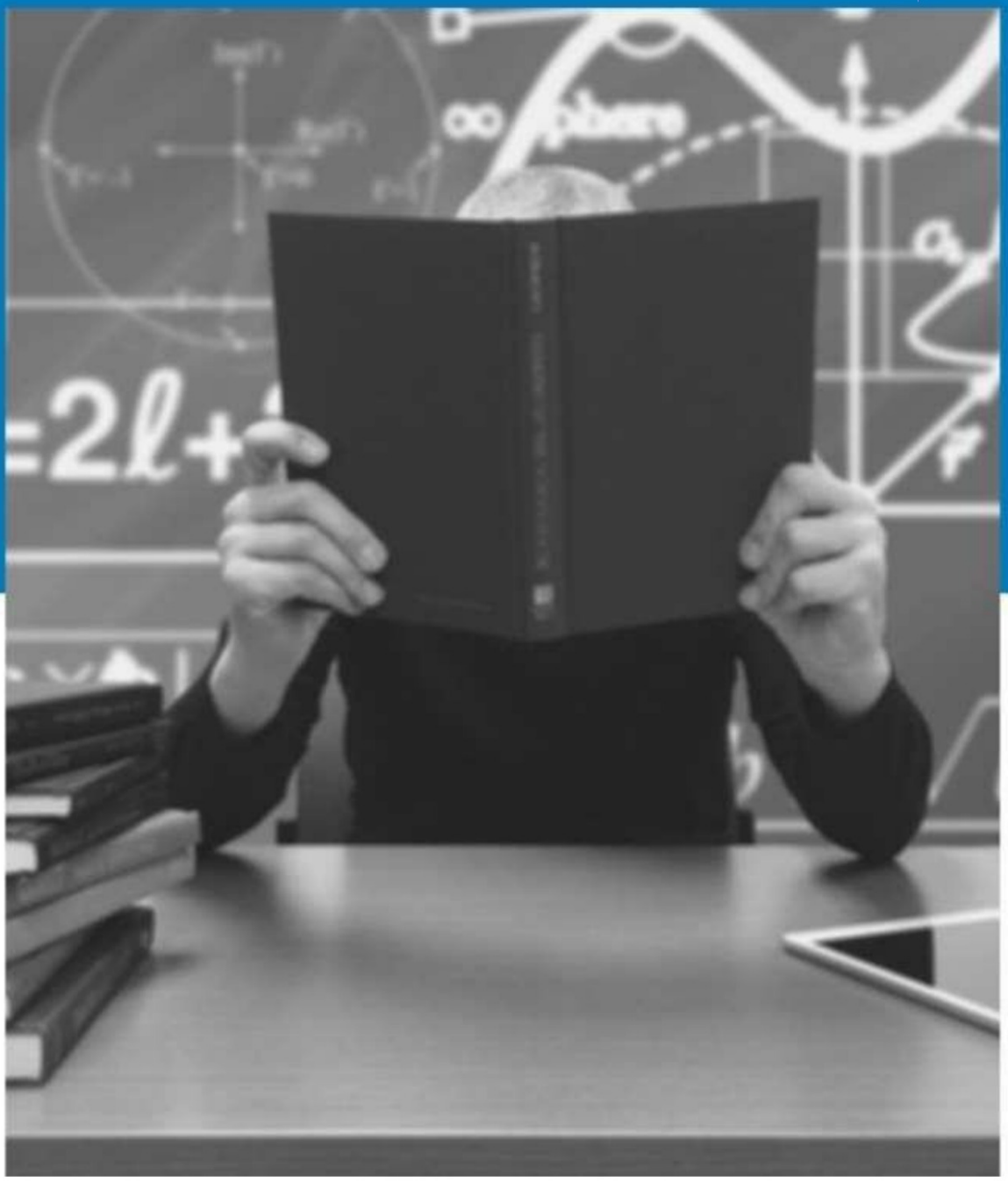


COURSE DESCRIPTIONS

	Class	Lab	Shop/Cli	Credit
ACA 111 College Student Success	1	0	0	1

Prerequisites: None
Corequisites: None

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. This course will also facilitate the development of self-regulated learning and problem solving. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACA 122 College Transfer Success	1	0	0	1

