 103 Intro. to Emergency Management** 3-0-3

This course is a study of techniques used to establish and maintain an emergency management system in the public sector. The four functions of emergency management are introduced (i.e., mitigation, preparedness, response, and recovery) and students will explore the emergency manager's role in each.

### **HSM 105 Sociology of Disaster** 3-0-3

This course covers sociological disaster research, systems, and alternative approaches. Topics include human behavior, organizational responses, long-term community impacts, disaster warnings, and evacuations. Students will learn to assess and predict disaster-related human behavior impacts.

### **HSM 201 Critical Incident Management** 3-0-3

**Prerequisites:** ENG 101 or ENG 155

This course explores the management and leadership principles necessary for the successful resolution of critical incidents. The National Incident Management System and the Incident Command System will be examined to provide an all hazard, interdisciplinary approach to critical incident management.

### **HSM 210 Recovery & Mitigation** 3-0-3

**Prerequisites:** ENG 101 or ENG 155

This course covers techniques to mitigate and recover from natural, technological, and manmade disasters. Topics include hazard mapping, design, financial incentives, insurance, structural controls, and planning. Students will learn to develop effective mitigation and recovery plans.

## **HUS — Human Services**

### **HUS 101 Introduction to Human Services** 3-0-3

This course covers an overview of the field of human services. Role responsibilities, problems, boundaries, and strategies of human service workers are included.

### **HUS 102 Personal & Prof Development** 3-0-3

**Corequisites:** HUS 101

This course provides students with the opportunity to gain a greater awareness of "self" through values clarification activities, reflective writings, etc., and to understand how attitudes, values and beliefs impact both their personal and professional lives.

### **HUS 202 Life Transitions** 3-0-3

This course studies the transitions of life, including the changing roles and issues faced by the elderly, as well as the effects of those issues on these individuals, their family, friends and/or caregivers. Students will develop skills to provide helpful interventions in an entry-level position.

### **HUS 205 Gerontology** 3-0-3

This course is a survey of the physical, social, and mental changes that occur as a person ages. The related problems and current programs designed for people age 55 and over are studied in the course.

### **HUS 208 Alcohol and Drug Abuse** 3-0-3

This course is a study of the etiology of alcohol and drug abuse, various types of addictive substances, physical, mental and social implications, programs in rehabilitation, and preventive education.

### **HUS 209 Case Management** 3-0-3

This course covers accepted methods and strategies for effectively assessing client needs, accessing necessary provider agencies, and monitoring and properly documenting service delivery and client welfare.

### **HUS 212 Survey of Disabil & Disorders** 3-0-3

This course is a survey of the major categories of disabilities and disorders with which the helping professional is most likely to work. These will include, but not be limited to, developmental and psychological disorders, visual and hearing impairment and physical disabilities resulting from injury or disease.

### **HUS 216 Behavior Change Techniques** 3-0-3

This course is a study of major theories associated with individual and group psychotherapy, family therapy, and alcohol, drug, and vocational rehabilitation. Emphasis is placed on the techniques of behavioral change.

## **HUS 221 Professional Ethics in Human 3-0-3**

This course is an in-depth analysis of human services ethics, application of NOHSE codes of ethics, and concepts and dilemmas specific to helping relationships.

## **HUS 230 Interviewing Techniques 3-0-3**

**Prerequisites:** *and ENG 101*

**Corequisites:** *HUS 101*

This course covers the development of skills necessary for interviews in various organizational settings. Students in human services will use these skills and knowledge later in their supervised field placements.

## **HUS 235 Group Dynamics 3-0-3**

This course is an examination of the theory and practice of group dynamics. Emphasis is on the application of the value and use of the group process in specialized settings related to human services.

## **HUS 237 Crisis Intervention 3-0-3**

This course is a study of the effects of crisis on people, the methods of intervention, and other use of multiple resources to reestablish individual function. Students are required to demonstrate mock crisis activities.

## **HUS 250 Supervised Field Placement I 1-9-4**

This course includes work experience assignments in selected human services agencies.

## **HUS 260 Human Services Special Topics 3-0-3**

This course is a study of special topics of interest to particular populations and locations.

# **IET — Industrial Engineering Te**

## **IET 223 Industrial Safety 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 Act (OSHA) is included.

# **IMT — Industrial Maint Tech**

## **IMT 131 Hydraulics & Pneumatics 2-6-4**

This course covers the basic technology and principles of hydraulics and pneumatics.

## **IMT 161 Mechanical Power Applications 2-6-4**

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

# **IST — Computer & Info Systems**

## **IST 162 Intro to Workstation Net Admin 2-3-3**

**Prerequisites:** *IST 202*

This course is an introductory study of the administration of a single and multiple domain networks. Tasks will include handling user group accounts, resource management, permissions, ownership assignments, printing, security and backup.

## **IST 165 Implem & Admin Wind Dir Serv 2-3-3**

**Prerequisites:** *IST 162 or IST 269*

This course is a study of directory services covering the planning, design, installation, configuration and administration of a network directory structure.

## **IST 190 LINUX Essentials 2-3-3**

**Prerequisites:** *CPT 168 and IST 201*

This course will provide students with the fundamental knowledge and concepts of the LINUX operating system, including command line functions, file systems, user and group administration, process management, text editors, and network applications.

## **IST 192 LINUX Network Applications 2-3-3**

**Prerequisites:** *IST 190*

This course will provide students with the skills necessary to deploy and administer the core networking services in a LINUX system, such as Apache Web Server, Samba File Server, BIND Domain Name Service, NFS, and others.

## **IST 196 Cloud Storage Fundamentals 2-3-3**

**Prerequisites:** *IST 192*

This course is the study of network and cloud-based storage technologies, cloud computing networks, and data management processes in a storage environment. The course prepares students to provide network and cloud-based storage support to businesses.

## **IST 201 Cisco Internetworking Concepts 2-3-3**

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 models, cabling, cabling tools, Cisco routers, router programming, star topology, IP addressing, and network standards.

## **IST 202 Cisco Router Configuration 2-3-3**

**Corequisites:** *IST 201*

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.

**IST 203 Adv Cisco Router Configuration 2-3-3****Prerequisites:** IST 202

This course is a study of configuring Cisco routers.

**IST 204 Cisco Troubleshooting 2-3-3****Corequisites:** IST 203

This course is a study of troubleshooting network problems.

**IST 215 Health Info Networking 2-3-3**

This course studies the application of information technology principles in a health care environment. Topics include electronic health records, medical group LANs and WANs, and effective security and support strategies for medical group networks.

**IST 226 Internet Programming 2-3-3****Prerequisites:** CPT 187

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 applications.

**IST 236 Mobile & Wireless Appliances 2-3-3****Prerequisites:** IST 226

This course is a survey of the protocols and interface standards for mobile and wireless appliances accessing the internet. An introduction to development and deployment of applications is included in this course.

**IST 261 Adv Network Administration 2-3-3****Prerequisites:** IST 165 or IST 291

This course is an advanced study of the networking operating system. Topics include installation upgrades, IP services, internet infrastructure, advanced server management and security, NDS management, and server optimization.

**IST 266 Internet & Firewall Security 2-3-3**

This course is an introduction to firewalls and other network security components that can work together to create an in-depth defensive perimeter around a Local Area Network (LAN).

**IST 268 Computer Forensics 2-3-3**

This course provides students with a foundational knowledge in computer forensics investigation. Students are introduced to the skills, tools, and methods used to gather, document, and handle electronic evidence.

**IST 269 Digital Forensics 2-3-3**

This course examines advanced technical aspects of digital computer evidence to include detection, collection, identification, and preservation. Emphasis is placed on specific tools and methods for extracting deleted or destroyed computer-related evidence.

**IST 271 Object-Oriented Technologies 2-3-3****Prerequisites:** CPT 230

This course emphasizes the application of the object model to design well-structured complex systems. A variety of object-based tools and object-oriented programming languages will be used to implement small-scale projects.

**IST 285 Cybersecurity Capstone 3-3-4**

This course integrates the knowledge and skills gained through previous coursework and experience to develop and implement risk management, vulnerability assessment, threat analysis, and incident response plans.

**IST 290 Special Topics in Info Science 2-3-3****Prerequisites:** IST 165 and IST 291

This course covers special topics in information sciences technologies.

**IST 291 Fund of Network Security I 2-3-3****Prerequisites:** IST 162

This course is the study of intro levels of security processes based on a security policy, emphasizing hands-on skills in the areas of secure perimeter, security connectivity, security management, identity services, and intrusion detection. The course prepares students to manage network security.

