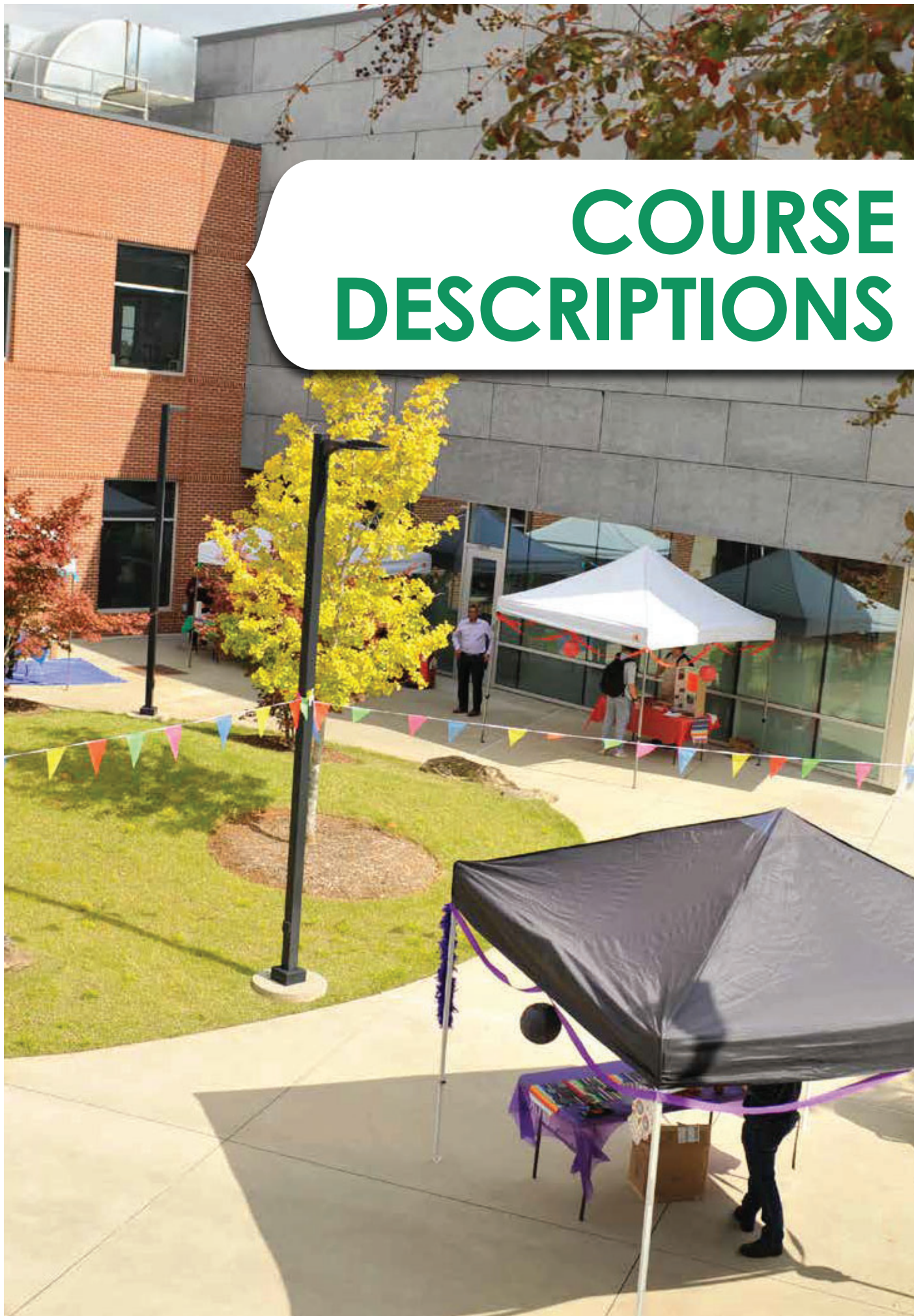


# COURSE DESCRIPTIONS



# GENERAL EDUCATION COURSES

		Communications and Literature Courses	Humanities Courses; If Only One Humanities Course Is Taken	Humanities Courses That Can Be Used As A Second Humanities Course	Mathematics Courses	Natural Sciences Courses	Social Sciences Courses	University Transfer Courses
ANT 101	General Anthropology (3)						✓	✓
ART 101	Art History and Appreciation (3)		✓	✓				✓
ART 107	History of Early Western Art (3)		✓	✓				✓
ART 108	History of Western Art (3)		✓	✓				✓
ART 111	Basic Drawing (3)		✓	✓				✓
ART 112	Basic Drawing II (3)		✓	✓				✓
ART 121	2-D Design Fundamentals (3)		✓	✓				✓
ART 122	3-D Design Fundamentals (3)		✓	✓				✓
ART 211	Introduction to Painting (3)		✓	✓				✓
ASL 101	American Sign Language (4)			✓				✓
AST 101	Solar System Astronomy (4)					✓		✓
AST 102	Stellar Astronomy (4)					✓		✓
BIO 101	Biological Science I (4)					✓		✓
BIO 102	Biological Science II (4)					✓		✓
BIO 105	Principles of Biology (4)					✓		✓
BIO 112	Basic Anatomy and Physiology (4)					✓		✓
BIO 113	Principles of Biology I (5)					✓		✓
BIO 114	Principles of Biology II (5)					✓		✓
BIO 115	Basic Microbiology (3)					✓		✓
BIO 202	Botany (4)					✓		✓
BIO 208	Introductory Genetics (3)					✓		✓
BIO 209	Principles of Environmental Science (4)					✓		✓
BIO 210	Anatomy and Physiology I (4)					✓		✓
BIO 211	Anatomy and Physiology II (4)					✓		✓
BIO 225	Microbiology (4)					✓		✓
BIO 240	Nutrition (3)					✓		✓
BIO 280	Vertebrate Biology (4)					✓		✓
BIO 299	Research in Biological Science (3)					✓		✓
CHM 105	General, Organic & Biochemistry (4)					✓		✓
CHM 106	Contemporary Chemistry I (4)					✓		✓
CHM 110	College Chemistry I (4)					✓		✓
CHM 111	College Chemistry II (4)					✓		✓
CHM 211	Organic Chemistry I (4)					✓		✓
CHM 212	Organic Chemistry II (4)					✓		✓
CHM 213	Principles of Biochemistry (3)					✓		✓
ECO 101	Basic Economics (3)						✓	✓
ECO 207	International Economics (3)						✓	✓

		Communications and Literature Courses	Humanities Courses, If Only One Humanities Course Is Taken	Humanities Courses That Can Be Used As A Second Humanities Course	Mathematics Courses	Natural Sciences Courses	Social Sciences Courses	University Transfer Courses
ECO 210	Macroeconomics (3)						✓	✓
ECO 211	Microeconomics (3)						✓	✓
ENG 101	English Composition I (3)	✓						✓
ENG 102	English Composition II (3)	✓						✓
ENG 103	Accelerated Composition (3)	✓						✓
ENG 155	Communications I (3)	✓						
ENG 156	Communications II (3)	✓						
ENG 165	Professional Communication (3)	✓						
ENG 201	American Literature I (3)	✓	✓	✓				✓
ENG 202	American Literature II (3)	✓	✓	✓				✓
ENG 205	English Literature I (3)	✓	✓	✓				✓
ENG 206	English Literature II (3)	✓	✓	✓				✓
ENG 208	World Literature I (3)	✓	✓	✓				✓
ENG 209	World Literature II (3)	✓	✓	✓				✓
ENG 220	20th and 21st Century Literature (3)	✓	✓	✓				✓
ENG 238	Creative Writing (3)	✓						✓
GEO 102	World Geography (3)						✓	✓
HIS 101	Western Civilization to 1689 (3)		✓	✓				✓
HIS 102	Western Civilization Post 1689 (3)		✓	✓				✓
HIS 122	History, Technology, and Society (3)		✓	✓				✓
HIS 201	American History: Discovery to 1877 (3)		✓	✓				✓
HIS 202	American History: 1877 to Present (3)		✓	✓				✓
HSS 105	Technology and Culture (3)		✓	✓				✓
HSS 205	Technology and Society (3)		✓	✓				✓
IDS 207	Cultural Exploration (3)		✓	✓				✓
MAT 101	Beginning Algebra (3)				✓			
MAT 102	Intermediate Algebra (3)				✓			
MAT 103	Quantitative Reasoning (3)				✓			✓
MAT 109	College Algebra with Modeling (3)				✓			✓
MAT 110	College Algebra (3)				✓			✓
MAT 111	College Trigonometry (3)				✓			✓
MAT 120	Probability and Statistics (3)				✓			✓
MAT 130	Elementary Calculus (3)				✓			✓
MAT 140	Analytical Geometry and Calculus I (4)				✓			✓
MAT 141	Analytical Geometry and Calculus II (4)				✓			✓
MAT 155	Contemporary Mathematics (3)				✓			
MAT 170	Algebra, Geometry and Trigonometry I (3)				✓			
MAT 171	Algebra, Geometry and Trigonometry II (3)				✓			
MAT 211	Math for Elementary Education I (3)				✓			✓

		Communications and Literature Courses	Humanities Courses, If Only One Humanities Course Is Taken	Humanities Courses That Can Be Used As A Second Humanities Course	Mathematics Courses	Natural Sciences Courses	Social Sciences Courses	University Transfer Courses
MAT 212	Math for Elementary Education II (3)				✓			✓
MAT 215	Geometry Credit (3)				✓			✓
MAT 230	Basic Multivariable Calculus (3)				✓			✓
MAT 240	Analytical Geometry and Calculus III (4)				✓			✓
MAT 242	Differential Equations (4)				✓			✓
MUS 101	Chorus I (1)		✓	✓				✓
MUS 102	Chorus II (1)		✓	✓				✓
MUS 103	Chorus III (1)		✓	✓				✓
MUS 104	Chorus IV (1)		✓	✓				✓
MUS 105	Music Appreciation (3)		✓	✓				✓
MUS 110	Music Fundamentals (3)		✓	✓				✓
MUS 111	Band I (1)		✓	✓				✓
MUS 112	Band II (1)		✓	✓				✓
MUS 113	Band III (1)		✓	✓				✓
MUS 114	Band IV (1)		✓	✓				✓
PHI 101	Introduction to Philosophy (3)		✓	✓				✓
PHI 105	Introduction to Logic (3)		✓	✓				✓
PHI 110	Ethics (3)		✓	✓				✓
PHS 101	Physical Science I (4)					✓		✓
PHS 102	Physical Science II (4)					✓		✓
PHY 101	Survey of Physics (3)					✓		✓
PHY 201	Physics I (4)					✓		✓
PHY 202	Physics II (4)					✓		✓
PHY 221	University Physics I (4)					✓		✓
PHY 222	University Physics II (4)					✓		✓
PSC 201	American Government (3)						✓	✓
PSC 215	State and Local Government (3)						✓	✓
PSC 220	Introduction of International Relations (3)						✓	✓
PSC 225	Political Parties, Campaigns, & Elections (3)						✓	✓
PSY 103	Human Relations (3)						✓	
PSY 120	Organizational Psychology (3)						✓	✓
PSY 201	General Psychology (3)						✓	✓
PSY 202	Fundamentals of Psychological Science (3)						✓	✓
PSY 203	Human Growth and Development (3)						✓	✓
PSY 207	Forensic Psychology (3)						✓	✓
PSY 208	Human Sexuality (3)						✓	✓
PSY 212	Abnormal Psychology (3)						✓	✓
PSY 221	Psychology of Religion and Spirituality (3)						✓	✓
PSY 225	Social Psychology (3)						✓	✓



		Communications and Literature Courses	Humanities Courses, If Only One Humanities Course Is Taken	Humanities Courses That Can Be Used As A Second Humanities Course	Mathematics Courses	Natural Sciences Courses	Social Sciences Courses	University Transfer Courses
REL 101	Introduction to Religion (3)		✓	✓				✓
REL 201	Religions of the World (3)		✓	✓				✓
SOC 101	Introduction to Sociology (3)						✓	✓
SOC 102	Marriage and the Family (3)						✓	✓
SOC 205	Social Problems (3)						✓	✓
SOC 233	Social Issues in Sport (3)						✓	✓
SPA 101	Elementary Spanish I (4)			✓				✓
SPA 102	Elementary Spanish II (4)			✓				✓
SPA 201	Intermediate Spanish I (3)		✓	✓				✓
SPA 202	Intermediate Spanish II (3)		✓	✓				✓
SPC 200	Introduction to Speech (3)	✓						✓
SPC 205	Public Speaking (3)	✓						✓
SPC 209	Interpersonal Communication (3)	✓						✓

# KEY TO COURSE PREFIXES

<b>ACC</b>	Accounting
<b>ACR</b>	Cooling and Refrigeration
<b>AHS</b>	Allied Health Science
<b>AMT</b>	Automated Manufacturing Technology
<b>ANT</b>	Anthropology
<b>AOT</b>	Administrative Office Technology
<b>ART</b>	Art
<b>ARV</b>	Arts Visual
<b>ASL</b>	American Sign Language
<b>AST</b>	Astronomy
<b>AUT</b>	Automotive Technology
<b>BAF</b>	Banking and Finance
<b>BIO</b>	Biology
<b>BUS</b>	Business
<b>CHM</b>	Chemistry
<b>COL</b>	College Orientation
<b>CPT</b>	Computer Technology
<b>CRJ</b>	Criminal Justice
<b>CWE</b>	Cooperative Work Experience
<b>DAT</b>	Dental Assisting
<b>ECD</b>	Early Childhood Development
<b>ECO</b>	Economics
<b>EDU</b>	Education
<b>EEM</b>	Industrial Electricity/Electronics

<b>EET</b>	Electronics Engineering Technology
<b>EGR</b>	Engineering Technology
<b>EGT</b>	Engineering Graphics Technology
<b>ELT</b>	Electronics Technology
<b>EMS</b>	Emergency Medical Terminology
<b>ENG</b>	English
<b>FRE</b>	French
<b>GEO</b>	Geography
<b>HIS</b>	History
<b>HSS</b>	Humanities
<b>IDS</b>	Interdisciplinary Studies
<b>IMG</b>	Industrial Management Technology
<b>IMT</b>	Industrial Mechanics
<b>IST</b>	Information Systems
<b>LEG</b>	Legal Assistant
<b>MAP</b>	Media Arts Production
<b>MAT</b>	Mathematics
<b>MEC</b>	Mechatronics Technology
<b>MED</b>	Medical Assistant
<b>MET</b>	Mechanics Engineering Technology
<b>MGT</b>	Management
<b>MKT</b>	Marketing
<b>MLS</b>	Military Science
<b>MLT</b>	Medical Laboratory Technology

<b>MTT</b>	Machine Tool Technology
<b>MUS</b>	Music
<b>NUR</b>	Nursing
<b>PKS</b>	Packaging Science
<b>PHI</b>	Philosophy
<b>PHS</b>	Physical Science
<b>PHY</b>	Physics
<b>PNR</b>	Practical Nursing
<b>PSC</b>	Political Science
<b>PSY</b>	Psychology
<b>QAT</b>	Quality Assurance Technology
<b>RDG</b>	Reading
<b>REL</b>	Religion
<b>SAC</b>	School-Age Care
<b>SFT</b>	Sports and Fitness Training
<b>SOC</b>	Sociology
<b>SPA</b>	Spanish
<b>SPC</b>	Speech
<b>SUR</b>	Surgical Technology
<b>TEL</b>	Telecommunications
<b>THE</b>	Theater
<b>VET</b>	Veterinary Technology
<b>WLD</b>	Welding

# COURSE DESCRIPTIONS

## **ACC 101 - Accounting Principles I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Accounting systems for various assets, liabilities, and equities are studied.

Note: This course is offered every semester.

## **ACC 102 - Accounting Principles II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ACC 101 or ACC 112.

Note: This course is offered every semester, but is only offered in an online format during the Spring.

## **ACC 111 - Accounting Concepts**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the principles of the basic accounting functions--collecting, recording, analyzing, and reporting information.

## **ACC 112 - Organizational Accounting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of financial accounting with specific emphasis on partnerships and the corporate form of organization.

Prerequisites: ACC 101 or ACC 111.

## **ACC 115 - Managerial Accounting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the types and uses of internal accounting information for management decision-making, including cost determination, cost control, performance evaluation, and financial planning.

Note: 1. Credits earned for this course cannot be used toward graduation requirements for Accounting majors. 2. This course is offered online in Spring.

## **ACC 120 - Federal Income Tax**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ACC 101 or ACC 111.

## **ACC 150 - Payroll Accounting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

## **ACC 201 - Intermediate Accounting I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course explores fundamental processes of accounting theory, including the preparation of financial statements. An in-depth review of financial accounting principles is emphasized.