Prerequisites: None
Corequisites: None
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. This course will also facilitate the development of self-regulated learning and problem solving. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. *This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a premajor and/or elective course requirement.*

ACC 120 Principles of Financial Acct.	3	2	0	4

Prerequisites: None
Corequisites: None
This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision- making and address ethical considerations. *This course has been approved for transfer under the CAA agreement as a premajor and/or elective course requirement.*

ACC 121 Principles of Managerial Acct.	3	2	0	4

Prerequisites: ACC 120
Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product- costing systems. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

	Class	Lab	Shop/Cli	Credit
ACC-129	2	2	0	3

State Prerequisites None State

Corequisites None

CollegeTransfer N/A

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual income tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC-140	1	3	0	2

State Prerequisites Take One: ACC-115 or ACC-120

State Corequisites None

College Transfer N/A

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

ACC-149	1	3	0	2

State Prerequisites Take One: ACC-115 or ACC-120

State Corequisites None

College Transfer N/A

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

	Class	Lab	Shop/Cli	Credit
ACC-150	1	3	0	2

State Prerequisites: Take One: ACC-115 or ACC-120 State
Corequisites: None College Transfer N/A
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to accurately solve accounting problems.

ART 111 Art Appreciation	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms, including, but not limited to, sculpture, painting, and architecture. Upon completion students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This is a Universal General Education Transfer (UGETC) component.*

ATR 280 Robotic Fundamentals	3	2	0	4

Prerequisites: None
Corequisites: None
This course covers application, programming, and maintenance fundamentals for robotic devices. Emphasis is placed on terminology, problem solving, robotic systems controls, and hands-on projects. Upon completion, students should be able to apply basic concepts in application, programming, and robotic control systems.

AUT 113 Automotive Servicing 1	0	6	0	2

Prerequisites: AUT 116, AUT 161, AUT 181, AUT 183
Corequisites: None
This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon
completion, students should be able to perform a variety of automotive repairs using
proper service procedures and to operate appropriate equipment.

	Class	Lab	Shop/Cli	Credit
AUT 116 Engine Repair	2	3	0	3

Prerequisites: None
Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 116A Engine Repair Lab	0	3	0	1

Prerequisites: None
Corequisites: AUT 116
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 141 Suspension & Steering System	2	3	0	3

Prerequisites: None
Corequisites: AUT 141A
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT 141A Suspension & Steering Lab	0	3	0	1

Prerequisites: None
Corequisites: AUT 141
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

	Class	Lab	Shop/Cli	Credit
AUT 151 Brake Systems	2	3	0	3

Prerequisites: None
Corequisites: AUT 151A
This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems.
Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 151A Brake Systems Lab	0	3	0	1

Prerequisites: None
Corequisites: AUT 151
This course is an optional lab to be used as an alternative to co-op placement in meet- ing the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 163 Advanced Auto Electricity	2	0	0	3

Prerequisites: TRN 120
Corequisites: AUT 163A
This course covers electronic theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of electronics, lighting, gauges, horn, wiper, accessories, and body modules. Topicsinclude networking and module communication, circuit construction, wiring diagrams, circuit testing, and troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

AUT 163A Advanced Auto Electricity Lab	0	3	0	1

Prerequisites: TRN 120
Corequisites: AUT 163
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, troubleshooting and emerging electrical/electronic systems technologies. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

	Class	Lab	Shop/Cli	Credit
AUT 181 Engine Performance 1	2	3	0	3

Prerequisites: None
Corequisites: None
This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related drivability problems using appropriate testequipment/service information.

AUT 183 Engine Performance 2	2	6	0	4

Prerequisites: AUT 181
Corequisites: None
This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

AUT 212 Auto Shop Management	3	0	0	3

Prerequisites: None
Corequisites: None
This course covers the principals of management essential to decision-making, communication, authority, and leadership. Topics include shop supervision, shop organization, customer relations, cost effectiveness and work place ethics. Upon completion, students should be able to describe basic automotive shop operation from a management standpoint.