**IST 292 Fund of Network Security II 2-3-3****Prerequisites:** IST 291

This course is the study of advanced security processes based on a security policy, emphasizing hands-on skills in the areas of secure perimeter, security connectivity, security management, identity services, and intrusion detection. The course prepares students to install/configure secure firewalls.

**IST 293 IT and Data Assurance I 2-3-3**

This course introduces the basics of network security. Topics covered will include network vulnerabilities and threats, security planning, security technology, network security organization, as well as legal and ethical issues related to network security.

**IST 294 IT and Data Assurance II 2-3-3**

This course introduces methods for attacking a network. Concepts, principles, tools, and techniques for attacking and disabling a network will be covered in the context of understanding how to properly secure a network as a network administrator.

**IST 295 Fundamentals of Voice Over IP 2-3-3****Prerequisites:** IST 291 or IST 204

This course is an introduction to features of Voice over IP protocols, including VOIP hardware selection and network design considerations. Concepts include analog and digital voice encoding signaling and Quality of Service (QoS) and troubleshooting and configuration of VOIP networks.

## LEG — Paralegal

### LEG 120 Torts 3-0-3

This course is a study of the various classifications and functions of tort law, including intentional and negligent torts, causation, proximate cause, and defenses.

### LEG 121 Business Law I 3-0-3

This course is a study of the basics of commercial law, with emphasis on the formation and enforcement of contracts and the rules particular to the Uniform Commercial Code (UCC) and sales of goods.

### LEG 132 Legal Bibliography 3-0-3

This course is a study of the methods of legal research, proper citation of authority, use of legal treatises, texts, reporters, and digests. (Legal Specialty)

### LEG 135 Introduction to Law and Ethics 3-0-3

This course provides a general introduction to law, including courts, legal terminology, procedures, systems, and laws of society. Emphasis is on ethics and the role of the paralegal in the legal system.

### LEG 201 Civil Litigation I 3-0-3

This course is a study of the principles of litigation and the rules of procedure for each court in the South Carolina system, including pleading, practice, and discovery procedures.

### LEG 202 Civil Litigation II 3-0-3

**Prerequisites:** LEG 201

This course includes an in-depth examination of the principles of litigation, focusing on the application of civil techniques and the role of a paralegal using hypothetical cases. (Legal Specialty)

### LEG 212 Workers' Compensation 3-0-3

This course is a study of the history of worker's compensation, case laws, statutes, regulations, and procedures in handling claims.

### LEG 213 Family Law 3-0-3

This course includes an examination of the laws of marriage, divorce, annulment, separation, adoption, custody, and the juvenile. (Legal Specialty)

### LEG 214 Property Law 3-0-3

This course includes an overview of South Carolina property law, including the mechanics of various commercial and private property transactions and mortgage foreclosures.

### LEG 230 Legal Writing 3-0-3

**Prerequisites:** LEG 132 and ENG 101

This course includes methods, techniques, and procedures for the research and preparation of legal memoranda, trial and appellate briefs, and trial notebooks. (Legal Specialty)

### LEG 231 Criminal Law 3-0-3

This course includes a study of the definition and classification of criminal offenses, criminal responsibility, and legal procedures in a criminal prosecution.

### LEG 232 Law Office Management 3-0-3

This course is a study of the basic principles of office management, including administrative procedures, client relations, and office operating procedures.

### LEG 233 Wills Trusts and Probate 3-0-3

This course includes a detailed study of testacy and intestacy, preparation of wills and codicils, and fundamentals of trust and probate administration. (Legal Specialty)

### LEG 242 Law Practice Workshop 1-6-3

This course includes the application of substantive knowledge in a practical situation as a paralegal. (Legal Specialty)

### LEG 245 Real Estate Law I 3-0-3

This course includes the examination of residential real estate closing procedures and the preparation of a closing package by utilizing both print and electronic forms. (Legal Specialty)

### LEG 252 Business Applications 3-0-3

This course introduces computer applications in various business transaction settings using general and legal software programs. (Legal Specialty)

## MAT — Math

### MAT 101 Beginning Algebra 3-0-3

This course includes the study of rational numbers and their applications, operations with algebraic expressions, linear equations and applications, linear inequalities, graphs of linear equations and inequalities, operations with exponents and polynomials, and factoring.

### MAT 102 Intermediate Algebra 3-0-3

This course includes the study of linear systems and applications; quadratic expressions, equations, functions and graphs; and rational and radical expressions and functions.

### MAT 110 College Algebra 3-0-3

This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; and solutions of higher degree polynomials.



**MAT 111 College Trigonometry 3-0-3**

This course includes the following topics: trigonometric functions; trigonometric identities; solution of right and oblique triangles; solution of trigonometric equations; polar coordinates; complex numbers, including DeMoivre's Theorem; vectors; conic sections; and parametric equations. (Prerequisite: College Algebra)

**MAT 120 Probability and Statistics 3-0-3**

This course is an introduction to probability and statistics. Topics include organization of data, calculating probabilities, counting principles, binomial and normal distributions, central limit theorem, confidence intervals, and hypothesis tests, linear regression and correlation.

**MAT 122 Finite College Mathematics 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: a college algebra course)

**MAT 130 Elementary Calculus 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: College Algebra)

**MAT 140 Analytical Geometry and Calc I 4-0-4**  
**Prerequisites:** MAT 111

This course includes the following topics: derivatives and integrals of polynomial, rational, logarithmic, exponential, trigonometric, and inverse trigonometric functions; curve sketching; maxima and minima of functions; related rates; work; and analytic geometry. (Prerequisite: a college algebra course and a college trigonometry course or pre-calculus)

**MAT 141 Analytical Geometry & Calc II 4-0-4**  
**Prerequisites:** MAT 140

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: Analytical Geometry and Calculus I)

**MAT 155 Contemporary Mathematics 3-0-3**

This course includes techniques and applications of the following topics: properties of and operations with real numbers, elementary algebra, consumer mathematics, applied geometry, measurement, graph sketching and interpretations, and descriptive statistics.

**MAT 170 Algebra Geometry and Trig I 3-0-3**

This course includes the following topics: elementary algebra, geometry, trigonometry, and applications.

**MAT 175 Algebra and Trigonometry I 3-0-3**

This course includes the following topics: basic laws and operations of algebra, linear and quadratic equations, systems of equations, introduction to trigonometry and vectors, concepts of functions, and graphs of functions.

**MAT 250 Elementary Mathematics 3-0-3**

Course provides students with an understanding of the meaning of numbers, fundamental operations of arithmetic, structure of the real number system & its subsystems, & elementary numbers theory. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university.

**MAT 251 Elementary Mathematics II 3-0-3**

This course provides students with an understanding of informal geometry and basic concepts of algebra. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university.

## MGT—Management

**MGT 101 Principles of Management 3-0-3**

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

**MGT 120 Small Business Management 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 3-0-3**

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 170 Emergency Mgmt Ser Law & Ethic 3-0-3**

This course studies federal and state laws impacting emergency services during disasters or terrorist incidents. Topics include response strategies, legal and ethical issues, and interagency coordination. Students will grasp the roles of private industry, government, and policies in emergencies.

**MGT 201 Human Resource Management 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 210 Employee Selection & Retention 3-0-3**

This course examines how to identify and assess employment needs within an organization. Students will also study the functions of recruitment, selection, and training, with an emphasis on employee retention.

**MGT 215 Project Management 3-0-3**

This course is the study of integrated project management. Emphasis is on the methods and software used in managing projects, including project scope, planning, scheduling, budgeting, and control and evaluation to achieve project objectives.

**MGT 216 Seminar Proj Mgmt & Tech Trend 2-0-2**

**Prerequisites:** MGT 215

This course is a study of the emerging trends in project management and information technology into the mid-21st century, tracking a timeline of steady improvement.

**MGT 240 Management Decision Making 3-0-3**

This course is a study of various structured approaches to managerial decision making.

**MGT 275 Emer. Operations Center Manage 3-0-3**

**Prerequisites:** ENG 101 or ENG 155

This course teaches students to manage and operate an EOC during crises. Topics cover EOC location, design, staffing, training, and operations. Students will learn to set up and run an effective emergency operations center.