Prerequisites: ACC 112.

## **ACC 230 - Cost Accounting I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the accounting principles involved in job order cost systems. The elements of cost are studied and the process cost system is introduced.

Prerequisites: ACC 102.

## **ACC 245 - Accounting Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ACC 101 or ACC 111, and CPT 170.

## **ACC 246 - Integrated Accounting Software**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the use of pre-designed integrated accounting software for accounting problems.

Prerequisites: ACC 101 or ACC 111, and CPT 170.

## **ACC 275 - Selected Topics In Accounting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides an advanced in-depth review of selected topics in accounting using case studies and individual and group problem solving.

Prerequisites: ACC 102 and ACC 120.

## **ACR 101 - Fundamentals of Refrigeration Systems**

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course covers the refrigeration cycle, refrigerants, pressure temperature relationship, and system components.

Note: This course is offered in Fall.

## **ACR 104 - Print Reading for HVAC**

Class Hours: 0 Lab Hours: 3 Credit Hours: 1

This course covers reading and interpreting prints used in HVAC installation and maintenance.

Note: This course is offered in Summer.

## **ACR 105 - Tools and Service Techniques I**

Class Hours: 0 Lab Hours: 3 Credit Hours: 1

This course is an introduction to basic uses of tools and service equipment used in installation and repair of HVAC equipment.

Note: This course is offered in Fall.

## **ACR 106 - Basic Electricity for HVAC/R**

Class Hours: 2 Lab Hours: 6 Credit Hours: 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.

Note: This course is offered in Fall.

## **ACR 110 - Heating Fundamentals**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course covers the basic concepts of oil, gas, and electric heat, their components and operation. Also included is a study of the design, construction, operation and maintenance of heating systems and their accessory components including gas, oil, electric and equipment for residential and commercial use.

Prerequisites: ACR 106.

Note: This course is offered in Spring.

## **ACR 111 - Gas Heating Principles**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of residential and commercial gas burners and their components.

Prerequisites: ACR 110.

Note: This course is offered in Fall.

## **ACR 122 - Principles of Air Conditioning**

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course is a study of the air cycle, psychrometrics, load estimating and equipment selection.

Prerequisites: ACR 101, ACR 105, and ACR 106.

Note: This course is offered in Spring.

## **ACR 131 - Commercial Refrigeration**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Prerequisites: ACR 101, ACR 105, and ACR 106.

Note: This course is offered in Spring.

## **ACR 140 - Automatic Controls**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: ACR 106.

Note: This course is offered in Spring.

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

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Fall.

## **ACR 175 - EPA 608 Certification Preparation**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course covers EPA guidelines and procedures required by law for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. A comprehensive review of essential material necessary to take the EPA 608 exam will be included.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is offered in Fall.

**ACR 201 - Troubleshooting and Maintenance**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Note: This course is offered in Fall.

**ACR 210 - Heat Pumps**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

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

Prerequisites: ACR 122.

Note: This course is offered in Fall.

**ACR 221 - Residential Load Calculations**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course is a study of heat losses/gains in residential structures.

Note: This course is offered in Summer.

**ACR 224 - Codes and Ordinances**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course covers instruction on how to reference appropriate building codes and ordinances where they apply to installation of heating and air conditioning equipment.

Note: This course is offered in Summer.

**ACR 225 - Industrial Air Conditioning**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of compressors, motors, drives, controls heat exchangers, and other components involved in the operation and maintenance of industrial air conditioning equipment.

Prerequisites: ACR 122.

Note: This course is offered in Spring.

**ACR 250 - Duct Fabrication**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Note: This course is offered in Summer.

**ACR 251 - SCWE in HVAC**

Class Hours: 0 Lab Hours: 12 Credit Hours: 4

This course includes supervised work experience at an approved work site in accordance with specific documented requirements.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

**AHS 101 - Introduction to Health Professions**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course provides a study of the health professions and the health care industry. Topics include the role and scope of personal care aides and other entry and mid-level health professionals, completion of industry-recognized skill certifications, applications of health and safety standards and methods of determining appropriate fit and preparation for health care professions.

**AHS 102 - Medical Terminology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

**AHS 105 - Medical Ethics and Law**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course provides a study of ethical conduct and legal responsibility related to health care.

Note: This course is offered online in Fall and Spring.

**AHS 163 - Long-Term Care**

Class Hours: 3 Lab Hours: 6 Credit Hours: 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 180 - Health Careers Preparation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. This course is designed for students whose career focus is to become a pharmacist.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is offered in Fall.

**AHS 190 - Fundamentals of Personal Care**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces principles and practices of effective personal care aides including physical/emotional/personal care, maintaining clean and safe environments, sensitivity to diverse perspectives and cultural needs, and comprehensive strategies to optimize clients' quality of life.

**AMT 102 - Computer-Controlled Machinery**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Note: This course is offered in Summer.

**AMT 103 - Sensors**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the theory of operation of various processes and discrete sensors used in modern industrial plants plus the techniques of interfacing these sensors with controllers (i.e., robot, work cell, programmable and process controls).

Note: This course is offered in Summer.

**AMT 105 - Robotics and Automated Control I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: IMT 131, IMT 141, and IMT 233.

**AMT 205 - Robotics and Automated Controls II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: AMT 105.

**ANT 101 - General Anthropology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English placement scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.

Note: This course is offered online.

**AOT 105 - Keyboarding**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course focuses on the mastery of touch keyboarding. Formatting principles using a computer is also covered.

**AOT 110 - Document Formatting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: AOT 105.

**AOT 122 - Medical Transcription I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides experience in transcribing medical documents from dictation.

Prerequisites: AOT 105.

Note: This course is offered in Fall.

**AOT 133 - Professional Development**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes development of personal and professional skills required of an office worker in areas such as projecting a professional image, job seeking skills, office etiquette, ethics, and time and stress management.

Note: This course is offered online.

**AOT 134 - Office Communications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: AOT 105.

Note: This course is offered in Spring.

**AOT 137 - Office Accounting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces the fundamentals of basic accounting principles and focuses on basic financial records of a typical office.

Note: This course is offered in Fall and Spring.

**AOT 141 - Office Procedures I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is an introductory course to a variety of office procedures and tasks using business equipment, systems, and procedures.

Prerequisites: AOT 105.

Note: This course is offered in Fall.

**AOT 143 - Office Systems and Procedures**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes procedures and applications used in the office environment. Both manual and electronic records information management systems are included.

Prerequisites: AOT 105.

**AOT 161 - Records Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes records management functions and various types of storage methods, technology, and procedures. Both manual and electronic records information management systems are included.

Prerequisites: CPT 270.

**AOT 167 - Information Processing Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes applications and features of information processing software. This course also provides an in-depth study of a graphical user interface by using Windows 10 and PowerPoint.

**AOT 210 - Document Production**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: AOT 110.

Note: This course is offered online.

**AOT 212 - Medical Document Production**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the production of documents found in medical offices. The major focus is on productivity and excellence in medical document production.

Note: This course is offered in Fall.

**AOT 251 - Administrative Systems and Procedures**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers processing information in the office. Emphasis is on increasing proficiency in performing a variety of office tasks. Course content will use Microsoft Word, Excel and Access.

Prerequisites: AOT 167, AOT 260, AOT 261, and AOT 263.

Note: This course is offered in Spring.

**AOT 252 - Medical Systems and Procedures**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes development of proficiency in integrating skills commonly performed in medical offices.

Note: This course is offered in Spring.

**AOT 255 - Senior Practicum**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes practical experience in an approved office setting as well as class meetings. Emphasis is placed on such topics as career planning, ethics, attitude, and other subjects which enhance employability skills.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is offered in Spring.

**AOT 260 - Office Word Processing Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes the concepts of word processing for information management in an office environment. Course content will use Microsoft Word.

Prerequisites: AOT 105.

Note: This course is offered online in Spring.

**AOT 261 - Office Spreadsheet Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes the concepts of spreadsheets for information management in an office environment. Course content will use Microsoft Excel.

Prerequisites: AOT 105.

Note: This course is offered in Spring.

**AOT 263 - Office Database Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes the concepts and structures of a database and the application of the concepts in an office environment. Course content will use Microsoft Access.

Prerequisites: AOT 105.

Note: This course is offered in Summer and Fall.

**AOT 265 - Office Desktop Publishing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes the integration of text and graphics using computer software to design, edit, and produce a variety of documents.

Prerequisites: AOT 105.

Note: This course is offered online in Summer and Fall.

**ART 101 - Art History and Appreciation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

**ART 107 - History of Early Western Art**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a visual and historical survey of Western art from the Paleolithic Age to the Renaissance. The techniques, forms and expressive content of painting, sculpture and architecture are studied within the context of the cultural environment which produced them.

Note: This course is offered in Fall and Spring.

**ART 108 - History of Western Art**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a visual and historical survey of western art from the Renaissance through modern times. The techniques, forms, and expressive content of painting, sculpture, and architecture will be studied within the context of the cultural environment which produced them.

Note: This course is offered in Fall and Spring.

**ART 111 - Basic Drawing**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides an introduction to the materials and the basic techniques of drawing.

Note: This course is offered in Fall and Spring.

**ART 112 - Basic Drawing II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers a study of the materials and basic techniques of drawing.

Prerequisites: ART 111.

Note: This course is offered in Fall and Spring.

**ART 121 - 2-D Design Fundamentals**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This foundational course covers the visual elements and principles of design including color theory. Projects in a variety of media focus on compositional organization and the development of design skills.

**ART 122 - 3-D Design Fundamentals**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This foundational course introduces students to 3-D design concepts and basic sculptural materials. Projects address a variety of design problems unique to 3-D art forms.

**ART 211 - Introduction to Painting**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is an introduction to materials and techniques of painting.

Prerequisites: ART 111.

**ARV 110 - Computer Graphics I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the fundamentals of computer assisted graphic design. Adobe Photoshop and Illustrator programs will be covered for uses in the print and web industries.

**ARV 114 - Photography I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the principles, terminology, techniques, tools, and materials of basic photography.

**ARV 161 - Visual Communication Media**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the theory, psychology, principles and practices of major visual communications media.

**ARV 211 - Digital Media Design**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the core concepts of digital media design and a survey of digital media trends. Students will produce and format raster and vector graphics for digital media.

Prerequisites: ARV 231 with a grade of C or higher.

Note: This course is offered in Fall.

**ARV 212 - Digital Photography**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Completion of ARV 114 recommended.

Knowledge of the principles, terminology, techniques, tools and materials of basic photography is also recommended.

Note: A grade of D in this course will not satisfy any Associate Degree or Certificate requirements in the Media Arts program.



**ARV 213 - Lighting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the fundamentals of photographic lighting techniques for photography, video and multimedia.

Prerequisites: ARV 114 with a grade of C or higher.  
Note: This course is offered in Spring.

**ARV 214 - Photography II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers advanced projects in photography, including studio work.

Prerequisites: ARV 114 with a grade of C or higher.  
Note: This course is offered in Spring.

**ARV 222 - Computer Animation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces techniques of creating the illusion of motion and three-dimensional space.

Prerequisites: ARV 231 with a grade of B or higher or approval is needed by the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**ARV 227 - Web Site Design I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Spring.

**ARV 231 - Digital Video Editing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the skills necessary to effectively utilize contemporary Non-Linear Editing (NLE) programs designed for digital video production. The course focuses on the professional level tools used by local businesses.

Note: This course is offered in Fall.

**ARV 261 - Advertising Design I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ARV 110 with a grade of C or higher.  
Note: This course is offered in Spring.

**ARV 283 - Social Media Content Creation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers critical content creation and media management skills and includes an overview of current social media platforms, audiences, and best practices for the different platforms. Students learn how to create effective social media posts to help build a social media presence by planning, writing, creating, and curating professional content for social media platforms.

**ASL 101 - American Sign Language I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of visual readiness and basic vocabulary, grammar features, and non-manual behaviors, all focusing on receptive language skill developments.

Prerequisites: Satisfactory English placement score for ENG 101 or completion of ENG 101 with a grade of C or higher.

**AST 101 - Solar System Astronomy**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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. Laboratory requirement supplements lectures.

Prerequisites: Satisfactory reading and writing placement test scores for ENG 101 and MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, or MAT 140 and either ENG 101 or ENG 155, or ENG 100 and RDG 100. All prerequisite courses require a grade of C or higher.

Note: This course is offered in Fall and Summer.

**AST 102 - Stellar Astronomy**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a descriptive survey of the universe with emphasis on basic physical concepts and galactic and extragalactic objects. Related topics of current interest are included in this course. Laboratory requirement supplements lectures.

Prerequisites: Satisfactory placement scores for ENG 101 and MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, or MAT 140 and either ENG 101 or ENG 155, or ENG 100 and RDG 100. All prerequisite courses require a grade of C or higher.

Note: This course is offered in Spring and Summer.

**AUT 100 - Introduction to Automotive Hazardous Materials**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course is a basic study of the proper handling of hazardous materials found in automotive service centers. Topics include types of hazardous materials, handling of the materials, and their proper disposal.

Note: This course is offered online in Fall.

**AUT 109 - Engine Fundamentals and Basic Diagnostics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

Covers the basic construction and principles of operation of the internal combustion engine. Will also cover basic diagnosis and repair of the engine, such as oil consumption and common noises.

Note: This course is offered in Fall.

**AUT 111 - Brakes**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the fundamentals of hydraulics and brake components and their application to brake systems.

Note: This course is offered in Fall.

**AUT 116 - Manual Transmission and Axle**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is an advanced study of manual transmissions and transaxles, including proper overhaul procedures for axles and manual transmissions and transaxles.

Prerequisites: AUT 156 and AUT 231.

Note: This course is offered in Spring.

**AUT 124 - Steering, Suspension and Alignment**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Prerequisites: AUT 156 and AUT 231.

Note: This course is offered in Fall.

**AUT 132 - Automotive Electricity**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of electricity as used in automotive applications. This course includes DC and AC principles and their various uses in the automobile. The relationship between Ohm's Law and actual automotive circuits is demonstrated.

Note: This course is offered in Spring.

**AUT 145 - Engine Performance**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the diagnosis of various performance problems using the appropriate diagnostic equipment and diagnostic manuals. Logical thinking is also included in the course.

Prerequisites: AUT 109 and AUT 132.

Note: This course is offered in Spring.

**AUT 152 - Automatic Transmission**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Prerequisites: AUT 231.

Note: This course is offered in Fall.

**AUT 156 - Automotive Diagnosis and Repair**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Prerequisites: AUT 145 and AUT 231.

Note: This course is offered in Summer.

**AUT 211 - Advanced Brakes**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of four wheel anti-lock brakes and rear anti-lock brakes, including operation of system, diagnosis, service, and repair.

Prerequisites: AUT 111 and AUT 132.

Note: This course is offered in Spring.

**AUT 231 - Automotive Electronics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course includes the study of solid state devices, microprocessors, and complete diagnostics using the latest available equipment.

Prerequisites: AUT 132.

Note: This course is offered in Spring.

**AUT 241 - Automotive Air Conditioning**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study in the principles of refrigeration, operation, and testing procedures to determine the cause of malfunction, servicing or repairing by approved methods. Emphasis is on special tools, equipment, and safety procedures.

Prerequisites: AUT 231.

Note: This course is offered in Summer.

**AUT 262 - Advanced Automotive Diagnosis and Repair**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is an advanced study of the proper diagnostic and repair procedures required on newer computerized automobiles, including scan tool and digital multi-meter operation.

Prerequisites: AUT 145.

Note: This course is offered in Spring.

**AUT 275 - Alternate Technology Vehicles**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of vehicles powered with gasoline engines in combination with other non-gasoline power systems. Hybrid, Fuel Cell, compressed gasses, diesel/bio-diesel, and Homogeneous Charge Compression Ignition (HCCI) technology will be covered in this course.

Prerequisites: AUT 109, AUT 132, AUT 156, and AUT 231.  
Note: This course is offered in Summer.

**BAF 101 - Personal Finance**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 260 - Financial Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ACC 101 and CPT 170.

**BIO 101 - Biological Science I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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. Laboratory requirement supplements lecture.

Prerequisites: Satisfactory placement test scores for ENG 101 or completion of ENG 101, ENG 103, ENG 155 or ENG 100 and RDG 100. Satisfactory placement test scores for MAT 101 or completion of MAT 032, MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. Completion of BIO 105 and CHM 105 replaces MAT and ENG prerequisites. All prerequisite courses require a grade of C or higher.  
Note: Credit may not be earned for both BIO 101 and BIO 105 or BIO 113.

**BIO 102 - Biological Science II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of C or higher. Satisfactory placement test scores for MAT 101 or completion of MAT 101 with grade of C or higher.  
Note: Credit may not be earned for both BIO 102 and BIO 114.