**MGT 285 IT Project Management Sim 4-0-4**

**Prerequisites:** MGT 215

This course is a study of core project management concepts related to a simulated IT project. Emphasis is on the phases of a typical project from initiation through planning, execution, and closeout and will manage time, cost, and scope considering alternative methods for executing a project.

## MKT — Marketing

**MKT 101 Marketing 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 3-0-3**

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 111 Media Relations 3-0-3**

**Prerequisites:** MKT 101

This course is a study of building and managing effective media relationships through the application of networking, press releases, public relations strategies, and media interviewing skills.

**MKT 120 Sales Principles 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 135 Customer Service Techniques 3-0-3**

This course studies techniques and skills required for providing customer service excellence, including illustrations to turn customer relations into high standards of customer service, satisfaction, and repeat sales.

**MKT 240 Advertising 3-0-3**

**Prerequisites:** MKT 101

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

**MKT 250 Consumer Behavior 3-0-3**

**Prerequisites:** ( ENG 155 or ENG 101 ) and ( MAT 101 or MAT 155 )

This course is a study of the buying behavior process and how individuals make decisions to spend their available resources on consumption related items.

**MKT 260 Marketing Management 3-0-3**

**Prerequisites:** ( ENG 101 or ENG 155 ) and ( MAT 101 or MAT 155 )

This course is a study of the marketing system from the decision-maker's view, including how marketing strategies are planned and utilized in the market place.

## MLT — Medical Laboratory Tech

**MLT 102 Medical Lab Fundamentals 2-3-3**

**Prerequisites:** and ( BIO 112 or BIO 210 ) and ENG 101 and MAT 120 and ( CHM 105 or CHM 110 )

**Corequisites:** MLT 105, MLT 115, MLT 131

This course introduces basic concepts and procedures in medical laboratory technology.

**MLT 105 Medical Microbiology 3-3-4**

**Prerequisites:** and ( BIO 112 or BIO 210 ) and ENG 101 and MAT 120 and ( CHM 105 or CHM 110 )

**Corequisites:** MLT 102, MLT 115, MLT 131

This course provides a survey of organisms encountered in the clinical microbiology laboratory, including sterilization and disinfection techniques.

**MLT 108 Urinalysis and Body Fluids 2-3-3****Prerequisites:** MLT 205 and MLT 210 and MLT 120**Corequisites:** MLT 230

This course introduces the routine analysis and clinical significance of urine and other body fluids.

**MLT 115 Immunology 2-3-3****Prerequisites:** and ( BIO 112 or BIO 210 ) and ENG 101 and MAT 120 and ( CHM 105 or CHM 110 )**Corequisites:** MLT 102, MLT 105, MLT 131

This course provides a study of the immune system, disease states, and the basic principles of immunological testing.

**MLT 120 Immunohematology 3-3-4****Prerequisites:** MLT 102 and MLT 105 and MLT 115 and MLT 131**Corequisites:** MLT 205, MLT 210

This course introduces the theory and practice of blood banking, including the ABO, RH and other blood group systems, compatibility testing, and HDN.

**MLT 131 Clinical Chemistry 2-3-3****Prerequisites:** and ( BIO 112 or BIO 210 ) and ENG 101 and MAT 120 and ( CHM 105 or CHM 110 )**Corequisites:** MLT 102, MLT 105, MLT 115

This course provides a study of the chemical elements in human blood and body fluids and their relationship to organ system function. Testing methods, interferences, quality control and clinical correlations will be emphasized.

**MLT 205 Advanced Microbiology 3-3-4****Prerequisites:** MLT 102 and MLT 105 and MLT 131 and MLT 115**Corequisites:** MLT 210, MLT 120

This course provides a detailed study of microorganisms and the currently accepted procedures for identification of these microorganisms in the clinical laboratory.

**MLT 210 Advanced Hematology 3-3-4****Prerequisites:** MLT 102 and MLT 105 and MLT 115 and MLT 131**Corequisites:** MLT 205, MLT 120

This course provides a study of the diseases of blood cells and other hematologic procedures including coagulation.

**MLT 230 Advanced Clinical Chemistry 3-3-4****Prerequisites:** MLT 205 and MLT 210 and MLT 120**Corequisites:** MLT 108

This course includes advanced theory, principles, and instrument techniques used in clinical chemistry.

**MLT 251 Clinical Experience I 1-12-5****Prerequisites:** MLT 108 and MLT 230**Corequisites:** MLT 252, PSY 201

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

**MLT 252 Clinical Experience II 1-12-5****Prerequisites:** MLT 108 and MLT 230**Corequisites:** MLT 251, PSY 201

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

**MLT 253 Clinical Experience III 1-12-5****Prerequisites:** PSY 201 and MLT 251 and MLT 252**Corequisites:** MLT 254

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

**MLT 254 Clinical Experience IV 1-12-5****Prerequisites:** PSY 201 and MLT 251 and MLT 252**Corequisites:** MLT 253

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

## MNT—Marine & Nautical Tech

**MNT 101 Outboard Marine Engines I 1-6-3**

This course covers the history of the internal combustion engine and how it works, how an outboard engine works, and the designs of two-stroke and four-stroke engines.

**MNT 102 Lower Units 1-6-3****Corequisites:** MNT 108

This course covers the components of a drive system, including how power is transmitted from the motor to the propeller and the service requirements of the lower unit.

**MNT 103 Rigging 2-3-3****Corequisites:** MNT 110, MNT 105, MNT 107

This course covers the concepts involved in rigging a boat, including how to properly mount an outboard engine and a basic understanding of data networks.

**MNT 104 Marine Service Operations 2-6-4**

This course covers understanding and performing service items and intervals on outboard engines, performing service, and troubleshooting and repair.

**MNT 105 Marine Fuel & Lub Systems 2-3-3****Prerequisites:** ( MNT 104**Corequisites:** MNT 110, MNT 107, MNT 103

This course covers the functions and requirements of the fuel system, including service requirements and the qualities and characteristics of various lubricants.

**MNT 106 Marine System Elec Basics 1-3-2**

This course covers electricity and circuit types, including reading wiring diagrams and performing electrical tests.

**MNT 107 Marine Electrical Systems 1 - 3 - 2****Prerequisites:** ( MNT 106**Corequisites:** MNT 110, MNT 105, MNT 103

This course identifies different types of electrical systems and includes troubleshooting electrical systems and circuit types.

**MNT 108 Marine Sys Electrical Diagnost 1 - 6 - 3**

This course covers the components of the outboard ignition system, including the different types of ignition systems and service requirements.

**MNT 109 Propellers 2 - 0 - 2**

This course covers propellers and their applications, including how to choose the proper propeller and how propulsion works.

**MNT 110 Outboard Marine Engines II 1 - 9 - 4****Prerequisites:** ( MNT 101**Corequisites:** MNT 105, MNT 107, MNT 103

This course covers the functions of mounting bracket components; the different types of trim and tilt units and repair; and corrosion, including corrosion prevention in the marine environment.

**MNT 120 Intro to Outboard Marine Syste 1 - 3 - 2**

This course covers the basics of marine motor types and their applications, including measurements, materials, tools, and safety.

**MNT 151 Introduction to Boat Building 3 - 3 - 4**

This course covers boat building techniques and principals used in real world manufacturing environments emphasizing materials, processes, and procedures.

**MNT 152 Lamination I 1 - 6 - 3**

This course covers the foundational areas of chemicals, gel coat, fiberglass applications, techniques, and types of laminations in boat building.

**MNT 153 Molds and Materials 2 - 3 - 3**

This course covers the steps of mold preparation, mold use, demolding, and cutting and grinding.

**MNT 154 Structural Integrity 3 - 3 - 4**

This course covers the design and functionality of molds and materials as it relates to strength and durability in boat manufacturing. Foam, sealants, adhesives, stringers, and capping competencies are emphasized.

**MNT 161 Boat Assembly 1 - 6 - 3**

Installing stringer system, Deck to Hull, Console to deck, T-Top, Rub rail and Underdeck compartments.

**MNT 162 Lamination II 2 - 3 - 3**

This course covers more intricate details of lamination from chemical reactions, environmental variables, and troubleshooting as well as strengthening gel coat and fiberglass application methods and skills.

**MNT 163 Boat Rigging and Engine Instal 1 - 6 - 3**

This course covers installation, troubleshooting and minor repairs of marine electrical system and motor installation to transom.

**MNT 164 Boat Plumbing and Electrical 1 - 6 - 3**

This course covers electrical and plumbing systems found on modern boats. Topics covered include 12-volt direct current, wiring sizing, batteries, wire harnesses, distribution panels, electronic component installation.

**MNT 165 Quality Control & Finishing 2 - 3 - 3**

This course covers inspection and quality standards, systems, and repairs after the manufacturing processes.

**MNT 166 Boat Building Capston 1 - 6 - 3**

This course covers relevant competencies and skills needed to effectively and efficiently manufacture a sea worthy boat.

**MNT 200 SCWE in Boat Building 0 - 2 4 - 6**

This course includes an integration of skills needed for composite boat building at an approved industry related work site.

## MTH — Massage Therapy

**MTH 113 Essentials of A&P for Massage 2 - 3 - 3**

This course will focus on the pre-massage assessment of each body region including signs and symptoms relating to pathological conditions. Specific emphasis will be given to the skeletal, muscular, cardiovascular and nervous systems.

**MTH 120 Introduction to Massage 4 - 0 - 4**

A comprehensive introduction to therapeutic massage including history, theories, benefits, contraindications, ethical considerations, and S.C. Law for licensure. Swedish techniques are introduced.

**MTH 121 Principles of Massage I 3 - 3 - 4**

This course is an in-depth study of Swedish massage techniques and applications to a complete body massage.

**MTH 122 Principles of Massage II 3 - 3 - 4**

This course introduces basic assessment skills and application of therapeutic techniques to muscles, tendons, ligaments, and other structures.

**MTH 126 Pathology for Massage Therapy 1-3-2**

**Prerequisites:** MTH 113 and MTH 120 and MTH 121 and MTH 122

This course covers basic pathology for the massage therapy student. The course includes signs and symptoms of diseases with emphasis on recognition and identification, as prescribed in massage therapy.

**MTH 128 Clinical Apps of Massage 2-6-4**

Students will perform massage therapy in a clinical massage setting. Students will be closely supervised and evaluated by instructors in all aspects of massage.

**MTH 132 Massage Therapy Seminar 1-0-1**

**Prerequisites:** MTH 113 and MTH 120 and MTH 121 and MTH 122

This course includes the integration of didactic and clinical techniques in Massage Therapy. This course is the study of the skills needed to enter the professional arena, including resume writing, interviewing, professional decision making, and preparation for the Massage & Bodywork Licensing Examination.

**MTH 135 Massage Practicum 0-6-2**

**Prerequisites:** MTH 113 and MTH 120 and MTH 121 and MTH 122

This course provides practical experience in all aspects of therapeutic massage application using advanced techniques & specialized modalities in the professional setting. Students will observe facility & business operations under supervision of licensed massage therapists or licensed medical staff.

**MTH 136 Kinesiology for Massage Therap 1-3-2**

**Prerequisites:** MTH 113 and MTH 120 and MTH 121 and MTH 122

This course is a study of body movement and the body's muscular and structural factors, such as posture and gait, in relation to massage therapy. Specific emphasis will be placed on the affects of massage therapy on the way the body reacts during various activities.

**MTH 141 Pharmacology for Massage 1-0-1**

**Prerequisites:** MTH 113 and MTH 120 and MTH 121 and MTH 122

This course studies the effects of medications commonly reported on health intake forms by massage clients. Topics include common over-the-counter pain relievers, NSAIDS, and medications for cardiovascular disease and diabetes. Emphasis is placed on possible contraindications for massage therapy.

## MTT — Machine Tool Technology

**MTT 101 Introduction to Machine Tool 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 3-0-3**

**Corequisites:** MTT 130, MTT 141

This course is a study of shop math relevant to the machine tool trade.

**MTT 106 Machine Tool Computer App 3-0-3**

This course is a study of basic computer applications that are used in machining industries. Topics will include word processing, ASCII text editing, spreadsheets, locating information on the internet and serial communicable concepts.

**MTT 111 Machine Tool Theory & Prac I 1-12-5**

This course is an introduction to the basic operation of machine shop equipment.

**MTT 112 Machine Tool Theory & Prac II 1-12-5**

**Prerequisites:** MTT 101 and MTT 111

**Corequisites:** MTT 105, MTT 130, MTT 141

This course is a combination of the basic theory and operation of machine shop equipment.

**MTT 113 Machine Tool Theory & Prac III 1-12-5**

**Prerequisites:** MTT 101 and MTT 112

**Corequisites:** MTT 255

This advanced course is a combination of theory and practice to produce complex metal parts. This course will include advanced machining and grinding procedures required to complete all machining applications.

**MTT 120 Machine Tool Print Reading 3-0-3**

This course is designed to develop the basic skills and terminology required for visualization and interpretation of common prints used in the machine tool trades.

**MTT 130 Fund of Geometric Dim & Tole 2-0-2**

**Prerequisites:** MTT 120

**Corequisites:** MTT 105, MTT 112, MTT 141

This course covers the basic uses and interpretation of geometric dimensions and tolerances as specified for machine trade prints.

**MTT 141 Metals & Heat Treatment 3-0-3**

**Prerequisites:** MTT 101

**Corequisites:** MTT 105, MTT 112, MTT 130

This course is a study of the properties, characteristics, and heat treatment procedures of metals.

**MTT 241 Jigs and Fixtures I 1-3-2**

**Prerequisites:** MTT 101

**Corequisites:** CNC 206, MTT 249, MTT 250

This course includes the theory necessary to design working prints of simple jigs and fixtures.

**MTT 245 Rapid Prototype Setup & Op 1-6-3**

This course is an introduction to the set-up, operation, prototyping of parts, maintenance, and safety of rapid prototyping equipment.

**MTT 249 Introduction to CAM 2-3-3**

**Prerequisites:** MTT 112 and MTT 106

**Corequisites:** CNC 206, MTT 241, MTT 250

This course covers the basic commands necessary to create a simple part program for CNC machines using a graphics programming software.

**MTT 250 Principles of CNC 2-3-3**

**Prerequisites:** MTT 112

**Corequisites:** CNC 206, MTT 241, MTT 249

This course is an introduction to the coding used in CNC programming.

**MTT 251 CNC Operations 2-3-3**

**Prerequisites:** MTT 250 and MAT 170

**Corequisites:** MTT 245, MTT 253, MTT 252, WLD 116

This course is a study of CNC machine controls, setting tools, and machine limits, and capabilities.

**MTT 252 CNC Setup and Operations 1-9-4**

**Prerequisites:** MTT 250

**Corequisites:** MTT 245, MTT 251, MTT 253, WLD 116

This course covers CNC setup and operations.

**MTT 253 CNC Programming & Oper 1-6-3**

**Prerequisites:** MTT 250

**Corequisites:** MTT 245, MTT 251, MTT 252, WLD 116

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.

**MTT 254 CNC Programming I 1-6-3**

**Prerequisites:** MTT 245

**Corequisites:** MTT 113, MTT 255

This course is a study of CNC programming, including machine language and computer assisted programming.

**MTT 255 CNC Programming II 2-3-3**

**Corequisites:** MTT 254, MTT 113

This course includes CNC programming with simulated production conditions.

## MUS—Music

**MUS 105 Music Appreciation 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.

**MUS 111 Band I 0-3-1**

**Prerequisites:** Prior experience on a brass, woodwind, or percussion instrument, or in dance or color guard. Band camp in early August is required of all members for placement auditions, fundamentals training and show preparations.

This course includes the study and performance of selected band music.

**MUS 112 Band II 0-3-1**

**Prerequisites:** Prior experience on a brass, woodwind, or percussion instrument.

This course includes the study and performance of selected band music.

## NRM—Environmental Science

**NRM 106 Spreadsheet & Word Processing 0-3-1**

This course covers the use of computer spreadsheets and word processing applications used in natural resource professions. The processes used to analyze and report field data is covered in this course as well.

**NRM 130 Outdoor Recreation Management 2-3-3**

**Corequisites:** ENG 155, ENG 101

This course examines the management of natural resources for outdoor recreational purposes.

**NRM 151 Vertebrate Natural History 2-3-3**

**Corequisites:** ENG 155, ENG 101

This course includes the taxonomic classification, identification, geographic range, and biology of fish, amphibians, reptiles, birds, and mammals native to South Carolina and the Southeast.

**NRM 201 Soil Fertility & Plant Prod 2-3-3**

**Corequisites:** ENG 155, ENG 101

This course is a study of agronomic principles of soil management and plant production, including use and application of chemical fertilizers. Emphasis will be placed on utilizing the tools to effectively manage soils for productive wildlife habitat.