**BIO 105 - Principles of Biology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is an introductory biology course, unifying biology concepts and principles at all levels. This course is for non-AS majors and Health Professions students. Laboratory requirements supplement lecture.

Note: High school biology and chemistry are strongly recommended. Credit may not be earned for both BIO 105 and BIO 101 or BIO 113. This course will not satisfy any Associate of Science requirements.

**BIO 112 - Basic Anatomy and Physiology**

Class Hours: 4 Lab Hours: 2 Credit Hours: 4

This course is a basic integrated study of the structure and function of the human body. Topics include the anatomy and physiology of cells, tissues, organs, and systems. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 105 with a grade of C or higher recommended.  
Note: Credit may not be earned for both BIO 112 and BIO 210. This course will not satisfy any Associate of Science requirements.

**BIO 113 - Principles of Biology I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is an introduction to biology for biological science majors. This course is a study of the fundamental principles of biology, including cell structure and function, bioenergetics, molecular and organismal genetics, evolutionary theory, and an introduction to diversity. Note: Title and description designed for articulation through the Clemson Bridge Program. Labs will supplement lecture.

Prerequisites: Satisfactory reading and writing placement scores for ENG 101 or ENG 103, or completion of ENG 100, ENG 101, ENG 103 or ENG 155. Satisfactory math placement scores for MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. High school college preparatory biology and chemistry or BIO 105 and CHM 105 strongly recommended. All prerequisite courses require a grade of C or higher.  
Note: 1. Credit may not be earned for both BIO 113 and BIO 101 or BIO 105. 2. This course is offered in Fall.

**BIO 114 - Principles of Biology II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course focuses on the study of plants and animals with emphasis on diversity, form, and function. The principles of ecology will also be discussed. Labs will supplement lecture. Note: Title and description designed for articulation through the Bridge to Clemson Program. This course is the second course in a two-semester sequence for biological sciences majors.

Prerequisites: BIO 113 with a grade of C or higher.  
Note: Credit may not be earned for both BIO 114 and BIO 102. This course is offered in Spring.

**BIO 115 - Basic Microbiology**

Class Hours: 3 Lab Hours: 2 Credit Hours: 3

This is a general course in microbiology, including epidemiology, presence, control, and identification of microorganisms. The microorganisms studied will include bacteria, fungi and viruses. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 105 or BIO 101 with a grade of C or higher is recommended.  
Note: Credit may not be earned for both BIO 115 and BIO 225. This course will not satisfy any Associate of Science requirements.

**BIO 202 - Botany**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of cells, tissue, structure, growth, development, organization, energetics, and physiology of plants. This course surveys the major groups of plants, their biology, diversity and evolution. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 102 or BIO 114 with a grade of C or higher.  
Note: This course is offered in Spring.

**BIO 208 - Introductory Genetics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course discusses concepts required to understand genetics at the molecular, cellular and multicellular levels. Topics include structure and function of genes, cellular reproduction, gene regulation, biological variation resulting from mutation, population genetics, heredity, and modern research techniques used to study genetics in model organisms.

Prerequisites: Completion of BIO 102 or BIO 114 with a grade of C or higher.  
Note: This course is offered in Spring.

**BIO 209 - Principles of Environmental Science**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

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 manmade environmental problems and solutions.

Prerequisites: Satisfactory placement scores for ENG 101 or completion of ENG 100, ENG 101, or ENG 155. All prerequisite courses require a grade of C or higher.  
Note: This course is offered in Fall and Spring.

**BIO 210 - Anatomy and Physiology I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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. Topics include terminology, biological chemistry, cells, tissues and the following systems: integumentary, skeletal, muscular, nervous, special senses. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of C or higher.  
Note: Credit may not be earned for both BIO 210 and BIO 112.

**BIO 211 - Anatomy and Physiology II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a continuation of a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. A continuation of BIO 210, the following systems are studied: endocrine, circulatory, lymphatic, respiratory, digestive, urinary, fluids and electrolytes, reproductive. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 210 with a grade of C or higher.

**BIO 225 - Microbiology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of C or higher.  
Note: Credit may not be earned for both BIO 225 and BIO 115.

**BIO 240 - Nutrition**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the essential aspects concerning the science of nutrition. Particular emphasis is on the classes of nutrients and their physiological uses in the body. Body energy requirements and the nutritional status of the world are considered.

Prerequisites: Completion of BIO 101, BIO 105, or BIO 113 with a grade of C or higher.

**BIO 280 - Vertebrate Biology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course surveys the vertebrate animal taxa, including their diversity, morphology, evolution, and ecology. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 102 or BIO 114 with a grade of C or higher.

Note: This course is offered in Spring.

**BIO 299 - Research in Biological Science**

Class Hours: 0 Lab Hours: 3 Credit Hours: 3

This course provides an opportunity for students to investigate a faculty-approved topic related to Biology using the application of practical research methods.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is for use at Greenville and Tri-County Technical Colleges in support of the academic agreement with Clemson University calling for courses based on project-based, creative inquiry content. May be repeated for six credits.

**BUS 101 - Introduction to Business**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Topics include finance, marketing, production, quality assurance and international business issues.

**BUS 110 - Entrepreneurship**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the process of starting a small business, including forms of ownership and management.

**BUS 121 - Business Law I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

**BUS 160 - Fundamentals of Transportation and Logistics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Businesses today cannot be competitive without a good transportation and logistics network. This course introduces the basic forms of transportation and provides an understanding of the economic fundamentals underlying each mode. Students then discuss ways in which today's business managers can use transportation modes to achieve efficiencies and cost effectiveness necessary for a company to survive in today's global markets.

**BUS 175 - International Business**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is an introductory course in international business and trade. The course will explore the reasons companies choose to enter the international market, various marketing approaches, government regulations and opportunities for the individual.

Prerequisites: BUS 101.

**BUS 235 - Sourcing and Purchasing Practices**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Sourcing/purchasing has become a major source of economic benefit to most firms. This course examines the purchasing/procurement functions in manufacturing and service oriented businesses. Topics include sourcing (domestic and international), specifications, standards, contract and pricing practices, make-or-buy decisions, and relationship management.

Prerequisites: BUS 101.

**BUS 268 - Special Projects in Business**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes research, reporting, and special activities for successful employment in the business world.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

**BUS 275 - Business Internship**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes practical experience in an approved business setting as well as class meetings. Class meeting emphasis is placed on topics which will enhance employability skills.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

**CHM 105 - General, Organic & Biochemistry**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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. Laboratory requirement supplements lecture.

Note: This course will not satisfy any Associate of Science requirements. This course is offered in Fall.

**CHM 106 - Contemporary Chemistry I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a survey course in chemistry for non-science majors emphasizing basic principles. Topics include atomic and molecular structure, nuclear chemistry, formulas and nomenclature, states of matter, chemical reactions, acids and bases. Laboratory sections emphasize applications of basic techniques and supplement lecture topics. This course addresses the chemistry of societal issues, including alternative energy sources and the impact humans have on the environment.

Prerequisites: Satisfactory reading and writing placement test scores for ENG 101 or ENG 103, or completion of ENG 100, ENG 101, ENG 103, or ENG 155. Satisfactory math placement test scores for MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. All prerequisite courses require a grade of C or higher.

Note: Credit may not be earned for both CHM 106 and CHM 110. High school chemistry or equivalent is recommended. This course does not serve as a pre-requisite for CHM 111.

**CHM 110 - College Chemistry I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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. Heat processes and molecular structure will also be covered. Laboratory requirement supplements lecture.

Prerequisites: Math placement score satisfactory for MAT 109 or MAT 110 or completion of MAT 102, MAT 109, MAT 110, MAT 111, MAT 130, MAT 138, or MAT 140. Reading placement score satisfactory for ENG 101, ENG 103 or ENG 155 or completion of ENG 101, ENG 103, or ENG 155. All prerequisite courses require a grade of C or higher.

Note: High school college preparatory chemistry is strongly recommended. Credit may not be earned for both CHM 110 and CHM 106.

**CHM 111 - College Chemistry II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

(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. Laboratory requirement supplements lecture.

Prerequisites: Completion of CHM 110 with a grade of C or higher. Satisfactory math placement test scores for MAT 130 or MAT 140 or completion of MAT 109, MAT 110, MAT 111, MAT 130, MAT 138, or MAT 140. All prerequisite courses require a grade of C or higher.

**CHM 211 - Organic Chemistry I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is the first in a sequence of courses that includes nomenclature, structure and properties, and reaction mechanisms of basic organic chemistry. Laboratory requirement supplements lecture.

Prerequisites: Completion of CHM 111 with a grade of C or higher.

Note: This course is offered in Fall and Summer.

**CHM 212 - Organic Chemistry II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a continuation of basic organic chemistry. Topics include nomenclature, structure and properties, reaction mechanisms of basic organic chemistry, biochemistry, and spectroscopy. Laboratory requirement supplements lecture.

Prerequisites: Completion of CHM 211 with a grade of C or higher.

Note: This course is offered in Spring and Summer.

**CHM 213 - Principles of Biochemistry**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of the major biochemical processes, including those related to proteins, enzymes, nucleic acids, DNA replication and transcription, carbohydrates, lipids, and their associated pathways and significance. This course serves as an introduction to biomolecule structure, function, synthesis, and metabolism as found in living organisms.

Prerequisites: Completion of BIO 101 or BIO 113 and CHM 211 with a grade of C or higher.

Note: This course is offered in Spring.

**COL 103 - College Skills**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: Students may not receive credit for both COL 105 and COL 103.

**COL 105 - Freshman Seminar**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the purposes of higher education and provides a general orientation to the functions and resources of the college. The course is designed to help freshmen adjust to the college community, develop a better understanding of the learning process, and acquire essential academic survival skills.

Note: Students may not receive credit for both COL 105 and COL 103.

**COL 111 - E-Learning Success**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course provides an introduction to the online learning management system, basic computer skills, information literacy, time management skills, and learning resources to enhance student success in an electronic learning environment.

Note: This course is offered in Fall and Spring.

**COL 120 - STEM College and Career Readiness**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course builds skills and habits of mind for college and work success. Students will accomplish academic and job tasks using problem-solving and teamwork, apply personal responsibility, use learning strategies, explore STEM careers, and earn a skill award appropriate for entry-level work. Through discussion, guided practice and class projects, students will identify and use appropriate resources; apply strategies to succeed in college courses; participate actively in a collegiate learning environment; develop a global perspective; and apply personal responsibility to reach education, work and personal development goals. This course is designed for students who are participating in the Technical Skills for Success (TSS) initiative.

**COL 135 - Introduction to Adult Social Interactions**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides an overview of social skills necessary for navigating personal and professional interactions.

**CPT 167 - Introduction to Programming Logic**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces foundation concepts in structured programming. Problem solving and algorithm development through pseudocode and flowcharting is emphasized. Solutions are developed using the basic control structures of sequential, decision, and iteration.

Note: This course is offered every semester.

**CPT 170 - Microcomputer Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces microcomputer applications software, including word processing, databases, spreadsheets, graphs, and their integration.

Note: Reading placement scores satisfactory for ENG 100 or ENG 155 is strongly recommended. This course is offered every semester.

**CPT 176 - Microcomputer Operating Systems**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers operating system concepts of microcomputers, including file maintenance, disk organization, batch files and subdirectory concepts.

Prerequisites: CPT 167.  
Note: This course is offered every semester.

**CPT 208 - Special Topics in Computer Technology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course focuses on changes in computer technology. As topics change, students may repeat this course for additional credit with permission of the Program Director or Department Head.

Prerequisites: CPT 234.  
Note: This course is offered in Spring.

**CPT 212 - Visual Basic Programming**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course focuses on Windows programming using Visual Basic to create graphical user interfaces. The course examines forms, controls, graphical controls, loops, control arrays, database and traditional file processing, and application class scheduling.

Prerequisites: CPT 234.  
Note: This course is offered in Summer.

**CPT 234 - C Programming I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This introductory course in C programming emphasizes the designing, coding, testing and debugging of C programs involving input/output operations, data types, storage classes, decision structures, looping, functions, preprocessor directives, arrays, and simple pointers.

Prerequisites: CPT 167.  
Note: This course is offered every semester.

**CPT 236 - Introduction to Java Programming**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to java programming. Topics will cover java syntax and classes for use in the development of java applications and applets.

Prerequisites: CPT 234.  
Note: This course is offered in Fall.

**CPT 238 - Internet Scripting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of Internet programming including the syntax of scripting languages and Internet programming concepts and examines topics related to client-side scripting language programming as well as introducing topics related to server-side scripting.

Prerequisites: IST 222.  
Note: This course is offered in Fall.

**CPT 242 - Database**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: CPT 167.  
Note: This course is offered in Fall.

**CPT 264 - Systems and Procedures**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: CPT 242 and IST 150.  
Note: This course is offered in Spring.

**CPT 270 - Advanced Microcomputer Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course emphasizes the integration of popular microcomputer software packages using advanced concepts in microcomputer applications software. Some of the advanced features of Microsoft Office software will be applied to solve typical business problems.

Prerequisites: CPT 170.  
Note: This course is offered online every semester.

**CPT 283 - PHP Programming I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the PHP programming language and will cover topics related to the syntax of PHP language and how PHP can be used to design and develop dynamic, database-driven web pages.

Prerequisites: CPT 234 and IST 222.  
Note: This course is offered in Fall.

**CPT 285 - PC Hardware Concepts**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course focuses on installing and upgrading microcomputer hardware and identifying malfunctions.

Prerequisites: CPT 167.  
Note: This course is offered every semester.

**CRJ 101 - Introduction to Criminal Justice**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Fall and Spring.

**CRJ 110 - Police Patrol**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides an understanding of the duties, extent of authority, and responsibilities of the uniformed patrolman. Special emphasis is placed on patrol function-line activities, including traffic control and investigation, community relations, vice control, tactical units, civil disturbances, and preventive patrol.

Note: This course is offered in Summer.



**CRJ 115 - Criminal Law I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Fall.

**CRJ 116 - Criminal Law II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes a study of criminal procedures and analyzes, from the legal perspective, the process from arrest to sentencing.

Note: This course is offered in Spring.

**CRJ 120 - Constitutional Law**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 to the individual. The application of the Bill of Rights to federal and state systems is examined.

Note: This course is offered in Summer.

**CRJ 125 - Criminology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Fall.

**CRJ 130 - Police Administration**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: 1. This course is offered in Summer. 2. Course is offered in Spring only for the Criminal Justice Leadership and Management Certificate.

**CRJ 140 - Criminal Justice Report Writing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the proper preparation and retention of criminal justice records and reports, including observational skills, formatting, and the value of accurate, complete, and selective written articulation of information and observations.

Note: This course is offered in Fall.

**CRJ 145 - Juvenile Delinquency**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Summer.

**CRJ 150 - Interviewing and Counseling**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the basic elements of human relationships in order to provide techniques for interviewing and conducting individual therapy. Small group dynamics and interview counseling sessions are examined as information gathering methods. Particular emphasis is placed on interpersonal relationships and the development of communication skills.

Note: This course is offered in Fall.

**CRJ 202 - Criminalistics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Summer.

**CRJ 205 - Criminal Justice in Film**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course employs motion pictures in an examination of issues pertinent to the criminal justice field, including court procedure, forensics, terrorism, community relations, police corruption, corrections, and criminology.

Note: This course is offered in Summer.

**CRJ 216 - Police Supervision**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the analysis of the relationship of the first-line supervisor to the organization, including manpower needs, employee development and motivation, employee training and education, employee safety and health, and employee services and relations.

Note: This course is offered in Fall.

**CRJ 222 - Ethics in Criminal Justice**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Fall.

**CRJ 224 - Police Community Relations**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Spring.

**CRJ 230 - Criminal Investigation I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Summer.

**CRJ 236 - Criminal Evidence**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Spring.

**CRJ 237 - Defensive Tactics for Law Enforcement**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is the study of the methodologies and tactics for solving critical incidents that law enforcement must face, such as the arrest process, handcuffing, and felony car stops.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is offered in Summer.

**CRJ 239 - Terrorism & Homeland Security**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides an overview of the problem of terrorism and homeland security efforts by drawing on several disciplines. An emphasis is placed on problems and countermeasures within an "all-hazards" approach to protecting people and assets.

Note: This course is offered in Summer.

**CRJ 242 - Correctional Systems**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Spring.

**CRJ 243 - Criminal Profiling**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course involves the analysis and interpretation of evidence discovered at the crime scene that might be useful in understanding the perpetrator's motivations and behavior to assist law enforcement in developing a criminal profile for identification, apprehension and prosecution.

Prerequisites: PSY 207.