**NRM 207 Geographic Info Sys I (GIS) 2-3-3****Prerequisites:** NRM 106

This course is the study of Geographic Information Systems (GIS) concepts, including coordinate systems, projections, datums, data models and sources, spatial statistics, queries and analyses, and basic cartographic principles. Emphasis is on applications within the NRM field.

**NRM 209 Remote Sensing & Dig Image 2-3-3****Prerequisites:** NRM 207

This course is a study of basic concepts of remote sensing, including the use of aerial photography and satellite imagery and their integration into a geographic information system. This course covers classifying, reprojecting, filtering, analyzing and modifying images from a variety of sources.

**NRM 245 Wildlife Mgmt & Techniques 2-3-3****Corequisites:** ENG 155, ENG 101

This course is a basic study and application of management and monitoring practices which are beneficial to wildlife. Methods for increasing food production, developing water sources, providing cover requirements, applied techniques of wildlife management and improving wetlands are included.

**NRM 250 Wetlands Ecology 2-3-3****Prerequisites:** FOR 130**Corequisites:** ENG 101, ENG 155

This course covers the identification, taxonomy, and life histories of freshwater fish. Management implications for various species of fish with commercial, sport or ecological value are included.

## NUR—Nursing

**NUR 101 Fundamentals of Nursing 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.

**NUR 120 Basic Nursing Concepts 4-9-7****Prerequisites:** NUR 101 and NUR 161**Corequisites:** ENG 102, BIO 211

This course introduces the application of the nursing process in the care of persons throughout the life span who are experiencing selected common health problems.

**NUR 150 Chronic Health Problems 4-6-6****Corequisites:** NUR 162, BIO 225, PSY 201

This course is a study of the treatments used for chronic health problems in adult patients.

**NUR 161 Basic Concepts of Pharmacology 2-0-2****Corequisites:** NUR 101, NUR 201, ENG 101, BIO 210, MAT 110, MAT 120

This course is an introductory study to pharmacotherapeutics, including drug classifications and clinical implications for clients.

**NUR 162 Psychiatric & Mental Health Nu 2-3-3****Prerequisites:** ( NUR 120**Corequisites:** NUR 201, BIO 225, PSY 201

This course covers application of critical thinking skills and nursing concepts in the care of adult clients with selected mental health problems in a variety of settings. The course includes the study of dynamics of human behavior ranging from normal to extreme.

**NUR 201 Transition Nursing 2-3-3**

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

**NUR 217 Trends and Issues in Nursing 1-3-2****Prerequisites:** NUR 220**Corequisites:** NUR 221, SPC 205

This course is an exploration of health care trends and issues.

**NUR 220 Family Centered Nursing 4-9-7****Prerequisites:** NUR 150

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.

**NUR 221 Advanced Nursing Concepts 2-9-5****Prerequisites:** NUR 220**Corequisites:** NUR 217, SPC 205

This course expands the application of the nursing process in the care of persons throughout the life span who are experiencing complex health problems.

## OTA—Occupational Therapy Asst

**OTA 101 Fund of Occupational Therapy 3-0-3****Prerequisites:** ENG 101 and BIO 210 and BIO 211 and PSY 201 and ( MAT 110 or MAT 120 )

This course introduces basic principles in occupational therapy including the philosophy, history, current trends, emerging practice areas, models and theories of the profession. The Occupational Therapy Framework is also discussed.



**OTA 105 Therapeutic Analysis in OT 2-3-3**

**Prerequisites:** ENG 101 and BIO 210 and BIO 211 and PSY 201 and ( MAT 110 or MAT 120 )

This course focuses on the observation and analysis of therapeutic exercise, activities, and human occupations across the lifespan. Coursework incorporates hands-on experience into the application of therapeutic interventions.

**OTA 108 Professional Development 1-0-1**

**Prerequisites:** OTA 155 and OTA 221 and OTA 245

**Corequisites:** OTA 264, OTA 262

This course introduces the skills needed to enter the professional arena, including resume writing, interviewing, professional decision making, life-long learning opportunities and preparation for the NBCOT certification examination.

**OTA 142 OTA Clinical Intro I 0-3-1**

**Prerequisites:** ENG 101 and BIO 210 and BIO 211 and PSY 201 and ( MAT 110 or MAT 120 )

**Corequisites:** OTA 101, OTA 105, OTA 162, OTA 200

This course introduces fundamental knowledge and the application of professional behaviors during the provision of occupational therapy services. Students will learn about observation and interaction skills under the guidance and direction of fieldwork supervisors.

**OTA 144 OTA Clinical Introduction II 0-3-1**

**Corequisites:** OTA 176, OTA 203, OTA 220

This course will facilitate continued development of observation and interaction skills in an occupational therapy setting under the guidance and direction of fieldwork supervisors.

**OTA 155 Gerontology 1-3-2**

**Prerequisites:** OTA 144

This course explores the role of occupational therapy with the elderly population, including physical, cognitive, and psychosocial changes of aging, and sensory loss and compensation. Disease processes and occupational therapy evaluation and treatment principles are emphasized.

**OTA 162 Psychosocial Dysfunction 2-3-3**

**Prerequisites:** ENG 101 and BIO 210 and BIO 211 and PSY 201 and ( MAT 110 or MAT 120 )

This course examines the occupational therapy process related to psychosocial challenges across the life span. Topics include pathologies, interventions, and promotion of health and wellness.

**OTA 176 Pediatric Dev and Dysfunction 3-3-4**

**Prerequisites:** OTA 142

This course addresses normal growth and development, disabilities and delays from birth through adolescence. Topics include assessments, treatment planning, and interventions in various practice settings.

**OTA 200 Intro to Kinesiology 2-3-3**

**Prerequisites:** ENG 101 and BIO 210 and BIO 211 and PSY 201 and ( MAT 110 or MAT 120 )

This course is a study of functional movement of the human body. The course provides an introduction to normal and abnormal musculoskeletal and neuromuscular anatomy with an emphasis on goniometry measurement and muscular testing.

**OTA 203 Kinesiology for Occup Therapy 2-3-3**

**Prerequisites:** OTA 142

This course includes the identification and analysis of the components of human motion related to occupational therapy.

**OTA 220 Adult Physical Performance I 3-3-4**

**Prerequisites:** OTA 142

This course introduces the role of occupational therapy in medical, orthopedic, neurologic, and multisystem conditions common in the adult population. Etiology, symptomology, and effects on occupation are discussed.

**OTA 221 Adult Physical Performance II 3-3-4**

**Prerequisites:** OTA 144

This advanced course explores the clinical application of occupational therapy intervention to diagnoses commonly encountered in the adult population.

**OTA 240 Patient Care Skills for OTA 2-3-3**

**Prerequisites:** OTA 142

**Corequisites:** OTA 176, OTA 203, OTA 220

This course introduces basic patient care skills in occupational therapy: treatment procedures, safety and body mechanics, medical line awareness, assessment of vital signs, and data collection methods are covered.

**OTA 245 Occup Therapy Dept Mgmt 2-0-2**

**Prerequisites:** OTA 144

This course covers the operation of an occupational therapy clinic, including inventory, supervision and quality assurance.

**OTA 262 OTA Clinical Application I 0-21-7**

**Prerequisites:** OTA 155 and OTA 221 and OTA 245

**Corequisites:** OTA 264, OTA 108

This course provides clinical experiences under the direct supervision of an experienced OTR or COTA, enabling students to transition into the role of entry-level OTA. Students are assigned to various settings working with individuals with developmental, physical or emotional challenges.

**OTA 264 OTA Clinical Application II 0-21-7**

**Prerequisites:** OTA 155 and OTA 221 and OTA 245

**Corequisites:** OTA 262, OTA 108

Under the direct supervision of an experienced OTR or COTA, students will build on acquired knowledge and skills as they further develop into entry-level OTA practitioners.

## PHI — Philosophy

### PHI 101 Introduction to Philosophy 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.

### PHI 110 Ethics 3-0-3

This course is a study of the moral principles of conduct emphasizing ethical problems and modes of ethical reasoning.

### PHI 201 History of Philosophy 3-0-3

This course is a survey of the history of philosophical thinking.

### PHI 211 Moral Philosophy 3-0-3

**Prerequisites:** PHI 110

This course is a study of moral issues confronting men and women and the ethical arguments provoked by them. Topics include controversial issues such as drugs, euthanasia, war, social engineering, punishment of criminals, and the potential answers provided by contemporary and historical philosophers.

## PHY — Physics

### PHY 118 Medical Imaging Science 3-0-3

This course is the study of the fundamental physics associated with the field of medical imaging sciences. The areas of study include concepts of radiation production as it relates to x rays and nuclear medicine studies and acoustical properties related to sonographic exams.

### PHY 201 Physics I 3-3-4

This is the first in a sequence of physics courses. Topics include mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### PHY 202 Physics II 3-3-4

**Prerequisites:** PHY 201

This course covers physics topics, including mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### PHY 221 University Physics I 3-3-4

**Prerequisites:** ( MAT 130 or MAT 140 )

This is the first of a sequence of courses. The course includes a calculus based treatment of the following topics: vectors, laws of motion, rotation, vibratory, and wave motion. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

### PHY 222 University Physics II 3-3-4

**Prerequisites:** PHY 221

This course is a continuation of calculus based treatment of the following topics: thermodynamics, kinetic theory of gases, electricity and magnetism, including electrostatics, dielectrics, electric circuits, magnetic fields, and induction phenomena. This course is transferable to public senior institutions as part of the South Carolina Higher Education Statewide Articulation Agreement. .

## PNR — Practical Nursing

### PNR 110 Fundamentals of Nursing 3-6-5

**Corequisites:** BIO 210, MAT 155, MAT 110, MAT 120, PNR 121

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.

### PNR 111 Basic Nutrition & Diet Therap 1-0-1

**Prerequisites:** PNR 110

**Corequisites:** BIO 211

This course is a study of basic nutrition and diet therapies related to common health problems experienced by health care clients across the lifespan, including diabetes, coronary artery disease, obesity, osteoporosis, cognitive, renal and gastrointestinal disorders and some forms of cancer.

### PNR 120 Medical/Surgical Nursing I 3-6-5

**Prerequisites:** BIO 210 and ( MAT 155 or MAT 110 or MAT 120 )

**Corequisites:** PNR 110

This course is a beginning study utilizing 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.

### PNR 121 Fundamentals of Pharmacology 2-0-2

**Corequisites:** MAT 110, MAT 120, MAT 155, BIO 210, PNR 110

This course is an introduction to basic concepts of pharmacology. Dosage calculations, medication administration, and common drug classifications are among the concepts explored.

### PNR 130 Medical/Surgical Nursing II 3-6-5

**Corequisites:** PNR 120, BIO 211, PNR 111

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.

**PNR 140 Medical/Surgical Nursing III 3-6-5****Prerequisites:** and PNR 154 ) and PNR 111 or ENG 101 )**Corequisites:** PNR 183, ENG 101, PSY 201

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.

**PNR 154 Maternal/Infant/Child Nursing 3-6-5****Prerequisites:** PNR 130 and BIO 211 and PNR 111

This course is a study utilizing the nursing process to meet the needs of the childbearing family. Clinical experiences address the care of the mother, newborn, and the care of the child with commonly occurring diseases.

**PNR 183 Special Topics in Prac Nursing 3-0-3****Prerequisites:** and PNR 154 )**Corequisites:** PNR 140, ENG 101, PSY 201

This course covers special topics in practical nursing.

## PSC — Political Science

**PSC 201 American Government 3-0-3**

This course is a study of American federal governmental institutions with a focus on the Constitution and key founding documents; the functions of executive, legislative and judicial branches: civil liberties and rights; and the role and influence of the electorate, interest groups, and the media.

**PSC 215 State and Local Government 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.

## PSY — Psychology

**PSY 103 Human Relations 3-0-3**

This course is a study of human relations, including the dynamics of behavior, interrelationships, and personality as applied in everyday life.

**PSY 201 General Psychology 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 3-0-3****Prerequisites:** PSY 201

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

**PSY 208 Human Sexuality 3-0-3****Prerequisites:** PSY 201

This course is a study of biological, psychological, and sociological perspectives of human sexuality. Historical, cross-cultural, and ethical issues are considered in the course. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

**PSY 210 Educational Psychology 3-0-3****Corequisites:** PSY 201

This course is the study of the teaching-learning process with emphasis on learning theory, transfer, problem solving, habit formation, individual difference, and other factors that facilitate learning. Attention will be given to the implications for classroom practices as they relate to personal, cultural, social and moral development, and learner exceptionalities.

**PSY 212 Abnormal Psychology 3-0-3****Prerequisites:** PSY 201

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

## PTH — Physical Therapy

**PTH 101 Physical Therapy Prof Prep 1-3-2****Prerequisites:** BIO 210 and BIO 211 and ( MAT 110 or MAT 120 )**Corequisites:** PSY 203

This course introduces the purpose, philosophy and history of physical therapy and medical/legal documentation.

**PTH 202 Physical Therapy Modalities 3-3-4****Prerequisites:** PTH 101 and PTH 221 and PTH 205 and PTH 204 and PSY 203

This course introduces patient care techniques, including patient preparation and therapeutic hot/cold modalities.

**PTH 204 Physical Ther Functional Anat 4-3-5**

The course introduces the basic concepts and principles of muscles, joints and motion. Emphasis is placed on the development of competence in goniometry, manual muscle testing, and traditional testing necessary to plan for patient treatment.

**PTH 205 Physical Therapy Func Anatomy 3-3-4****Prerequisites:** BIO 210 and BIO 211 and ( MAT 110 or MAT 120 )**Corequisites:** PSY 203, PTH 221, PTH 204

This course introduces the basic concepts and principles of muscles, joints, and motion, including traditional testing procedures.

**PTH 221 Pathology I 2-0-2**

**Prerequisites:** BIO 211 and BIO 210 and ( MAT 110 or MAT 120 )

**Corequisites:** PSY 203

This course is an introduction to basic pathophysiology of the body with the emphasis on the body's reaction to disease and injury.

**PTH 234 Clinical Education I 0-9-3**

**Prerequisites:** PTH 205 and PTH 101 and PTH 221 and PTH 204 and PSY 203

This course provides basic clinical experiences for the physical therapist assistant student within a physical therapy setting.

**PTH 235 Interpersonal Dynamics 2-0-2**

**Prerequisites:** PTH 244 and PTH 242

This course introduces the dynamics of the health professional/patient relationship and includes communication and the principles of respectful interaction throughout the life cycle.

**PTH 240 Therapy Exercises/Applications 3-6-5**

**Prerequisites:** PTH 101 and PTH 221 and PTH 205 and PTH 204 and PSY 203

This course provides the practical application of therapeutic exercise.

**PTH 242 Orthopedic Management 2-6-4**

**Prerequisites:** PTH 202 and PTH 240 and PTH 234 and PTH 270

This course introduces basic orthopedic assessment skills and application of treatment techniques for the trunk and extremities.

**PTH 244 Rehabilitation 2-6-4**

**Prerequisites:** PTH 202 and PTH 234 and PTH 240 and PTH 270

This course introduces neurological principles, pathology, and specialized rehabilitation techniques for pediatric and adult care.

**PTH 253 Clinical Practice II 0-9-3**

**Prerequisites:** PTH 242 and PTH 244

This course involves the student's participation in the basic treatment techniques of physical therapy, intensified in both the clinic and classroom setting. This course includes patient treatments under the direct supervision of a licensed physical therapist and/or a licensed physical therapist assistant.

**PTH 270 Special Topics in Physical The 2-3-3**

**Prerequisites:** and PTH 101 and PTH 204 and PTH 205 and PTH 221

**Corequisites:** PSY 203

This course provides opportunities for specialized study of selected topics in physical therapy.

**PTH 275 Adv Professional Preparation 1-0-1**

**Prerequisites:** PTH 244 and PTH 242

This course is the study of the skills needed to enter the professional arena, including resume writing, interviewing, professional decision making, and preparation for the PTA National Board Examination.

**PTH 276 Physical Therapy Prac II 0-18-6**

**Prerequisites:** PTH 244 and PTH 242

This course includes a practicum experience in a clinical setting using advanced skills under the supervision of a licensed physical therapist and/or a licensed physical therapist assistant.

## **RAD — Radiologic Technology**

**RAD 101 Introduction to Radiography 1-3-2**

This course provides an introduction to radiologic technology with emphasis on orientation to the radiology department, ethics, and basic radiation protection.

**RAD 102 Radiology Patient Care Proc 2-0-2**

This course provides a study of the procedures and techniques used in the care of the diagnostic imaging patient.