Note: This course is offered in Summer.

**CRJ 246 - Special Problems in Criminal Justice**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

In this course, issues are examined within the criminal justice community/profession which are of special concern to students and practitioners because of such elements as timeliness, local concern, legalistics, and/or other dynamic factors of such issues.

Note: This course is offered in Summer.

**CRJ 250 - Criminal Justice Internship I**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course includes practical experience in a criminal justice or private security setting.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This elective course is offered in Summer.

**CRJ 251 - Criminal Justice Internship II**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course includes additional practical experience in a criminal justice or private security setting.

Prerequisites: CRJ 250 and approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities. All prerequisites require a grade of C or higher.

Note: This elective course is offered in Summer.

**CRJ 260 - Seminar in Criminal Justice**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes a study of new trends in criminal justice. This capstone course explores contemporary criminal justice perspectives and theoretical approaches to the study and understanding of the criminal justice system.

Prerequisites: CRJ 101; CRJ 116 or LEG 231; and CRJ 125.

Note: This course is offered in Spring and Summer.

### **CRJ 262 - Criminal Justice Workshop**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course includes application of substantive knowledge and practical experience in the criminal justice field. Proposed areas are law enforcement, corrections, and the solicitor U.S. attorney's office.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Fall and Summer.

### **CRJ 281 - Police Science I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Course has been aligned with current SCCJA and LETC training standards and requirements that, at a minimum, meet training standards as required by the SCCJA curriculum.

Corequisite: CRJ 282.

### **CRJ 282 - Police Science II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Course has been aligned with current SCCJA and LETC training standards and requirements that, at a minimum, meet training standards as required by the SCCJA curriculum.

Corequisite: CRJ 281.

### **CRJ 283 - Police Science III**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these blocks of instruction. Areas covered include, but are not limited to, Report Writing, Interviewing, Officer Survival, Drug Enforcement, and Crime Scene and Physical Evidence. Course has been aligned with current SCCJA and LETC training standards and requirements that, at a minimum, meet training standards as required by the SCCJA curriculum.

Corequisite: CRJ 284.

### **CRJ 284 - Police Science IV**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Course has been aligned with current SCCJA and LETC training standards and requirements that, at a minimum, meet training standards as required by the SCCJA curriculum.

Corequisite: CRJ 283.

### **CWE 111 - Cooperative Work Experience I**

Class Hours: 0 Lab Hours: 5 Credit Hours: 1

This course includes cooperative work experience in an approved setting.

### **CWE 122 - Cooperative Work Experience II**

Class Hours: 0 Lab Hours: 10 Credit Hours: 2

This course includes cooperative work experience in an approved setting.

### **CWE 133 - Cooperative Work Experience III**

Class Hours: 0 Lab Hours: 15 Credit Hours: 3

This course includes cooperative work experience in an approved setting.

### **CWE 214 - Cooperative Work Experience IV**

Class Hours: 0 Lab Hours: 20 Credit Hours: 4

This course includes cooperative work experience in an approved setting.

### **CWE 225 - Cooperative Work Experience V**

Class Hours: 0 Lab Hours: 25 Credit Hours: 5

This course includes cooperative work experience in an approved setting.

### **CWE 236 - Cooperative Work Experience VI**

Class Hours: 0 Lab Hours: 30 Credit Hours: 6

This course includes cooperative work experience in an approved setting.

### **CWE 247 - Cooperative Work Experience VII**

Class Hours: 0 Lab Hours: 35 Credit Hours: 7

This course includes cooperative work experience in an approved setting.

### **CWE 258 - Cooperative Work Experience VIII**

Class Hours: 0 Lab Hours: 40 Credit Hours: 8

This course includes cooperative work experience in an approved setting.

### **DAT 112 - Integrated Human Sciences**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a basic study of human anatomy, physiology, and microbiology as related to dental science and the practice of dental assisting.

Prerequisites: AHS 102.  
Note: This course is offered in Fall.

### **DAT 113 - Dental Materials**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Note: This course is offered in Fall.

### **DAT 115 - Ethics and Professionalism**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

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.

Note: This course is offered in Fall.

### **DAT 118 - Dental Morphology**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

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

Note: This course is offered in Fall.

### **DAT 121 - Dental Health Education**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

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.

Note: This course is offered in Spring.

### **DAT 122 - Dental Office Management**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

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

Note: This course is offered in Summer.

### **DAT 123 - Oral Medicine/Oral Biology**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Note: This course is offered in Spring.

### **DAT 127 - Dental Radiography**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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.

Note: This course is offered in Spring.

### **DAT 154 - Clinical Procedures I**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

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.

Note: This course is offered in Fall.

### **DAT 177 - Dental Office Experience**

Class Hours: 2 Lab Hours: 15 Credit Hours: 7

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.

Note: This course is offered in Summer.

### **DAT 185 - Dental Specialties**

Class Hours: 1 Lab Hours: 12 Credit Hours: 5

This course covers the equipment and procedures related to dental specialties used in clinical experiences.

Note: This course is offered in Spring.

### **ECD 101 - Introduction to Early Childhood**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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**

Class Hours: 2 Lab Hours: 3 Credit Hours: 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.

Note: This course is offered in Summer and Fall.

**ECD 105 - Guidance-Classroom Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Fall.

**ECD 107 - Exceptional Children**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Spring.

**ECD 108 - Family and Community Relations**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Spring.

**ECD 109 - Administration and Supervision**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of methods and materials in age-appropriate language experiences. Opportunities are provided to develop listening, speaking, pre-reading and 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.

Note: This course is offered in Fall.

**ECD 132 - Creative Experiences**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Fall.

**ECD 133 - Science and Math Concepts**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Spring.

**ECD 135 - Health, Safety and Nutrition**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. CPR and First Aid certifications received through online training programs are not acceptable and cannot be used to fulfill the CPR and First Aid requirement.

Note: This course is offered in Fall.

**ECD 200 - Curriculum Issues in Infant and Toddler Development**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered in Summer.

**ECD 201 - Principles of Ethics and Leadership in Early Care and Education**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: ECD 237 with a grade of C or higher.  
Corequisite: ECD 243.

Note: This course is offered in Spring.

**ECD 203 - Growth and Development II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 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.

Note: This course is offered in Spring.

**ECD 205 - Socialization and Group Care of Infants and Toddlers**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of 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.

Note: This course is offered in Spring and Summer.

**ECD 207 - Inclusive Care for Infants and Toddlers**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides an overview of the field of infants and toddlers with special needs. Emphasis will be placed on instructional strategies, adaptations, environment, inclusion, etiology, federal legislation, family partnership, multicultural considerations, and optimal development.

Note: This course is offered in Summer.

**ECD 237 - Methods and Materials**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of emergency medical care procedures for the paramedic provider. It is designed to cover topics related to the preparation of a paramedic, the human body and body systems, operations, and patient assessment.

Prerequisites: ECD 102 and ECD 203. All prerequisites require a grade of C or higher.

Note: This course is offered in Fall.

**ECD 243 - Supervised Field Experience I**

Class Hours: 1 Lab Hours: 6 Credit Hours: 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.

Prerequisites: ECD 237. All prerequisite courses require a grade of C or higher.

Corequisite: ECD 201.

Note: This course is offered in Spring.

**ECD 244 - Supervised Field Experience II**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of planning, implementing, and evaluating scheduled programs, age-appropriate methods, materials, activities, and environments in all areas of responsibility in programs dealing with young children.

Prerequisites: ECD 237.

Corequisite: ECD 243.

**ECD 251 - Supervised Field Experiences in Infant/Toddler Environment**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of planning, implementing and evaluating scheduled programs, age-appropriate methods, materials, activities and environments of infants and toddlers.

Prerequisites: ECD 101, ECD 102, ECD 135, ECD 200, and ECD 205. All prerequisite courses require a grade of C or higher.

Note: This course is offered in Summer.

**ECD 259 - Behavior Management for Special Needs**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an overview of understanding and managing challenging behavior in school and child care settings. It includes common causes of problem behaviors and treatment for attention disorders, making changes in the classroom, and administrative steps to help children with challenging behaviors.

### **ECO 260 - Methods of Teaching Special Needs Students**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course focuses on developmentally appropriate methods for teaching special needs students. Emphasis is on planning, implementation, and evaluation of developmentally appropriate activities utilizing a variety of methods and materials.

### **ECO 101 - Basic Economics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of comparative economic systems, forms of business organization, business operation, and wage and price determination. Credit cannot be awarded for both ECO 101 and ECO 210 or ECO 211.

This course counts for elective credit only in the AA and AS degree programs.

Note: This course is offered online.

### **ECO 207 - International Economics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of topics in international economics including the causes and consequences of economic development, international trade, and the emerging global economic systems.

Prerequisites: Completion of ECO 210, ECO 211 or ECO 101 with a grade of C or higher.

### **ECO 210 - Macroeconomics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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. Credit cannot be awarded for both ECO 210 and ECO 101.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100; or completion of ENG 100, ENG 101, ENG 103, or ENG 155. Satisfactory math placement scores for MAT 109 or MAT 110 or completion of MAT 102, MAT 109, MAT 110, MAT 111, MAT 130, or MAT 140. All prerequisite courses require a grade of C or higher.

### **ECO 211 - Microeconomics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the study of the behavior of households and firms, including supply and demand, elasticity, price/output in different market structures, pricing of resources, regulations, and comparative advantage and trade. Credit cannot be awarded for both ECO 211 and ECO 101.

Prerequisites: Satisfactory reading and writing placement scores for ENG 101; or completion of ENG 100, ENG 101, ENG 103, or ENG 155; or satisfactory english placement scores for ENG 101 and completion of RDG 100. Satisfactory math placement scores for MAT 109 or MAT 110 or completion of MAT 102, MAT 109, MAT 110, MAT 111, MAT 130, or MAT 140. All prerequisite courses require a grade of C or higher.

### **EDU 101 - Introduction to Education**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the history, philosophical development, organization and practices of elementary and middle school education.

### **EDU 102 - Professional Preparation for Education Careers**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

### **EEM 117 - AC/DC Circuits I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

Note: This course is offered in Fall and Spring.

### **EEM 118 - AC/DC Circuits II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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.

Prerequisites: EEM 117.

Note: This course is offered in Spring.

### **EEM 131 - Solid-State Devices**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of semiconductor theory and common solid-state devices. Circuits are constructed and tested.

Prerequisites: EEM 118.

Note: This course is offered in Spring and Summer.

### **EEM 161 - Industrial Instruments**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of basic industrial instruments with particular emphasis on the devices utilized to control modern manufacturing processes.

Note: This course is offered in Fall and Spring.

### **EEM 173 - Electrical Installation I**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course is an introduction to the study of electrical wiring techniques commonly used in commercial, industrial and residential applications. Emphasis will be placed on compliance with the National Electrical Code.

Note: This course is offered in Fall.

### **EEM 217 - AC/DC Machines with Electrical Codes**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of AC and DC machines to include operational theory, applications and construction. Relevant sections of the National Electrical Code will also be covered.

Note: This course is offered in Fall and Spring.

### **EEM 221 - DC/AC Drives**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: IMT 141.

Note: This course is offered in Summer.

### **EEM 230 - Digital Electronics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of logic, mathematics, components and circuits utilized in digital equipment.

Note: This course is offered in Fall and Summer.

### **EEM 251 - Programmable Controllers**

Class Hours: 2 Lab Hours: 3 Credit Hours: 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.

Prerequisites: EEM 230 and IMT 141.

Note: This course is offered in Fall.

### **EEM 252 - Programmable Controllers Applications**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: EEM 251.

Note: This course is offered in Spring.

### **EEM 275 - Technical Troubleshooting**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: EEM 251.

Note: This course is offered in Spring.

### **EET 113 - Electrical Circuits I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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.

Note: This course is offered in Fall.

### **EET 131 - Active Devices**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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.

Prerequisites: EET 113.

Note: This course is offered in Fall.

### **EET 145 - Digital Circuits**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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.

Note: This course is offered in Spring.



**EET 175 - Introduction to Photonics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This introductory course focuses on the technology of generating and harnessing light and other forms of radiant energy whose quantum unit is the photon.

Note: This course is offered in Spring.

**EET 212 - Industrial Robotics**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of the systems design, modeling and simulation, signals and control systems, AI, sensor integration, vision systems, robot programming, and principles of mechatronics.

Note: This course is offered in Spring.

**EET 235 - Programmable Controllers**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**EET 274 - Selected Topics in Electrical/Electronics Engineering Technology**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of current topics related to electrical/electronics engineering technology. Technical aspects of practical applications are discussed.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**EGR 130 - Engineering Technology Applications and Programming**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the development and use of computer programs to solve engineering technology problems.

Note: This course is offered in Spring.

**EGR 175 - Manufacturing Processes**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course included the processes, alternatives, and operations in the manufacturing environment.

Note: This course is offered in Fall.

**EGR 184 - Problem Based Integrated Technology I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This problem-based course focuses on the introduction of workplace skills such as problem solving, teamwork, computers, and communications and on applications of mathematics and science competencies. Various applications software, including CAD, will be utilized in the course.

Note: This course is offered in Spring.

**EGR 194 - Statics and Strength of Materials**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course covers external and internal forces in structures and/or machines, including conditions of equilibrium, systems of force, moments of inertia and friction. It also covers the stress/strain relationships in materials.

Prerequisites: MAT 170 and PHY 101.  
Note: This course is offered in Fall and Spring.

**EGR 269 - Engineering Disciplines and Skills**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course assists students in selecting an engineering field while studying professionalism, ethics, safety, communications, and career planning. Computers are used to study spreadsheets, obtain graphical solutions to problems, perform on-line tasks, and work on a team design project and report.

Prerequisites: Completion of MAT 110 with a grade of C or higher or satisfactory placement test scores for MAT 111.  
Note: This course is offered in Fall and Spring.

**EGR 270 - Introduction to Engineering**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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.

Prerequisites: Completion of MAT 111 with a grade of a C or higher or satisfactory placement test scores for MAT 130.  
Note: This course is offered in Fall and Spring.

**EGR 275 - Introduction to Engineering/Computer Graphics**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of basic graphical concepts needed for engineering applications. These graphical concepts are presented through modeling and animation software.

Note: This course is offered in Fall and Spring.

**EGT 103 - Print Reading**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is an introduction to basic print reading and interpretation, including layout, projection, and dimensioning.

Corequisite: EGT 114.  
Note: This course is offered in Spring.

**EGT 106 - Print Reading and Sketching**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Note: This course is offered in Fall.

**EGT 114 - Welding Print Basics**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course covers the fundamentals of print reading for welding applications.

Prerequisites: WLD 109.  
Corequisite: EGT 103.  
Note: This course is offered in Spring.

**EGT 115 - Engineering Graphics II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course in engineering graphics science includes additional drawing techniques for industrial applications.

Prerequisites: EGT 152 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**EGT 119 - Geometrics**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides the student with an in-depth knowledge of both the interpretation of geometric dimensioning and tolerancing symbols, and the inspection techniques

(conventional and x, y, z coordinate measuring machines) necessary to determine if parts meet the specification required by the drawing.

Prerequisites: EGT 106.  
Note: This course is offered in Spring.

**EGT 123 - Industrial Print Reading**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course covers basic print reading and sketching for the industrial trades area. Sketching of geometric shapes and interpretation of working shop drawings are also included.

**EGT 152 - Fundamentals of CAD**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes a related series of problems and exercises utilizing the computer graphics station as a drafting tool. Course topics will feature an introduction to pictorial presentations including 3-D wire frame and solid models.

**EGT 156 - Intermediate CAD Applications**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course builds on the fundamentals of computer-aided drafting and includes such concepts as 3D modeling and user interface customization. This course also provides the foundation for advanced computer-aided drafting concepts and applications.

Note: This course is offered in Summer.

**EGT 165 - Introduction to CAD/CAM**

Class Hours: 0 Lab Hours: 6 Credit Hours: 2

This course covers the basic principles of CNC machine operation, fixturing required to clamp parts in the machine, and basic competencies in CNC programming.

Note: This course is offered in Fall.

**EGT 210 - Engineering Graphics III**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This advanced course in engineering graphics science covers the production of technical working drawings.

Note: This course is offered in Fall.

**EGT 215 - Mechanical Drawing Applications**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This advanced drawing course covers industrial applications.

Prerequisites: EGT 115.  
Note: This course is offered in Spring.

**EGT 245 - Principles of Parametric CAD**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of 3D product and machine design utilizing state-of-the-art parametric design software.

Prerequisites: EGT 210.  
Note: This course is offered in Spring.

**EGT 251 - Principles of CAD**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes the additional use of CAD software for production of technical drawings and related documentation.

Prerequisites: EGT 115 and EGT 152.  
Note: This course is offered in Summer.