**RAD 103 Intro to Computed Tomography 2-0-2**

This course is a study of the technological developments behind computed tomography, an overview of scanner components, terminology, data acquisition, digital imaging, image reconstruction, display and manipulations. Current applications will be explored, including patient screening, contract utilization and administration, contrast reactions and treatment, pediatrics, conscious sedation and monitoring, and radiation protection.

**RAD 110 Radiographic Imaging I 2-3-3**

**Prerequisites:** RAD 101

This course provides a detailed study of the parameters controlling radiation quality and quantity for radiographic tube operation and image production.

**RAD 115 Radiographic Imaging II 3-0-3**

**Prerequisites:** RAD 110

This course continues a detailed study of primary and secondary influencing factors and accessory equipment related to imaging.

**RAD 120 Principles of Computed Tomogra 3-0-3**

This course is a study of assurance procedures, and radiation dosimetry in computed tomography. Special applications of computer tomography will be explored including interventional procedures, high speed ct scanning, 3 dimensional ct and multi-planar reformations. A review of special scanner features will also be covered in the course.

**RAD 130 Radiographic Procedures I 2-3-3**

This course provides an introduction to radiographic procedures. Positioning of the chest, abdomen, and extremities are included.

**RAD 135 Comp Tomography Body & Muscu 2-0-2**

This course provides the basic imaging protocols and patient positioning for CT exams of the abdomen, pelvis, and musculoskeletal system. Case studies including anatomy and pathology of the abdomen, pelvis, and extremities will be explored.

**RAD 136 Radiographic Procedures II 2-3-3**

**Prerequisites:** RAD 130

This course is a study of radiographic procedures for visualization of the structures of the body.

**RAD 140 Comp Tomography Clinical App I 1-15-6**

This course provides the student with clinical experience in basic CT scanning. Students will explore techniques related to patient safety, radiation protection, and exam protocols.

**RAD 145 Comp Tomography Physics & Inst 3-0-3**

This course is a study of Computed Tomography physics and instrumentation. The course provides an overview of technology, application, and practice that is unique to the Computed Tomography profession.

**RAD 153 Applied Radiography I 0-9-3**

This course introduces the clinical environment of the hospital by providing basic use of radiographic equipment and routine radiographic procedures.

**RAD 165 Applied Radiography II 0-15-5**

**Prerequisites:** RAD 153

This course includes the use of radiographic equipment and performance of radiographic procedures within the clinical environment of the hospital.

**RAD 175 Applied Radiography III 0-15-5**

**Prerequisites:** RAD 165

This course includes clinical education needed for building competence in performing radiographic procedures within the clinical environment.

**RAD 201 Radiation Biology 2-0-2**

This course is a study of the principles of radiobiology and protection. It emphasizes procedures that keep radiation exposure to patients, personnel, and the population at large to a minimum.

**RAD 205 Radiographic Pathology 2-0-2**

**Prerequisites:** RAD 136

This course provides a survey of disease processes significant to the radiographer, including etiology, diagnosis, prognosis, and treatment.

**RAD 210 Radiographic Imaging III 3-0-3**

**Prerequisites:** RAD 115

This course provides a detailed study of advanced methods and concepts of imaging.

**RAD 220 Selected Imaging Topics 3-0-3**

**Prerequisites:** RAD 201 or RAD 210 or RAD 230

This course is a study of advanced topics unique to the radiological sciences.

**RAD 230 Radiographic Procedures III 3-0-3**

**Prerequisites:** RAD 136

This course is a study of special radiographic procedures.

**RAD 256 Advanced Radiography I 0-18-6**

**Prerequisites:** RAD 175

This course includes independently performing routine procedures in a radiology department, including involvement in advanced radiographic procedures.

**RAD 268 Advanced Radiography II 0-24-8**

**Prerequisites:** RAD 256

This course includes routine radiographic examinations, as well as advanced procedures, while continuing to build self-confidence in the clinical atmosphere

**RAD 278 Advanced Radiography III 0-24-8**

**Prerequisites:** RAD 268

This course includes routine and advanced radiographic procedures in the clinical environment.

## REL — Religion

**REL 103 Comparative Religion 3-0-3**

This course is an analysis of the religious experience of various persons and groups, east and west, in traditional and contemporary settings. It includes indigenous religions, Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

## RES — Respiratory Care

**RES 101 Intro to Respiratory Care 3-0-3**

This course includes introduction topics pertinent to entering the respiratory care profession, i.e., medical terminology, ethical issues, and legal issues.

**RES 111 Pathophysiology 2-0-2**

**Corequisites:** RES 101

This course is a study of the general principles and analyses of normal and diseased states.



**RES 121 Respiratory Skills I 3-3-4****Corequisites:** RES 131

This course includes a study of basic respiratory therapy procedures and their administration. Skills required to be a Respiratory Care Professional are detailed in this course.

**RES 131 Respiratory Skills II 3-3-4****Corequisites:** RES 121

This course is a study of selected respiratory care procedures and applications.

**RES 141 Respiratory Skills III 2-3-3****Prerequisites:** RES 121 and RES 131

This course covers mechanical ventilation systems, pediatrics and associated monitors.

**RES 152 Clinical Applications II 0-9-3****Prerequisites:** RES 121 and RES 131

This course includes practice of respiratory care procedures in the hospital setting.

**RES 154 Clinical Applications II 0-12-4****Prerequisites:** RES 152

This course includes practice of respiratory care procedures in the hospital setting.

**RES 204 Neonatal/Pediatric Care 2-3-3****Prerequisites:** RES 141

This course focuses on cardiopulmonary physiology, pathology, and management of the newborn and pediatric patient.

**RES 220 Hemodynamic Monitoring 1-0-1****Prerequisites:** RES 111

This course is a study of basic hemodynamic monitoring.

**RES 232 Respiratory Therapeutics 2-0-2****Prerequisites:** RES 121 and RES 101

This course is the study of specialty areas in respiratory care, including rehabilitation.

**RES 235 Respiratory Diagnostics 3-3-4****Prerequisites:** RES 101

This course is a study of diagnostic and therapeutic procedures.

**RES 236 Cardiopulmonary Diagnostics 3-0-3****Prerequisites:** RES 235

This course focuses on the purpose, use, and evaluation of equipment/procedures used in the diagnosis and therapeutic management of patients with cardiopulmonary disease.

**RES 242 Adv Respiratory Care Trans 0-3-1****Prerequisites:** RES 236 and RES 204 and RES 253

This course provides a comprehensive review of respiratory care.

**RES 244 Advanced Respiratory Skills I 3-3-4****Prerequisites:** RES 204 and RES 236 and RES 253

This course includes an in-depth study of mechanical ventilation and considerations for management of the critical care patient.

**RES 246 Respiratory Pharmacology 2-0-2**

This course includes a study of pharmacologic agents used in cardiopulmonary care.

**RES 249 Comprehensive Applications 1-3-2****Prerequisites:** RES 152 and RES 154

This course includes the integration of didactic and clinical training in respiratory care technology. This section will introduce the student to the alternative types of Respiratory Care including Homecare, Sleep Clinics, and Outpatient testing labs.

**RES 253 Adv Clinical Studies I 0-18-6****Prerequisites:** RES 152 and RES 154

This course includes clinical instructions in advanced patient care practice.

**RES 254 Adv Clinical Studies II 0-21-7****Prerequisites:** RES 204 and RES 236 and RES 253 and RES 244**Corequisites:** RES 242

This course includes clinical instruction in advanced patient care practice.

## SAC — School-Age Child Care

**SAC 101 Best Prac in School Age and 3-0-3**

This course introduces basic best practices of school-age and youth care skills for practitioners in out-of-school care environments.

## SOC — Sociology

**SOC 101 Introduction to Sociology 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 3-0-3**

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** 3-0-3  
**Prerequisites:** SOC 101

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.

## SPA — Spanish

**SPA 101 Elementary Spanish I** 4-0-4

This course is a study of the four basic language skills: listening, speaking, reading, and writing, including an introduction to Hispanic cultures.

**SPA 102 Elementary Spanish II** 4-0-4

**Prerequisites:** SPA 101

This course continues development of the basic language skills and the study of Hispanic cultures.

**SPA 201 Intermediate Spanish I** 3-0-3

**Prerequisites:** SPA 102

This course is a review of Spanish grammar with attention given to more complex grammatical structures and reading difficult prose.