**EGT 252 - Advanced CAD**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers advanced concepts of CAD software and applications.

Prerequisites: EGR 194.  
Note: This course is offered in Spring.

**EGT 265 - CAD/CAM Applications**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes applications using CAD/CAM routines.

Prerequisites: EGT 165 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**ELT 251 - Special Topics in Electronics**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course covers a special phase or area of electronics.

Prerequisites: EEM 118.  
Note: This course is offered in Spring and Summer.

**EMS 110 - Emergency Medical Technician**

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This is an introductory course to the health care system and the function, role, and responsibility of emergency medical providers within the system. Emphasis is placed on legal and ethical practices and stress management. A team approach is emphasized in the study of the initial assessment and management of illness and injury.

Corequisite: EMS 212.

**EMS 111 - Advanced Emergency Care**

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course is a study of the concepts and skills related to general patient assessment, initial management of life threatening emergencies, airway management, pulmonary ventilation and oxygen administration, the pathophysiology of shock and treatment modalities for the shock syndrome, and pharmacological actions of groups of drugs and fluids. Emphasis is placed on administration of medication and fluid therapy, basic vehicle extrication, and rescue.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Corequisite: EMS 219.

**EMS 119 - Emergency Medical Services Operations**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

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 120 - Pharmacology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of concepts related to the pharmacological actions of groups of drugs and includes the development of skills related to the administration of medications and intravenous therapy. Physiology of systems affected drug action is also included in the course.

**EMS 210 - Advanced Emergency Medical Care I**

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

This course is a study of emergency medical care procedures for the paramedic provider. It is designed to cover topics related to the preparation of a paramedic, the human body and body systems, operations, and patient assessment.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Corequisite: EMS 220.

**EMS 211 - Advanced Clinical Experience I**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes hospital clinical experiences in obstetrics (labor/delivery), pediatrics, and emergency/trauma settings. Clinical rotation areas subject to change based on hospital scheduling.

**EMS 212 - EMS Field Internship**

Class Hours: 0 Lab Hours: 6 Credit Hours: 2

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

Corequisite: EMS 110.

**EMS 213 - Advanced Emergency Medical Care II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of concepts related to EMS communications, trauma, obstetric/gynecological emergencies, neonatal transport, psychiatric emergencies, central nervous system, GI/GU systems, anaphylaxis, toxicologic emergencies, drug abuse, infectious diseases, geriatric and pediatric patients, and environmentally related emergencies. This course includes compressed content from EMS 210.

Prerequisites: EMS 210.  
Corequisite: EMS 110.

**EMS 214 - Advanced Clinical Experience II**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes hospital clinical experiences in coronary care and emergency and trauma settings. Clinical rotation areas subject to change based on hospital scheduling.

Prerequisites: EMS 211.

**EMS 217 - Introduction to Electrocardiography**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course covers the basic principles of recognizing and interpreting EKG tracings. Laboratory emphasis is placed on the operation of electrocardiographic equipment.

**EMS 218 - EMS Management Seminar**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course covers concepts related to the application of management skills to emergency medical services. Focus is on common problems which occur in the work setting utilizing a problem solving approach.

**EMS 219 - Advanced EMS Field Internship II**

Class Hours: 0 Lab Hours: 6 Credit Hours: 2

This course builds in the knowledge and skills of advanced emergency medical practice in the pre-hospital environment. Focus is on situations involving complex patient problems including trauma, surgical and medical emergencies and the treatment modalities.

Corequisite: EMS 111.

**EMS 220 - Paramedic Internship I**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course includes experiences with advanced life support emergency medical service providers.

Corequisite: EMS 210.

**EMS 221 - Paramedic Internship II**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course builds on the experiences gained in Paramedic Internship I. Focus is on the student and their ability to apply knowledge gained in the classroom during an emergency situation while treating a wide variety of patients in different situations.

Prerequisites: EMS 220.  
Corequisite: EMS 213.

**EMS 222 - Paramedic Internship III**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course builds on the experiences gained in Paramedic Internship II. Focus is centered on the student's ability to function as the EMS team leader and direct patient care in any emergency situation.

Prerequisites: EMS 221.  
Corequisite: EMS 270.

**EMS 270 - NREMT Review**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides the opportunity to practice and demonstrate proficiency in all of the required National Registry of Emergency Medical Technician (NREMT) skill stations.

Corequisite: EMS 222.

**ENG 031 - Developmental English Basics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Developmental English Basics is intended for students who need assistance with basic writing skills. Based on assessment of students' needs, instruction includes basic grammar and usage, mechanics, sentence structure, and basic writing. Assignments will include the writing of a variety of unified and coherent compositions with evidence of a controlling idea, introduction, body, and conclusion.

Prerequisites: Satisfactory English and Reading placement scores.  
Note: 1. If ENG 031 is not offered students can enroll in ENG 150. 2. This course is offered in Fall and Spring.

**ENG 032 - Developmental English**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Developmental English is an intensive review of grammar and usage; mechanics of punctuation, spelling, and capitalization; sentence structure; and the writing process. Evidence of planning, organizing, drafting, editing, and revising are emphasized in the course along with a study of different modes of writing for a variety of rhetorical situations.

Prerequisites: Satisfactory English and Reading placement scores or ENG 031 with a grade of C\* or higher.  
Note: 1. If ENG 032 is not offered students can enroll in ENG 150. 2. This course is offered in Fall and Spring.

**ENG 100 - Introduction to Composition**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of basic writing and different modes of composition and may include a review of usage. Non-degree credit.

Prerequisites: Satisfactory English placement scores or a grade of C\* or higher in ENG 032 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

Note: 1. If ENG 100 is not offered students can enroll in ENG 150. 2. Students who have taken ENG 150, and earned a grade of C or higher, should not take this course. Please see an advisor for course placement. 3. Credits earned for this course cannot be used toward graduation requirements. 4. This course is offered in Fall and Spring.

**ENG 101 - English Composition I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: Satisfactory Writing placement score or a grade of C or higher in ENG 100 or in ENG 155 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

**ENG 102 - English Composition II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: development of writing skills through logical organization, effective style, literary analysis and research. An introduction to literary genre is also included.

Prerequisites: ENG 101 with a grade of C or higher.

**ENG 103 - Accelerated Composition**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides accelerated training in composing grammatically correct, structurally coherent, and audience-appropriate exposition and argumentation, including MLA documentation.

Prerequisites: Satisfactory placement scores in both Reading and Writing. (Bridge to Clemson only)

Note: 1. This course is specifically designed for transfer from Tri-County to Clemson University as part of the Clemson Bridge Program. 2. This course is offered on-campus in Fall and Spring.

**ENG 150 - Basic Communications (Non-Degree Credit)**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course develops practical oral and written communication skills. Non-degree credit. Basic Communications develops practical oral and written communication skills, at an accelerated pace utilizing modular learning, and covers the material included in ENG 031, ENG 032, and ENG 100. Successful completion of this course may allow a student to exit Developmental English.

Prerequisites: Satisfactory English and Reading placement scores. Note: 1. If ENG 150 is not offered students can enroll in ENG 031, ENG 032, or ENG 100. 2. This course may serve as a prerequisite for ENG 101 and ENG 155. Students should see an advisor for course placement.

**ENG 155 - Communications I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: Satisfactory Writing placement score or grade of C or higher in ENG 032 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

Note: This course cannot be used for an AA or AS degree.

**ENG 156 - Communications II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a continuation of the development of communication skills through writing, speaking, and library research assignments.

Prerequisites: A grade of C or higher in ENG 155 or in ENG 101. Note: This course cannot be used for an AA or AS degree.

**ENG 165 - Professional Communication**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course develops practical written and oral communication skills.

Prerequisites: Satisfactory placement scores in both Reading and Writing.

Note: 1. This course cannot be used for an AA or AS degree.

**ENG 201 - American Literature I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of American literature from the Colonial period to the Civil War.

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher.

**ENG 202 - American Literature II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of American literature from the Civil War to the present.

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher.

**ENG 205 - English Literature I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: the study of English literature from the Old English period to the Romantic period with emphasis on major writers and periods.

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher. Note: This course is offered in Fall and Spring.

**ENG 206 - English Literature II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: the study of English literature from the Romantic period to the present with emphasis on major writers and periods.

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher. Note: This course is offered in Fall and Spring.

**ENG 208 - World Literature I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher. Note: This course is offered in Fall and Spring.

**ENG 209 - World Literature II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher. Note: This course is offered in Fall and Spring.

**ENG 220 - 20th and 21st Century Literature**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of literature, primarily American and British, since World War II.

Prerequisites: ENG 102 or ENG 103 with a grade of C or higher. Note: This course is offered in Fall and Spring.

**ENG 238 - Creative Writing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course presents an introduction to creative writing in various genres.

Prerequisites: A grade of C or higher in ENG 102 or ENG 103.

**GEO 102 - World Geography**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.

Note: This course is offered every semester, but is only offered in an online format in Summer.

**HIS 101 - Western Civilization to 1689**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: An English placement score satisfactory for ENG 101 is strongly recommended.

**HIS 102 - Western Civilization Post 1689**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: An English placement score satisfactory for ENG 101 is strongly recommended.

**HIS 122 - History, Technology, and Society**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers topics in the history of technology with emphasis on how technology affects society and how society shapes technology. Emphasis is on 19th and 20th century America, but some material from other periods of Western Civilization and other world regions may be discussed.

**HIS 201 - American History: Discovery to 1877**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: An English placement score satisfactory for ENG 101 is strongly recommended.

**HIS 202 - American History: 1877 to Present**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: An English placement score satisfactory for ENG 101 is strongly recommended.

**HSS 105 - Technology and Culture**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a study of the impact of technological change on cultural values, society, and the individual.

Note: This course counts for elective credit only in the AA and AS degree programs. This course is offered only online in Summer.

**HSS 205 - Technology and Society**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

**HSS 295 - Leadership Through the Humanities**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course examines leadership issues of philosophy, style, and skills from the perspective of classic and contemporary readings in various humanities disciplines, primarily world history, world literature, and Western and Eastern philosophical traditions.

**IDS 106 - Employment Skills Development**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course offers the student a simulated work experience in a lab setting. Students will perform mock interviews and learn the soft skills required for the job market.

Note: This course is offered in Fall and Spring.

**IDS 114 - Employability Skills**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Students will practice employability skills through simulated workplace scenarios in order to apply and interview for, and secure employment. Students will create professional application documents, perform mock interviews, and apply soft skills to a variety of workplace scenarios.

**IDS 207 - Cultural Exploration**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course will explore the culture and environment of the country or region in which the students are studying while abroad. The special topics studied will provide the students with a deeper understanding of the political, social, economic and cultural issues they experience.

Note: This course is offered in Summer.

**IMG 115 - Industrial Management Safety**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the managerial safety fundamentals and the relationship to the economics of accident prevention. Promotion of safe practices includes mechanical safeguards, fire preventive housekeeping, occupational devices, first aid, safety organization, protection equipment, and the analysis of accident causes. OSHA standards will be reviewed.

Note: This course is offered every semester.

**IMG 233 - Industrial Supervision**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the principles, concepts, and techniques concerned with effective and efficient utilization of personnel. Emphasis is placed on leadership and human behavior as they relate to employer-employee relationships. Includes teaming and problem-solving situations.

Note: This course is offered every semester.

**IMT 112 - Hand Tool Operations**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the use of hand tools and their applications in industrial and service areas.

**IMT 131 - Hydraulics and Pneumatics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course covers the basic technology and principles of hydraulics and pneumatics.

**IMT 141 - Electrical Control Devices**

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course covers principals and applications of electrical motor, control circuits, and industrial equipment.

Prerequisites: EEM 117 with a grade of C or higher.

**IMT 161 - Mechanical Power Applications**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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

**IMT 202 - Electrical Troubleshooting**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course covers diagnosing a mechanical problem using prints and electrical troubleshooting techniques.

Prerequisites: IMT 131, IMT 161, and IMT 233.

**IMT 224 - Basic Electronics Theory**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of basic electronic theory. Students will learn to identify electronic system components and interpret electronic schematic diagrams. (Note: Course is aligned with NCCER standard 32315.)

Prerequisites: EEM 118.

**IMT 230 - Reliability Centered Maintenance**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of methods of predictive and preventive maintenance. Vibration analysis, infrared photography and ultrasonics will be covered.

**IMT 233 - Programmable Logic Controllers**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This is the study of programmable logic controllers. Students will learn how to state the characteristics of different types of memory and count and convert between number systems. (Note: Course is aligned with NCCER module 32508).

Prerequisites: IMT 141.

**IST 150 - Project Management Essentials for IT Professionals**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of integrated project management for computer technology professionals with emphasis on the methods & software used by IT professionals, including task lists, Gantt charts, discussion of critical path statistical resource management, scheduling, budgeting, & economic factors.

Prerequisites: CPT 170.

Note: This course is offered in Fall.

**IST 191 - LINUX System Administration**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course will provide students with the skills necessary to administer a LINUX system, including hardware/software configuration, user and group administration, LINUX network configuration, and file system management.

Prerequisites: CPT 167.

Note: This course is offered in Summer.

**IST 201 - Cisco Internetworking Concepts**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: IST 220.

Note: This course is offered in Summer.

**IST 202 - Cisco Router Configuration**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of LANs, WANs, OSI models, Ethernet, token ring, fiber distributed data interface TCP/IP addressing protocol, dynamic routing, routing, and the network administrator's role and function.

Prerequisites: IST 201.

Note: This course is offered in Fall.

**IST 203 - Advanced Cisco Router Configuration**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of configuring Cisco routers.

Prerequisites: IST 202.

Note: This course is offered in Spring.

**IST 204 - Cisco Troubleshooting**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of troubleshooting network problems.

Prerequisites: IST 202.

Note: This course is offered in Spring.

**IST 220 - Data Communications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the fundamentals of data communications. Basic signaling, networking, and various transmission media are covered.

Prerequisites: CPT 167.

Note: This course is offered in Fall and Spring.

**IST 222 - Introduction to Webpage Production**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is designed to develop skills in using common office and web development software to produce webpage content.

**IST 237 - Intermediate Website Design**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of server-side (cgi; dynamic HTML) and client-side (JavaScript) dynamic web design, including the incorporation of database applications and content into web pages.

Prerequisites: CPT 234 and IST 222.

Note: This course is offered in Summer.



**IST 241 - Network Architecture I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of how the computer architecture relates to the interconnecting of the various network components, the environment in which the applications processes execute, and the overall plan defining services to be provided in a distributed environment.

Prerequisites: IST 220.  
Note: This course is offered in Summer.

**IST 257 - LAN Network Server Technologies**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of network operating system technologies including network operating system architecture, the installation, configuration, monitoring and troubleshooting of network resources, and network administration functions such as user/group maintenance, network security, print services, remote access, fault tolerance, backup and recovery.

Prerequisites: IST 220.  
Note: This course is offered in Spring.

**IST 268 - Computer Forensics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: IST 191. Note: This course is offered in Fall.

**IST 269 - Digital Forensics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: IST 268.  
Note: This course is offered in Spring.

**IST 272 - Relational Database**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a comprehensive foundation in both SQL and relational database design and implementation. Dynamic and embedded SQL programming techniques are emphasized.

Prerequisites: CPT 242.  
Note: This course is offered in Spring.

**IST 290 - Special Topics in Information Sciences**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers special topics in information sciences technologies. As topics change, students may repeat this course for additional credit with permission of the Program Director or Department Head.

Prerequisites: CPT 234.  
Note: This course is offered in Summer.

**IST 291 - Fundamentals of Network Security I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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.

Prerequisites: IST 220.  
Note: This course is offered in Fall.

**LEG 120 - Torts**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.  
Note: This course is offered in Spring.

**LEG 121 - Business Law I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 122 - Business Law II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an in-depth study of the Uniform Commercial Code with special emphasis on the essentials of Article 3, Commercial Paper, and Article 9, Secured Transactions. Business partnerships and corporations and their formation are studied.

Prerequisites: LEG 121, LEG 135, and LEG 230. All prerequisites require a grade of C or higher.

**LEG 132 - Legal Bibliography**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the methods of legal research, proper citation of authority, use of legal treatises, texts, reporters, and digests.

**LEG 135 - Introduction to Law and Ethics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Note: This course is offered in Fall.

**LEG 201 - Civil Litigation I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.  
Note: This course is offered in Summer.

**LEG 202 - Civil Litigation II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 212 - Workers' Compensation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the history of worker's compensation, case laws, statutes, regulations, and procedures in handling claims.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 213 - Family Law**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes an examination of the laws of marriage, divorce, annulment, separation, adoption, custody, and the juvenile.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.  
Note: This course is offered in Spring.

**LEG 214 - Property Law**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes an overview of South Carolina property law, including the mechanics of various commercial and private property transactions and mortgage foreclosures.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 218 - Immigration Law**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of immigration law and procedures in the United States. Materials will focus on statutory and regulatory aspects of the immigration process. The impact of criminal statutes will be assessed. Applicable court opinions will be examined.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 230 - Legal Writing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes methods, techniques, and procedures for the research and preparation of legal memoranda, trial and appellate briefs, and trial notebooks.

Note: This course is offered in Fall.

**LEG 231 - Criminal Law**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes a study of the definition and classification of criminal offenses, criminal responsibility, and legal procedures in a criminal prosecution.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.  
Note: This course is offered in Summer.

**LEG 232 - Law Office Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the basic principles of office management, including administrative procedures, client relations, and office operating procedures.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 233 - Wills, Trusts, & Probate**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes a detailed study of testacy and intestacy, preparation of wills and codicils, and fundamentals of trust and probate administration.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 234 - Title Examination Procedures I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the common law and statutory requirements related to the transfer of real property with utilization of the appropriate indexes and documents in the appropriate city and county offices.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 242 - Law Practice Workshop**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the application of substantive knowledge in a practical situation as a paralegal.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 250 - Internship for Paralegal**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course is designed to provide the paralegal student with an opportunity to gain hands-on experience and apply the skills and knowledge in a law office or other suitable location where paralegals are employed.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 262 - Litigation Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces computer applications in various litigation and courtroom settings using general computer and legal software programs.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**LEG 270 - Paralegal Certification Preparation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a review and preparation for testing for a national paralegal certification exam.

Prerequisites: LEG 135 and LEG 230. All prerequisites require a grade of C or higher.

**MAP 101 - Audio Techniques I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers an introduction to the tools and processes involved in audio production, including basic training in the operation of sound recording and playback systems. The fundamentals of sound are also covered.

Note: This course is offered in Fall.

**MAP 104 - Radio Production I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to radio production techniques.

Corequisite: MAP 204.  
Note: This course is offered in Summer.

**MAP 122 - Field Production I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces the setup, operation, and application of video equipment for field production.

Note: This course is offered in Fall.

**MAP 130 - Lighting Fundamentals**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces students to the equipment, safety requirements, protocol and aesthetic techniques used in lighting digital and film productions.

Prerequisites: ARV 114. All prerequisites require a grade of C or higher.  
Note: This course is offered in Spring.

**MAP 140 - Writing for Media Production**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is designed to teach writing techniques for radio, television, and other electronic media.

**MAP 141 - Journalism for Media**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the preparation of news in a form desirable for broadcasting and other electronic media.

**MAP 150 - Studio Production I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the basics of studio operations with emphasis on lighting, cameras, floor management, and control room operations.

Note: This course is offered in Spring.

**MAP 160 - Introduction to Media Arts & Ethics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the history, current trends and ethics of Media Arts.

Note: This course is offered online in Summer.

**MAP 201 - Audio Techniques II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers advanced audio production techniques.

Prerequisites: MAP 101. All prerequisites require a grade of C or higher.  
Note: This course is offered in Summer.

**MAP 204 - Radio Production II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers advanced radio production techniques.

Corequisite: MAP 104.  
Note: This course is offered in Summer.

**MAP 223 - Interview and Discussion**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the techniques for successfully interviewing people, whether for sound bites or for full-length interview programs.

Prerequisites: ARV 231 and MAP 122. All prerequisites require a grade of C or higher.  
Note: This course is offered in Fall.

**MAP 226 - Producing and Directing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the planning and execution of production to create video programming across media platforms.

Prerequisites: ARV 231 and MAP 122. All prerequisites courses require a grade of C or higher.  
Corequisite: MAP 280.

**MAP 265 - Media Arts Business Procedures**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of professional practices involved in the organization and operation of businesses involved in media production as well as professional practices of independent, freelance contractors.

Note: This course is offered online in Summer.

**MAP 271 - SCWE in Media Arts Production I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes supervised production experience at a media production location.

Prerequisites: Approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered every semester.

**MAP 280 - Media Arts Exit Portfolio**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the development of strategies for entering the media arts industry. Students will refine portfolio demo reels and resumes to meet professional standards.

Prerequisites: MAP 104 with a grade of C or higher.  
Corequisite: MAP 226.

**MAT 031 - Developmental Math Basics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the study of whole numbers, fractions, decimals, ratios, and proportions. Concepts are applied to real-world problem solving. Instruction may also include basic geometry, data analysis, graphs, as well as skills needed to be successful MAT 032.

Note: 1. A grade of C\* or higher is required to take MAT 032.  
2. If MAT 031 is not offered students can enroll in MAT 150. 3. This course is offered in Fall and Spring.

**MAT 032 - Developmental Mathematics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

Developmental Mathematics includes a review of arithmetic skills and focuses on the study of measurement and geometry, basic algebra concepts and data analysis. Application skills are emphasized. This is considered a Pre-Algebra course so instruction may also include operations with positive and negative numbers, solving one-and two-step equations, solving related application problems and an introduction to graphing linear equations.

Prerequisites: Satisfactory math placement score or MAT 031 with a grade of C\* or higher.  
Note: 1. A grade of C\* or higher is required to take MAT 101, MAT 155, or MAT 170. 2. If MAT 032 is not offered students can enroll in MAT 150. 3. This course is offered in Fall and Spring.

**MAT 101 - Beginning Algebra**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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, operations with exponents and polynomials, and factoring.

Prerequisites: Satisfactory math placement score; or MAT 032 with a grade of C\* or higher.  
Note: This course cannot be used for an AA or AS degree.

**MAT 102 - Intermediate Algebra**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the study of linear systems and applications; quadratic expressions, equations, functions and graphs; and rational and radical expressions and functions.

Prerequisites: Satisfactory math placement score or MAT 101 with a grade of C or higher.

Note: This course cannot be used for an AA or AS degree.

**MAT 103 - Quantitative Reasoning**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is designed to develop quantitative reasoning and critical thinking skills. Topics include logic and computers, probability and statistics, financial mathematics, and additional applications selected to address areas of contemporary interest.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or higher, or MAT 101 with a grade of A, and a satisfactory reading placement score or RDG 100 with a grade of C or higher or ENG 101 or ENG 103 with a grade of C or higher.

**MAT 109 - College Algebra with Modeling**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an approach to algebra that incorporates mathematical modeling of real data and business applications. Emphasis on linear, quadratic, piece-wise defined, rational, polynomial, exponential and logarithmic functions. Includes inequalities and matrices.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or higher and a satisfactory reading placement score or RDG 100 with a grade of C or higher or ENG 101 or ENG 103 with a grade of C or higher.

Note: Credit cannot be earned for both MAT 109 and MAT 110.

**MAT 110 - College Algebra**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions of higher degree polynomials.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or higher.

Note: Credit cannot be earned for both MAT 109 and MAT 110.

**MAT 111 - College Trigonometry**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory math placement score or MAT 110 with a grade of C or higher.

**MAT 120 - Probability and Statistics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation.

Prerequisites: Satisfactory math placement score or completion of MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 130, MAT 140, MAT 141, MAT 211, MAT 212, MAT 215, MAT 230, or MAT 240 with a grade of C or higher or MAT 101 with a Grade of A or higher. Satisfactory reading placement score or completion of RDG 100 or ENG 101 with a grade of C or higher.

**MAT 130 - Elementary Calculus**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is designed to introduce the ideas and applications of Differential and Integral Calculus and focuses on the concepts of functions, limits, continuity, differentiation, and integration in the context of algebraic functions.

Prerequisites: Satisfactory math placement score or MAT 109 with a grade of C or higher and a satisfactory reading placement score or RDG 100 with a grade of C or higher or ENG 101 or ENG 103 with a grade of C or higher.

**MAT 137 - Calculus I with Algebraic Functions**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course is designed to introduce the ideas and applications of Differential and Integral Calculus and focuses on the concepts of functions, limits, continuity, differentiation, and integration in the context of algebraic functions

Prerequisites: Satisfactory math placement scores or MAT 111 with a grade of C or higher.

Note: This course is offered in Fall.

**MAT 138 - Calculus I with Transcendental Functions**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course is designed to introduce the ideas and applications of Differential and Integral Calculus and focuses on the concepts of differentiation and integration with applications in the context of transcendental functions.

Prerequisites: Satisfactory math placement scores or MAT 137 with a grade of C or higher.

Note: This course is offered in Spring.

**MAT 140 - Analytical Geometry and Calculus I**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

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.

Prerequisites: Satisfactory math placement score or MAT 111 with a grade of C or higher.

**MAT 141 - Analytical Geometry and Calculus II**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course includes the following topics: continuation of calculus of one variable, including analytic geometry; techniques of integration; volumes by integration, and other applications; infinite series, including Taylor series; improper integrals.

Prerequisites: MAT 138 or MAT 140 with a grade of C or higher.

**MAT 150 - Fundamentals of Mathematics (Non-Degree Credit)**

Class Hours: 1 Lab Hours: 2 Credit Hours: 3

This course includes the following topics: elementary number theory; basic algebra and geometry; English and SI measurements; ratio and proportion; statistics; and graph interpretation. Non-degree credit. This is an adaptive type of learning model where outcomes may vary depending on your placement score and the time invested in the course. Content can potentially cover course material from MAT 031, MAT 032, MAT 101, and MAT 102. Each student will be placed on an individualized "Learning Path" which includes study skills like time management, note-taking,

test-taking, and problem solving strategies. Students can expect instruction on how to learn mathematics and be provided with lab time to get individualized math instruction.

Note: 1. If MAT 150 is not offered students can enroll in MAT 031 or MAT 032.

**MAT 155 - Contemporary Mathematics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory math placement score or MAT 032 with a grade of C\* or higher.

Note: This course cannot be used for an AA or AS degree.

**MAT 170 - Algebra, Geometry and Trigonometry I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: elementary algebra, geometry, trigonometry and applications.

Prerequisites: Satisfactory math placement scores, or MAT 032 with a grade of C\* or higher.

Note: This course cannot be used for an AA or AS degree.

**MAT 171 - Algebra, Geometry and Trigonometry II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: algebra, geometry, trigonometry, and advanced applications.

Prerequisites: MAT 170 with a grade of C or higher.

Note: 1. This course cannot be used for an AA or AS degree. 2. This course is offered in Fall and Spring.

**MAT 211 - Math for Elementary Education I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: Logic; set theory; properties of and operations on counting numbers, integers, rational numbers and real numbers.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or higher.

Note: 1. This course counts for elective credit only towards an AA or AS degree. 2. This course is offered in Fall.

**MAT 212 - Math for Elementary Education II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: basic algebra; introductory geometry; probability and statistics.

Prerequisites: MAT 211 with a grade of C or higher.

Note: 1. This course counts for elective credit only towards an AS degree. 2. This course is offered in Spring.

**MAT 215 - Geometry**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: Euclidean geometry of points, lines, triangles, circles, and polygons; right triangle trigonometry; and analytical geometry of the straight line. (This course is designed primarily for elementary teachers.)

Prerequisites: MAT 212 with a grade of C or higher.

Note: 1. This course counts for elective credit only towards an AA or AS degree. 2. This course is offered in Summer.

**MAT 230 - Basic Multivariable Calculus**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: partial derivatives; extreme problems; multiple integration; continuous probability distributions; difference equations; and management and economic applications.

Prerequisites: MAT 130 with a grade of C or higher.  
Note: This course is offered in Spring and Summer.

**MAT 240 - Analytical Geometry and Calculus III**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course includes the following topics: multivariable calculus, including vectors, partial derivatives and their applications to maximum and minimum problems with and without constraints; line integrals; multiple integrals in rectangular and other coordinates; and Stokes' and Green's theorems.

Prerequisites: MAT 141 with a grade of C or higher.  
Note: This course is offered in Spring.

**MAT 242 - Differential Equations**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course includes the following topics: solution of linear and elementary non-linear differential equations by standard methods with sufficient linear algebra to solve systems; applications; series; Laplace transform; and numerical methods.

Prerequisites: MAT 141 with a grade of C or higher.  
Note: This course is offered in Summer.

**MEC 101 - Circuit Analysis**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of applying mathematics to properly analyze and solve series, parallel, and series-parallel circuits. In addition, this course also explores the fundamentals of reading circuit diagrams and prints.

Corequisite: MEC 110.

**MEC 102 - Industrial Machining and Tools**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the fundamentals of machining metals by the operations of milling, drilling, and tapping along with the principles of precision measurements. In addition, safety guidelines of operating metalworking machines and hand tools that are commonly used in an industrial maintenance environment will be covered.

**MEC 103 - Hydraulics and Pneumatics**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the introduction to fluid power systems and the principles of how hydraulics and pneumatics are utilized in manufacturing. In addition, the study of fluid power symbols and schematics are related to the actual working component installations.

**MEC 110 - DC Circuits**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of direct current theory. Series, parallel, and series-parallel circuits are solved using Ohm's law and critical thinking skills. In addition to solving, circuits are constructed and tested for proper operation using various measuring instruments.

Corequisite: MEC 101.

**MEC 111 - AC Circuits**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the fundamentals of alternating current theory. Circuits are constructed using various resistive, inductive, and capacitive components, and then tested for proper operation using various measuring instruments. In addition, three phase power and transformers are covered and analyzed.

Prerequisites: MEC 101 and MEC 110.

**MEC 112 - Digital Controls**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of logic, mathematics, components, and circuits utilized in digital control systems. Emphasis is placed on logic used in hardwired and programmable systems.

Prerequisites: MEC 101.

**MEC 113 - Solid State Devices**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

Course Description This course is a study of the principles of solid state devices such as diodes, transistors, and FET's. In addition to exploring the theory behind semiconductor materials, circuits are constructed, analyzed, and tested for proper operation.

Prerequisites: MEC 101, MEC 110, and MEC 111.

**MEC 120 - Sensors and Instrumentation**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of basic industrial instruments with particular emphasis on the devices utilized to control modern manufacturing processes. Emphasis is placed on various types of sensors and how they interface with computers and controllers with machines to accomplish a task.

**MEC 130 - Motor Controls**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is an introduction to the principles and applications of motor control circuits. A study of the various control devices and wiring used in industrial processes is also covered.

Prerequisites: MEC 101, MEC 110, MEC 111.

**MEC 150 - Mechanical Systems**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers mechanical transmission devices, including various methods of how torque, HP, and motion are generated. In addition, the correct procedures for installation, removal, and maintenance as related to manufacturing equipment will be covered.

Prerequisites: MEC 102.

**MEC 200 - AC/DC Machines**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of applications, operations, and construction of AC and DC machines. Generators, AC/DC motors, and alternators are wired and tested for proper functionality.

Prerequisites: MEC 101, MEC 110, and MEC 111.

**MEC 201 - AC/DC Drives**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers the principles of operation and application of AC drives and DC drives, and additional motor control devices and techniques.

Prerequisites: MEC 101, MEC 110, MEC 111, and MEC 130.

**MEC 210 - Programmable Logic Controllers I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is an introduction to programmable logic controllers with an emphasis on basic programming techniques. Basic hardware as well as a variety of input/output devices and their applications are covered. Programs are constructed, operated, and tested.

Prerequisites: MEC 101, MEC 110, MEC 111, MEC 112, and MEC 130.

**MEC 211 - Programmable Logic Controllers II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

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

Prerequisites: MEC 101, MEC 110, MEC 111, MEC 112, MEC 130, and MEC 210.

**MEC 212 - Robotics and Automation**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes programming and testing robotic equipment used in automation with a concentration on connecting, assembling, and automating manufacturing processes.

Prerequisites: MEC 101, MEC 110, MEC 111, MEC 112, MEC 130, and MEC 210.

**MEC 213 - Technical Troubleshooting**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course consists of a systematic approach to troubleshooting techniques used to diagnose failures in mechanical, electrical, and fluid power systems. In addition, utilizing the proper testing equipment that aids in locating the root cause of machine malfunctions.

Prerequisites: MEC 101, MEC 110, MEC 111, MEC 112, MEC 130, MEC 210, and MEC 211.

**MEC 214 - Reliability Centered Maintenance**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of methods of preventive and predictive maintenance that ensures continuous improvement. This includes vibration analysis, infrared photography, and ultrasonic measuring equipment.

**MED 103 - Medical Assisting Introduction**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides an introduction to the profession of medical assisting, including qualifications, duties, and the role of the medical assistant.

Note: This course is offered in Fall.

**MED 104 - Medical Assisting Administrative Procedures**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a study of receptionist duties, patient record management, insurance claims processing, ICD-10-CM, CPT and HCPCS coding, letter writing, computer applications and the use of other business machines.