**SPA 202 Intermediate Spanish II** 3-0-3

**Prerequisites:** SPA 201

This course continues a review of Spanish grammar with attention given to more complex grammatical structures and reading more difficult prose.

## SPC — Speech

**SPC 205 Public Speaking** 3-0-3

This course is an introduction to principles of public speaking with application of speaking skills. This course is transferable to public senior institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.

## SPT — Sports Tourism

**SPT 101 Sports Tourism** 3-0-3

This course introduces the development and organizational structure of the sports tourism industry. Emphasis is placed on the various aspects of game operations and sports tourism and inter-relationships between tourists, residents, businesses, and governments.

## SUR — Surgical Technology

**SUR 101 Intro to Surgical Technology** 3-6-5

**Corequisites:** BIO 210, AHS 102

This course includes a study of the surgical environment, team concepts, aseptic technique, hospital organization, basic instrumentation and supplies, sterilization, principles of infection control, and wound healing.

**SUR 102 Applied Surgical Technology** 3-6-5

**Prerequisites:** SUR 101 and SUR 126

**Corequisites:** SUR 103

This course covers the principles and application of aseptic technique, the perioperative role, and medical/legal aspects.

**SUR 103 Surgical Procedures I** 3-3-4

**Prerequisites:** SUR 101 and SUR 126

**Corequisites:** SUR 102

This course is a study of a system to system approach to surgical procedures and relates regional anatomy, pathology, specialty equipment, and team responsibility. Patient safety, medical/legal aspects, and drugs used in surgery are emphasized.

**SUR 104 Surgical Procedures II** 3-3-4

**Prerequisites:** SUR 102 and SUR 103

**Corequisites:** SUR 112

This course is a study of the various specialties of surgical procedures.

**SUR 105 Surgical Procedures III** 3-3-4

**Prerequisites:** SUR 104 and SUR 112

**Corequisites:** SUR 113

This course is a study of advanced specialties of surgical procedures.

**SUR 112 Surgical Practicum I** 0-12-4

**Prerequisites:** ( SUR 102 and SUR 103 )

**Corequisites:** SUR 104

This course includes the application of perioperative theory under clinical supervision.

**SUR 113 Advanced Surgical Practicum** 0-18-6

**Prerequisites:** SUR 103 and SUR 104 and SUR 112

This course includes a supervised progression of surgical team responsibilities and duties of the perioperative role in various clinical affiliations.

**SUR 114 Surgical Specialty Practicum** 1-18-7

**Prerequisites:** SUR 105 and SUR 113

**Corequisites:** SUR 120

This course includes the correlation of the principles and theories of specialized surgical procedures with clinical performance in affiliated hospitals.

**SUR 120 Surgical Seminar 1 - 3 - 2****Prerequisites:** SUR 105 and SUR 113**Corequisites:** SUR 114

This course includes the comprehensive correlation of theory and practice in the perioperative role.

**SUR 126 Principles of Surgical Pharmac 1 - 0 - 1**

This course is a study of therapeutic agents and mathematical concepts in relation to the perioperative setting.

## THE — Theatre

**THE 101 Introduction to Theatre 3 - 0 - 3**

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

## TUF — Turf Management

**TUF 171 Intro to Turf Management 3 - 0 - 3**

This course is designed to introduce principles of turfgrass management and golf course operations to non-golf course management majors. Topics include turfgrass selection, mowing, commonly used golf course terminology, supplementary cultural practices, different types of golf courses and the golf course management principles. The history and function of golf related organizations are also discussed in the course.

**TUF 172 Turf Management I 2 - 3 - 3**

This course covers the principles and practices involved in turfgrass management. Topics include establishment, maintenance, and management of turfgrass areas.

**TUF 174 Turfgrass Pests I 2 - 3 - 3**

This course is a study of turf insects and diseases with emphasis placed on identification and control. Weed identification is also included.

**TUF 175 Turfgrass Pests II 2 - 3 - 3****Prerequisites:** TUF 174

This course provides an in-depth analysis of turfgrass pests with emphasis on scientific resources.

**TUF 190 SCWE in Turf Grass Management 0 - 2 0 - 5****Prerequisites:** TUF 172

This course provides for practical work experience and integration of turf grass skills at an approved turf grass facility or golf course.

**TUF 201 SCWE in Golf Course Management 0 - 3 2 - 8****Prerequisites:** TUF 172

This course provides practical work experience at an approved golf course. Record keeping, experience in supervision and objective reporting of the golf course problems, corrections, and cost analysis are included.

**TUF 203 SCWE in Sports Turf Management 0 - 3 2 - 8****Prerequisites:** TUF 172

This course provides practical work experience at an approved sports turf facility. All aspects of the business will be covered while working under the supervision of an industry professional. Progress will be monitored by faculty and students are required to file reports on a regular basis.

**TUF 215 Turf Business Practices 3 - 0 - 3****Prerequisites:** TUF 175 and TUF 252

This course is a study of business practices and personnel management needed to operate a turf enterprise. Topics include budget management, business and economics, communication skills, interpersonal relations, government requirements, and problem solving.

**TUF 252 Turf Management II 2 - 3 - 3****Prerequisites:** TUF 172

This course is an in-depth analysis of common management practices on turf with emphasis on scientific resources.

**TUF 262 Pesticides 2 - 3 - 3****Prerequisites:** TUF 174

This course covers modern methods of applying herbicides, fungicides, insecticides, and nematocides. Special emphasis is placed on calibration of equipment, dilution techniques, and accurate application of minute quantities of pesticides over large areas.

**TUF 272 Turf Irrigation and Drainage 4 - 3 - 5**

This course is a study of the principles and practices of irrigation design, installation, and maintenance as it applies to golf courses. Practical application is included.

**TUF 274 Turf Records and Budgets 2 - 0 - 2****Prerequisites:** TUF 171

This course includes all aspects of recordkeeping involving golf course maintenance and warranties. Purchasing materials and the preparation of a projected budget for an 18-hole course are emphasized.

**TUF 275 Performance Turf Design & Cons 2 - 3 - 3****Prerequisites:** TUF 172

This course is a study of the concepts needed to design, construct and renovate various golf and sports turf playing surfaces. Topics include: USGA green construction, proper survey and layout of athletic fields, drainage methods, construction timelines and budgeting.

## WLD — Welding

### WLD 103 Print Reading I 1 - 0 - 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 106 Gas and Arc Welding 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 110 Welding Safety and Health 1 - 0 - 1

This course is an introduction to safety and health hazards associated with welding and related processes.

### WLD 111 Arc Welding I 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 2 - 6 - 4

**Prerequisites:** ( WLD 111

**Corequisites:** WLD 132, WLD 154

This course is a study of arc welding of ferrous and/or non-ferrous metals.

### WLD 116 Welding 1 - 3 - 2

This course is designed to acquaint students with common welding and techniques/equipment used currently in trades and industry. Students are expected to develop basic skills in general welding.

### WLD 132 Inert Gas Welding Ferrous 2 - 6 - 4

**Prerequisites:** ( WLD 111

**Corequisites:** WLD 113, WLD 154

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

### WLD 134 Inert Gas Welding Non-Ferrous 1 - 6 - 3

**Prerequisites:** ( WLD 111

**Corequisites:** WLD 140, WLD 228, WLD 229

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

### WLD 140 Weld Testing 1 - 0 - 1

**Prerequisites:** ( WLD 111

**Corequisites:** WLD 134, WLD 228, WLD 229

This is an introductory course in destructive and non-destructive testing of welded joints.

### WLD 154 Pipe Fitting and Welding 2 - 6 - 4

**Prerequisites:** ( WLD 111

**Corequisites:** WLD 113, WLD 132

This is a basic course in fitting and welding pipe joints, either ferrous or non-ferrous, using standard processes.

### WLD 201 Welding Metallurgy 2 - 0 - 2

This course covers the weldability of metals, weld failure, and the affects of heat on chemical, physical, and mechanical properties.

### WLD 228 Inert Gas Welding Pipe I 2 - 6 - 4

**Prerequisites:** WLD 132 and WLD 154

**Corequisites:** WLD 229, WLD 140, WLD 134

This course covers the techniques used in gas tungsten arc welding of groove welds on ferrous pipe.

### WLD 229 Inert Gas Welding Pipe II 1 - 3 - 2

**Corequisites:** WLD 228, WLD 140, WLD 134

This course covers the techniques used in gas tungsten arc welding of groove welds on alloyed steel and non-ferrous pipe.