Prerequisites: MED 103.

Note: This course is offered in Spring.



**MED 107 - Medical Office Management**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course provides a study of the principles and practices of banking and accounting procedures, billing methods, and office management.

Note: This course is offered in Fall.

**MED 114 - Medical Assisting Clinical Procedures**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course covers examination room techniques, including vital signs, specialty examination, minor surgical techniques and emergency procedures.

Note: This course is offered in Spring.

**MED 115 - Medical Office Lab Procedures I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a study of laboratory techniques commonly used in physicians' offices and other facilities.

Prerequisites: MED 103.

Note: This course is offered in Spring.

**MED 116 - Medical Office Lab Procedures II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course includes the study of laboratory techniques commonly used in physicians' offices and other facilities.

Prerequisites: MED 115.

Note: This course is offered in Summer.

**MED 118 - Pharmacology for the Medical Assistant**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a study of medical office pharmacology and drug calculations along with medication preparation and administration.

Note: This course is offered in Fall.

**MED 156 - Clinical Experience I**

Class Hours: 2 Lab Hours: 12 Credit Hours: 6

This course provides direct experience in a physician's office or other selected medical facilities.

Prerequisites: MED 115.

Note: This course is offered in Summer.

**MET 224 - Hydraulics and Pneumatics**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course covers basic hydraulics and pneumatic principles and circuits. System components such as pumps, compressors, piping, valves, cylinders, fluid motors, accumulators and receivers are discussed.

Prerequisites: MAT 170 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.

Note: This course is offered in Fall.

**MET 238 - Lean Manufacturing**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course covers the fundamentals of lean manufacturing techniques to be applied by mechanical engineering technicians and technologists. Topics include identification and elimination of waste, JIT, value-added principles, production leveling, and inventory management.

Note: This course is offered in Fall and Spring.

**MFG 101 - Introduction to Manufacturing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

In this course, students will examine manufacturing processes and systems, learn manufacturing terminology, assimilate workplace cultures, and identify requirements to work effectively in a manufacturing environment.

**MFG 102 - Applied Learning in Manufacturing**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course examines requirements of successful work in diverse manufacturing environments using structured learning experiences that occur in the classroom and/or at selected manufacturing facilities.

**MFG 103 - Principles of Manufacturing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course prepares students to understand, develop, implement, monitor, control, and improve manufacturing processes.

**MFG 104 - Introduction to Continuous Improvement**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the fundamentals of continuous improvement in a manufacturing environment. Topics include 5-S, visual systems, waste, quality practices and measurement, production leveling, production flow, preventative maintenance, and safety.

**MGT 101 - Principles of Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

**MGT 121 - Small Business Operations**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the daily operations of an established small business, emphasizing staffing, recordkeeping inventory control and marketing.

**MGT 150 - Fundamentals of Supervision**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: MGT 101.

**MGT 201 - Human Resource Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: MGT 101.

**MGT 220 - Operations Management I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces students to the concepts and practices that comprise operations management, including supply chain management. This course provides an overview of operating decisions and practices in multiple industry environments including manufacturing and service oriented businesses. Course is designed to prepare the student to take an active role in operations decision-making in the workplace.

**MGT 221 - Operations Management II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers additional topics related to operations and supply chain management and builds upon the concepts covered in the introductory course by allowing students the opportunity to practice concepts. This course is a continuation of the concepts of operations management and focuses on the strategic importance of the supply chain activities, such as management of inventory, materials, scheduling, lean production, and operations techniques. Students will apply concepts through case analysis, simulations and exposure to the way that contemporary companies adapt to emerging trends in operations and supply chain management practices.

Prerequisites: MGT 220.

**MGT 240 - Management Decision Making**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of various structured approaches to managerial decision making. The situations are realistic and will aid in developing problem-solving skills.

Prerequisites: ACC 101, CPT 170, MGT 101, and MKT 101.

**MGT 260 - Leadership Fundamentals**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course examines the significant research and theories that provide the conceptual framework for viewing and practicing leadership as a collective enterprise. Emerging leaders are empowered through the leadership experience involving new organizational paradigms.

Prerequisites: MGT 101.

**MKT 101 - Marketing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 120 - Sales Principles**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 130 - Customer Service Principles**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the importance of customer service satisfaction and the functions of various customer relations systems.

**MKT 240 - Advertising**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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 265 - Retailing Strategies and Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the applications and management of business strategies in the retailing industry, including business planning, site selection, merchandise management, pricing strategies, promotions strategies, store organization and layout.

**MLS 107 - Leadership Fundamentals I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

The study of leadership focused at the individual level. Students will learn effective communicating skills, ethical decision-making, small group management and mental and physical conditioning. Skills will be applied in a variety of challenging training events during Leadership Laboratory to include rappelling, water survival, land navigation and team athletics.

**MLS 108 - Leadership Fundamentals II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

Continued study of leadership focused at the individual and team level. Topics include problem solving, critical thinking, leadership styles and group cohesion. Leadership laboratory training will include small unit tactics and weapons firing.

**MLS 111 - Heritage and Values of the United States Air Force I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

This survey course is designed to introduce students to the United States Air Force and provide an overview of the basic characteristics, missions, and organization of the Air Force.

**MLS 112 - Heritage and Values of the United States Air Force II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

This survey course is a continuation of MLS 111 designed to introduce students to the United States Air Force and provide an overview of the basic characteristics, missions, and organization of the Air Force.

**MLS 207 - Leadership Development I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

This course is the study of leadership focused at the team level. Students will develop leadership skills through public speaking, managing small groups, and mentoring first year students. Skill will be applied in a variety of challenging training events during leadership laboratory to include rappelling, water survival, land navigation and team-building exercises.

**MLS 208 - Leadership Development II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

Continued study of leadership at the team and small group level. Focuses on moral leadership, officership and the Army as a profession. Leadership Laboratory training includes small unit tactics, airmobile operations and weapons firing. Students will lead teams throughout the semester.

**MLS 211 - Team and Leadership Fundamentals I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

This course focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership

on a personal level and within a team. The course will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate.

**MLS 212 - Team and Leadership Fundamentals II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 2

This course is a continuation of MLS 211 and focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The course will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate.

**MLT 101 - Introduction to Medical Laboratory Technology**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course provides an introduction to laboratory medicine, including techniques for routine laboratory procedures, medical terminology, safety, and an overview of each area within the laboratory.

Note: This course is offered in Fall.

**MLT 105 - Medical Microbiology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a survey of organisms encountered in the clinical microbiology laboratory, including sterilization and disinfection techniques.

Note: This course is offered in Fall.

**MLT 108 - Urinalysis and Body Fluids**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course introduces the routine analysis and clinical significance of urine and other body fluids.

Note: This course is offered in Summer.

**MLT 110 - Hematology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a study of the basic principles of hematology, including hemoglobins, hematocrits, white and red counts, and identification of blood cells.

Note: This course is offered in Spring.

**MLT 115 - Immunology**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a study of the immune system, disease states, and the basic principles of immunological testing.

Note: This course is offered in Fall.

**MLT 120 - Immunohematology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course introduces the theory and practice of blood banking, including the ABO, RH and other blood group systems, compatibility testing, and HDN.

Prerequisites: MLT 115.

Note: This course is offered in Spring.

**MLT 130 - Clinical Chemistry**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course focuses on the study of nutritional, functional and excretional chemicals in blood and body fluids, including testing techniques and clinical significance.

Note: This course is offered in Fall.

**MLT 205 - Advanced Microbiology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a detailed study of microorganisms and the currently accepted procedures for identification of these microorganisms in the clinical laboratory.

Prerequisites: MLT 105.

Note: This course is offered in Summer.

**MLT 210 - Advanced Hematology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course provides a study of the diseases of blood cells and other hematologic procedures including coagulation.

Prerequisites: MLT 110.

Note: This course is offered in Summer.

**MLT 230 - Advanced Clinical Chemistry**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course includes advanced theory, principles, and instrument techniques used in clinical chemistry.

Prerequisites: MLT 130 and BIO 112.

Note: This course is offered in Spring.

**MLT 241 - Medical Lab Transition**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course correlates laboratory procedures and concepts, with emphasis on higher level cognitive applications.

Prerequisites: MLT 101, MLT 105, MLT 108, MLT 110, MLT 115, MLT 120, MLT 130, MLT 205, MLT 210, and MLT 230.

Note: This course is offered in Spring.

**MLT 251 - Clinical Experience I**

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

Prerequisites: MLT 101, MLT 105, MLT 108, MLT 110, MLT 115, MLT 120, MLT 130, MLT 205, MLT 210, and MLT 230.

Note: This course is offered in Fall.

**MLT 252 - Clinical Experience II**

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

Prerequisites: MLT 251.

Note: This course is offered in Fall.

**MLT 253 - Clinical Experience III**

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

Prerequisites: MLT 252.

Note: This course is offered in Spring.

**MLT 254 - Clinical Experience IV**

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course provides an integrated, clinically-based rotation which correlates cognitive and technical skills in selected areas of the clinical laboratory.

Prerequisites: MLT 253.  
Note: This course is offered in Spring.

**MTT 105 - Machine Tool Math Applications**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of shop math relevant to the machine tool trade.

Note: This course is offered in Spring.

**MTT 121 - Machine Tool Theory I**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course covers the principles involved in the production of precision metal parts.

Note: This course is offered in Fall.

**MTT 122 - Machine Tool Practice I**

Class Hours: 1 Lab Hours: 9 Credit Hours: 4

This course covers practical experiences using the principles in Machine Tool Theory I.

Note: This course is offered in Fall.

**MTT 124 - Machine Tool Practice II**

Class Hours: 1 Lab Hours: 9 Credit Hours: 4

This course covers the practical application of the principles in Machine Tool Theory II.

Prerequisites: MTT 122 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Spring.

**MTT 141 - Metals and Heat Treatment**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the properties, characteristics, and heat treatment procedures of metals.

Note: This course is offered in Fall.

**MTT 212 - Tool Design**

Class Hours: 1 Lab Hours: 9 Credit Hours: 4

This course is a study of the development, material selection, manufacturing and machining procedures necessary in the production of tools and tooling.

Prerequisites: MTT 124.  
Note: This course is offered in Summer.

**MTT 243 - Advanced Dimensional Metrology for Machinists**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of higher levels of measurement, measuring instruments, and measuring techniques. The course consists of a theoretical and practical study incorporating the metric system, geometric dimensioning/tolerancing, sine bars/plates for compound angles and more.

Prerequisites: EGT 106.  
Note: This course is offered in Spring.

**MTT 251 - CNC Operations**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of CNC machine controls, setting tools, and machine limits, and capabilities.

Prerequisites: MTT 122.  
Note: This course is offered in Spring.

**MTT 252 - CNC Setup and Operations**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course covers CNC setup and operations.

Prerequisites: MTT 122.  
Note: This course is offered in Spring.

**MTT 253 - CNC Programming and Operations**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course is a study of the planning, programming, selecting tooling, determining speeds and feeds, setting up, operating, and testing of CNC programs on CNC machines.

Prerequisites: MTT 252 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Summer.

**MTT 254 - CNC Programming I**

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course is a study of CNC programming, including machine language and computer-assisted programming.

Prerequisites: MTT 253 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Fall.

**MTT 258 - Machine Tool Cam**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of computer-assisted manufacturing graphics systems needed to create CNC programs.

Prerequisites: EGT 265 or approval is needed from the Department Head, Program Director, or Coordinator of Instructional Activities.  
Note: This course is offered in Summer.

**MTT 261 - Advanced Multi-Axis Programming and Operations II**

Class Hours: 0 Lab Hours: 12 Credit Hours: 4

This course is a study of advanced CNC multi-axis machine programming, advanced contouring, and simultaneous multi-axis machining of 3D parts.

Prerequisites: EGT 265.  
Note: This course is offered in Summer.

**MUS 101 - Chorus I**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected choral music. (Women's Choir)

Note: This course is offered in Fall and Spring.

**MUS 102 - Chorus II**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected choral music. (Men's Choir)

Note: This course is offered in Fall and Spring.

**MUS 103 - Chorus III**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected choral music. (Mixed Choir)

Note: This course is offered in Fall and Spring.

**MUS 104 - Chorus IV**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected choral music.

Note: This course is offered in Fall and Spring.

**MUS 105 - Music Appreciation**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 110 - Music Fundamentals**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the elements of music and music notation with keyboard applications.

Note: This course is offered in Fall and Spring.

**MUS 111 - Band I**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected band music.

Note: This course is offered in Fall and Spring.

**MUS 112 - Band II**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected band music.

Note: This course is offered in Fall and Spring.

**MUS 113 - Band III**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected band music.

Note: This course is offered in Fall and Spring.

**MUS 114 - Band IV**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes the study and performance of selected band music.

Note: This course is offered in Fall and Spring.

**NUR 106 - Pharmacologic Basics**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This introductory course outlines the basic concepts of pharmaceuticals, pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. The process of clinical calculations is introduced as well as major drug classifications.

Corequisite: NUR 120.

**NUR 115 - Basic Concepts in Nursing**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course introduces students to the profession of nursing through both classroom and limited lab/clinical experiences. ADN and PNR majors only.

Note: This course is only offered online in the Summer.

**NUR 120 - Basic Nursing Concepts**

Class Hours: 4.5 Lab Hours: 7.5 Credit Hours: 7

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.

Prerequisites: Admission to the program.

**NUR 121 - Intermediate Nursing Concepts**

Class Hours: 5 Lab Hours: 9 Credit Hours: 8

This course facilitates the application of the nursing process in the care of persons throughout the life span who are experiencing common health problems. This course will also include complex health problems.

Prerequisites: NUR 106 and NUR 120. All prerequisite courses require a grade of B or higher.

**NUR 162 - Psychiatric and Mental Health Nursing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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.

Prerequisites: NUR 106 and NUR 120. All prerequisite courses require a grade of B or higher.

**NUR 170 - Nursing Applications**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course facilitates student's understanding and application of nursing concepts through the use of patient situation discussions. Nursing history, legal and ethical principles will be discussed. ADN and PNR majors only.

Note: This course is offered online in Summer.

**NUR 221 - Advanced Nursing Concepts**

Class Hours: 2 Lab Hours: 9 Credit Hours: 5

This course expands the application of the nursing process in the care of persons throughout the life span who are experiencing complex health problems. It provides opportunity for students to assume management responsibilities in the delivery of nursing care within the health care system.

Prerequisites: NUR 121 and NUR 229. All prerequisite courses require a grade of B or higher.

**NUR 229 - Nursing Care Management IV**

Class Hours: 4 Lab Hours: 6 Credit Hours: 6

This course is a study of nursing care to clients throughout their lifespan who are experiencing complex, multi-system health problems. Focus will be on the care of childbearing and child-rearing families and will incorporate knowledge of expected growth and development principles, including risk reduction and health promotion.

Prerequisites: NUR 121 and NUR 162. All prerequisite courses require a grade of B or higher.

**NUR 230 - Physical Assessment**

Class Hours: 1.5 Lab Hours: 4.5 Credit Hours: 3

This course facilitates the development of competence to perform a physical assessment.

Prerequisites: NUR 121 and NUR 229. All prerequisite courses require a grade of B or higher.

**NUR 232 - Gerontological Nursing**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course facilitates the development of competence to meet the needs of the older adult.

Prerequisites: NUR 121 and NUR 162. All prerequisite courses require a grade of B or higher.

**NUR 246 - Transcultural Clinical Skills Application**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course focuses on the application of nursing knowledge, skills and concepts in international clinical settings.

Prerequisites: NUR 121 and NUR 162. All prerequisite courses require a grade of B or higher.

**NUR 274 - Issues in Nursing Practice**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course addresses current issues in nursing practice.

Prerequisites: NUR 121 and NUR 162. All prerequisite courses require a grade of B or higher.

**PHI 101 - Introduction to Philosophy**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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 105 - Introduction to Logic**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the structure of argument, including symbolization; proofs; formal fallacies; deductions; and inductions.

Note: ENG 101 and MAT 102 are strongly recommended.

**PHI 110 - Ethics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the moral principles of conduct emphasizing ethical problems and modes of ethical reasoning.

**PHS 101 - Physical Science I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is the first of a sequence of courses in physical science and includes an introduction to science with emphasis on scientific terminology and investigations of the physical world. Topics are selected from astronomy, chemistry, geology, and physics. This course emphasizes chemistry and physics. Laboratory requirement supplements lecture.

Prerequisites: Satisfactory reading and writing placement test scores for ENG 101 or completion of ENG 101, ENG 103, or ENG 100 and RDG 100. Satisfactory math placement test scores for MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. All prerequisite courses require a grade of C or higher.

Note: This course is offered in Fall and Summer.

**PHS 102 - Physical Science II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a continuation of the introduction to science with emphasis on scientific terminology and investigations of the physical world. Topics are selected from astronomy, chemistry, geology, and physics. This course emphasizes astronomy and geology. Laboratory requirement supplements lecture.

Prerequisites: Satisfactory reading and writing placement test scores for ENG 101 or completion of ENG 101, ENG 103, or ENG 100 and RDG 100. Satisfactory math placement test scores for MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. All prerequisite courses require a grade of C or higher.

Note: This course is offered in Spring and Summer.

**PHY 101 - Survey of Physics**

Class Hours: 3 Lab Hours: 2 Credit Hours: 3

This course is a qualitative survey of the central concepts of physics with an emphasis on a conceptual rather than a mathematical viewpoint. This course includes concepts from classical mechanics, thermodynamics, electromagnetics and optics. Real life situations and hands-on laboratories will supplement lectures.

Prerequisites: Satisfactory placement scores for ENG 165 or completion of ENG 100, ENG 101, ENG 155, or ENG 165. Satisfactory placement scores for MAT 102 or completion of MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, MAT 140, or MAT 170. All prerequisite courses require a grade of C or higher.

Note: This course will not satisfy any Associate of Science requirements. Credit may not be earned for both PHY 101 and PHY 200, PHY 201, PHY 202, PHY 221, or PHY 222.

**PHY 200 - Applied Physics**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course will introduce students to concepts in mechanics, heat, properties of fluids, and radiation. These concepts will be applied in chemical binding, fluid systems, thermodynamics, and radiation in the context of chemical and biological interactions. Pre-pharmacy students may use this course as their required physics course. Lab requirement supplements lectures.

Prerequisites: Satisfactory placement scores for MAT 111 or completion of MAT 109, MAT 110, MAT 111, MAT 130, MAT 138, or MAT 140. All prerequisites require a grade of C or higher.

Note: Credit may not be earned for both PHY 200 and PHY 101, PHY 201, or PHY 221.

**PHY 201 - Physics I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 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 covers mechanics, waves, fluids and heat. As a transfer course, PHY 201 is designed for non-physical science and non-engineering majors. Lab requirement supplements lectures.

Prerequisites: Satisfactory placement scores for MAT 111, MAT 130, MAT 138, or MAT 140 or completion of MAT 110, MAT 111, MAT 130, or MAT 140. All prerequisite courses require a grade of C or higher.

Note: Credit may not be earned for both PHY 201 and PHY 101, PHY 200, or PHY 221.

**PHY 202 - Physics II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course covers physics topics, including mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. A continuation of PHY 201, this course covers electricity, magnetism, electromagnetic waves, optics and modern physics. As a transfer course, PHY 202 is designed for nonphysical science and non-engineering majors. Laboratory requirement supplements lectures.

Prerequisites: Completion of PHY 201 with a grade of C or higher.

Note: Credit may not be earned for both PHY 202 and PHY 222 or PHY 101.

**PHY 221 - University Physics I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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. In addition



to these topics, PHY 221 includes conservation principles, oscillations and gravitation. Laboratory requirement supplements lectures.

Prerequisites: Completion of MAT 138 or MAT 140 with a grade of C or higher.

Note: Students may not receive credit for both PHY 221 and PHY 201 or PHY 101.

### PHY 222 - University Physics II

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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. In addition to these topics, PHY 222 covers electric currents and circuits and motions of charged particles. Laboratory requirement supplements lectures.

Prerequisites: Completion of PHY 221 with a grade of C or higher.  
Note: 1. Students may not receive credit for both PHY 222 and PHY 202 or PHY 101. 2. This course is offered in Spring and Summer.

### PKS 102 - Introduction to Packaging Science

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

Considers functions of a package; materials, processes, and technology used in package development; and the relationship of packaging to the corporation, consumer, and society.

### PNR 120 - Medical/Surgical Nursing I

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

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.

Prerequisites: PNR 175.  
Note: This course is offered in Fall and Spring.

### PNR 121 - Fundamentals of Pharmacology

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is an introduction to basic concepts of pharmacology. Dosage calculations, medication administration, and common drug classifications are among the concepts explored.

Prerequisites: Admission to the program and satisfactory placement levels for MAT 120 or completion of MAT 102 or MAT 120.

### PNR 130 - Medical/Surgical Nursing II

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course is a continuation of the study utilizing the nursing process. Concepts studied include the physiological, psychosocial, nutritional and health and safety needs of the adult. Clinical experiences address the selected commonly occurring health problems having predictable outcomes.

Prerequisites: PNR 120.  
Note: This course is offered in Spring and Summer.

### PNR 140 - Medical/Surgical Nursing III

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course is a continuation of the 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.

Prerequisites: PNR 130.  
Note: This course is offered in Fall and Spring.

### PNR 154 - Maternal/Infant/Child Nursing

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

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.

Prerequisites: PNR 140.  
Note: This course is offered in Fall and Summer.

### PNR 175 - Practical Nursing Skills

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides refinement of skills used in the nursing process. Organizational skills, legal and ethical aspects of practical nursing, and career opportunities are emphasized.

Prerequisites: Admission to the program.  
Note: This course is offered in Fall and Spring.

### PNR 181 - Special Topics in Practical Nursing

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course covers special topics in practical nursing.

Prerequisites: PNR 130.  
Note: This course is offered in Fall and Summer.

### PSC 201 - American Government

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.  
Note: This course is offered every semester, but is only offered in an online format in Summer.

### PSC 215 - State and Local Government

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.  
Note: This course is offered online in Summer.

### PSC 220 - Introduction of International Relations

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.  
Note: This course is offered every semester, but is only offered in an online format in Summer.

### PSC 225 - Political Parties, Campaigns, & Elections

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course will focus on the dominant two-party system in U.S. politics, the federal campaign and election system, and electoral campaign races. The course will trace the evolution of political parties in the U.S., as well as focus on how campaigns are mounted and won.

Prerequisites: PSC 201 with a grade of C or higher.  
Note: This course is offered every semester.

### PSY 103 - Human Relations

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of human relations, including the dynamics of behavior, interrelationships, and personality as applied in everyday life.

This course counts as elective credit only in the AA and AS degree programs.

Note: This course is offered in Fall and Summer.

### PSY 120 - Organizational Psychology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of basic psychological principles of supervision and organizational dynamics, and includes the application of psychological concepts of human behavior to the self, groups and the workplace.

This course counts as elective credit only in the AA and AS degree programs.

Note: This course is offered every semester, but is only offered in an online format in Summer.

### PSY 201 - General Psychology

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher. BIO 101 strongly recommended.

### PSY 202 - Fundamentals of Psychological Science

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides an overview of the basic knowledge, skills, and abilities for success in the psychology major, including the fundamentals of psychometrics, research methods, career planning, and the dissemination of research findings.

Prerequisites: PSY 201  
Corequisite: MAT 120 is recommended.

### PSY 203 - Human Growth and Development

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Prerequisites: PSY 201 with a grade of C or higher.  
Note: This course is offered every semester, but is only offered in an online format in Summer.

**PSY 207 - Forensic Psychology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to psychological knowledge, concepts, and principles of forensic psychology. Topics include the application of research, procedures, and techniques to specific areas of law and the legal system as they relate to general psychological principles and methods.

Prerequisites: PSY 201 with a grade of C or higher.  
Note: This course is offered every semester, but is only offered online in the Summer.

**PSY 208 - Human Sexuality**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.  
Note: This course is offered in Fall and Spring.

**PSY 212 - Abnormal Psychology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the nature and development of behavioral disorders, including the investigation of contemporary treatment procedures. Other topics include analysis of human behavior problems and identification of the personal and social skills needed to deal with these problems.

Prerequisites: PSY 201 with a grade of C or higher.

**PSY 221 - Psychology of Religion and Spirituality**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the physical, cognitive, and social factors affecting religiousness and spirituality.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.  
Note: This course is offered in Fall and Spring.

**PSY 225 - Social Psychology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is the study of individual behavior as influenced by social roles, group identification, attitudes, and values.

Prerequisites: PSY 201 with a grade of C or higher.

**QAT 101 - Introduction to Quality Assurance**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the fundamentals of quality control, the evolution of the total quality system and the modern philosophy of quality. Process variability, fundamentals of probability and the basic concepts of control charts are included.

Note: This course is offered every semester.

**QAT 102 - Quality Concepts and Techniques**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the basic theory and concepts of quality. The total quality system, basic statistics, variable control charts, and the commitment to quality are emphasized.

Prerequisites: QAT 101.  
Note: This course is offered every semester.

**QAT 103 - Quality Management**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

The total quality concept, including organization, planning, organizational budgeting, product liability and the jobs of quality are covered in this course. Statistics required to construct attribute control charts are also included.

Prerequisites: QAT 102.  
Note: This course is offered in Summer.

**RDG 032 - Developmental Reading**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an intensive review of the academic reading skills needed for success in a college-level course. Students will demonstrate their understanding of reading as a process and will apply strategies learned to expand their reading comprehension skills. Students will demonstrate the ability to integrate knowledge, use context clues, and identify supporting details. A grade of C\* or higher is required to take RDG 100.

Prerequisites: Satisfactory Reading placement scores.

**RDG 100 - Critical Reading (Non-Degree Credit)**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers the application of basic reading skills to improve critical comprehension and higher order thinking skills.

Prerequisites: Satisfactory Reading placement score or a grade of C\* or higher in RDG 032.

**REL 101 - Introduction to Religion**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a study of religion and the nature of religious beliefs, practices, and their influences on culture, history and philosophy.

**REL 201 - Religions of the World**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course surveys the major religious traditions of the world.

**SAC 101 - Best Practices in School-Age and Youth Care Skills**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces basic best practices of school-age and youth care skills for practitioners in out-of-school care environments.

**SFT 109 - Lifetime Fitness and Wellness**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the foundation of the fitness/wellness series and introduces students to the theory and principles upon which the concepts of lifetime fitness and wellness are based.

**SOC 101 - Introduction to Sociology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of C or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of C or higher.

**SOC 102 - Marriage and the Family**

Class Hours: 3 Lab Hours: 0 Credit Hours: 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.

Prerequisites: SOC 101 with a grade of C or higher.  
Note: This course is offered in Spring and Summer.

**SOC 205 - Social Problems**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

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

Note: This course is offered based on enrollment.

**SOC 233 - Social Issues in Sport**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course surveys topics concerning the relationship between sports and society. Topics include racial, gender, age, and sexual-orientation stratification and discrimination in amateur and professional sports, the economics of sport, and sports culture.

Note: This course is only offered in the Spring and Summer.

**SPA 101 - Elementary Spanish I**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course is a study of the four basic language skills: listening, speaking, reading, and writing, including an introduction to the Hispanic culture.

Note: ENG 101 is strongly recommended.

**SPA 102 - Elementary Spanish II**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course continues development of the basic language skills and the study of the Hispanic culture.

Prerequisites: SPA 101, Foreign Language Placement test or Exemption test scores.

**SPA 201 - Intermediate Spanish I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a review of Spanish grammar with attention given to more complex grammatical structures and reading difficult prose.

Prerequisites: SPA 102 with a grade of C or higher, Foreign Language Placement test or Exemption test score.

**SPA 202 - Intermediate Spanish II**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course continues a review of Spanish grammar with attention given to more complex grammatical structures and reading more difficult prose.

Prerequisites: SPA 201 with a grade of C or higher, Foreign Language Placement test or Exemption test score.  
Note: This course is offered in Spring and Summer.

**SPC 200 - Introduction to Speech**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to the theory and practice of oral communication with an application of improving these skills in interpersonal, intercultural, group and public contexts.

Prerequisites: ENG 101, ENG 103, ENG 155, or ENG 156 with a grade of C or higher.  
Note: This course is not offered online.

**SPC 205 - Public Speaking**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: ENG 101, ENG 103, ENG 155, or ENG 156 with a grade of C or higher.

**SPC 209 - Interpersonal Communication**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of interpersonal communication with emphasis on interpersonal theory as applied to personal and professional relationships. Students will learn to observe and analyze how these principles operate in daily interaction with others.

Prerequisites: ENG 101, ENG 103, ENG 155, or ENG 156 with a grade of C or higher.

Note: This course is offered on-campus in Spring.

**SUR 101 - Introduction to Surgical Technology**

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

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.

Note: This course is offered in Fall.

**SUR 102 - Applied Surgical Technology**

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

This course covers the principles and application of aseptic technique, the perioperative role, and medical/legal aspects.

Note: This course is offered in Fall.

**SUR 103 - Surgical Procedures I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

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.

Note: This course is offered in Spring.

**SUR 104 - Surgical Procedures II**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of the various specialties of surgical procedures.

Note: This course is offered in Spring.

**SUR 105 - Surgical Procedures III**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of advanced specialties of surgical procedures.

Note: This course is offered in Summer.

**SUR 110 - Introduction to Surgical Practicum**

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course is an introduction to the application of surgical technique by assisting in the perioperative roles in various clinical affiliations.

Note: This course is offered in Summer.

**SUR 111 - Basic Surgical Practicum**

Class Hours: 2 Lab Hours: 15 Credit Hours: 7

This course includes the application of theory under supervision in the perioperative role in various clinical affiliations.

Note: This course is offered in Fall.

**SUR 120 - Surgical Seminar**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course includes the comprehensive correlation of theory and practice in the perioperative role.

Note: This course is offered in Fall.

**SUR 130 - Biomedical Science for The Surgical Technologist**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course includes basic principles of energy modalities, robotics, laser technology, and hybrid operating rooms as they relate to safe patient care practices in the operating room.

Note: This course is offered in Summer.

**TEL 105 - Telecommunications Principles**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of the basic principles of telecommunications systems. It will include operational characteristics of the voice telephone, wire and cable connectors, and a typical connection link.

**THE 101 - Introduction to Theatre**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the appreciation and analysis of theatrical literature, history, and production. This course equips students with a working knowledge of western and non-western theatre history.

Note: This course is offered in Fall and Spring.

**VET 101 - Animal Breeds and Husbandry**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the various species and breeds of domestic animals commonly encountered in veterinary medicine. Emphasis is placed on the recognition of each breed as well as important terminology, physiological data and behavior of each species of animal.

Prerequisites: VET 113.

**VET 104 - Veterinary Anatomy and Physiology**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a general survey of the functional anatomy and physiology of the domestic animals commonly encountered in veterinary medicine. Dissection of representative cadavers is performed in the laboratory.

Prerequisites: VET 113.

**VET 113 - Introduction to Veterinary Technology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces veterinary medical terminology, anatomy, physiology and related areas of veterinary medicine. It will also introduce the student to job opportunities and the characteristics it takes to be successful in this field.

Prerequisites: Satisfactory placement test scores for ENG 101 or completion of ENG 101 or ENG 100 and RDG 100.

Note: This course is offered every semester.

**VET 116 - Radiology and Parasitology**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of the radiologic techniques for all domestic animals in veterinary medicine, including taking, developing, and assessing for technical errors of large and small

animal radiographs. This course also includes a survey and laboratory study of domestic animal parasitology.

Prerequisites: VET 113.

**VET 140 - Veterinary Pharmacology**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is the study of the principles of pharmacology and the pharmaceutical products used in veterinary medicine.

Prerequisites: VET 150.

**VET 142 - Veterinary Anesthesia**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of the principles and practical uses of anesthesia in veterinary medicine.

Prerequisites: VET 150.

**VET 150 - Clinical Techniques I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes a survey of the technical skills required by the veterinary technician in dealing with all domestic animals. The course includes techniques in restraint, handling, administration of medications, and collection of bodily specimens.

Prerequisites: VET 113.

**VET 152 - Clinical Pathology**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides a study of veterinary hematology, urology, and clinical chemistry followed by application of standard laboratory procedures and regulatory testing in each of these disciplines.

Prerequisites: VET 150.

**VET 160 - Clinical Techniques II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a survey of technical skills required by the veterinary technician with emphasis on radiographic and anesthetic procedures.

Prerequisites: VET 150.

**VET 170 - Veterinary Technician Externship**

Class Hours: 0 Lab Hours: 24 Credit Hours: 6

This course provides clinical training in the veterinary field under the direct supervision of a licensed veterinarian in a veterinary facility.

Note: This course is offered in Spring and Summer.

**VET 201 - Diseases and Zoonosis**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course provides a study of domestic animal diseases, including their causes, symptoms, prevention, treatment, and public health significance.

Prerequisites: VET 160.

**VET 215 - Laboratory Animal Medicine**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course provides a study of the animals and facilities used in research procedures in medicine. The course includes equipment, aseptic techniques, vivarium management, husbandry, and disease prevention in laboratory animals.

Prerequisites: VET 250.