AUT 221 Auto Transmissions/Transaxles	2	3	0	3

Prerequisites: None
Corequisites: AUT 221A
This course covers operation, diagnosis, service, and repair of automatic transmissions/ transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains.

	Class	Lab	Shop/Cli	Credit
AUT 221A Auto Trans./Transaxles Lab	0	3	0	1

Prerequisites: None
Corequisites: AUT 221
This course is an optional lab to be used as an alternative to co-op placement in meet- ing the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

AUT 231 Manual Trans/Axles/Drive Trains	2	3	0	3

Prerequisites: None
Corequisites: AUT 231A
This course covers the operation, diagnosis, and repair of manual transmissions/ transaxles, clutches, drive shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains.

AUT 231A Manual Trans./Ax./Dr. Tr. Lab	0	3	0	1

Prerequisites: None
Corequisites: AUT 231
This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

AUT 281 Advanced Engine Performance	2	2	0	3

Prerequisites: AUT 183
Corequisites: None
This course utilizes service information and specialized test equipment to diagnose and repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform diagnosis and repair.

BIO 111 General Biology I	3	3	0	4

Prerequisites None
Corequisites: None
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a general education course in Natural Science. *This is a Universal General Education Transfer Component (UGETC) course.*

	Class	Lab	Shop/Cli	Credit
BIO 112 General Biology II	3	3	0	4

Prerequisites: BIO 111
Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

BIO 168 Anatomy and Physiology I 3 3 0 4

Prerequisites: None
Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.*

BIO 169 Anatomy and Physiology II 3 3 0 4

Prerequisites: BIO 168 Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.*

BIO 175 General Microbiology 2 2 0 3

Prerequisites: BIO 110, BIO 111, BIO 163, BIO 165, or BIO 168
Corequisites: None

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. *This course has been approved for transfer under the CAA as a pre-major and/or elective.*

	Class	Lab	Shop/Cli	Credit
BPR 111 Print Reading	1	2	0	2

Prerequisites: None
Corequisites: None

This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

BUS 110 Introduction to Business 3 0 0 3
Prerequisites: None Corequisites: None
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. *This course has been approved for transfer under the CAA as a pre- major and/or elective course requirement.*

BUS 115 Business Law I 3 0 0 3
Prerequisites: None
Corequisites: None
This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them. Student learning outcomes include identifying the elements of a contract, describing the structure of the U.S. court system and identifying laws, conditions and regulations in the national and international work environment. *This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.*

BUS 116 Business Law II 3 0 0 3
Prerequisites: BUS 115
Corequisites: None
This course includes the study of the legal and ethical framework of business. Business organizations, property law, intellectual property law, agency and employment law, consumer law, secured transactions, and bankruptcy are examined. Upon completion, the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.

	Class	Lab	Shop/Cli	Credit
	2	2	0	3

BUS 121 BusinessMath
Prerequisites: None
Corequisites: None

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

BUS 137 Principles of Management 3 0 0 3
Prerequisites: None
Corequisites: None
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. Student learning outcomes include explaining strategic management in business operations, defining management, qual- ity management and projection management and identifying relevant issues in human resource management. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.*

BUS 147 Business Insurance 3 0 0 3
Prerequisites: None
Corequisites: None
This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.

BUS 225 Business Finance 2 2 0 3
Prerequisites: ACC 120, BUS 121
Corequisites: None
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

BUS 230 Small Business Management 3 0 0 3
Prerequisites: BUS 110
Corequisites: None
This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

	Class	Lab	Shop/Cli	Credit BUS 239
Business Application Seminar	1	2	0	2

Prerequisites: ACC 120, BUS 115, BUS 137, MKT 120, ECO 251
Corequisites: None
This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to ap- ply the techniques, processes, and vital professional skills needed in the work place.

BUS 260 Business Communication	3	0	0	3

Prerequisites: ENG 111
Corequisites: None
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

CCT-250 Network Vulnerabilities I	**2**	**2**	**0**	**3**

Prerequisites: None
Corequisites: None
This course introduces students to penetration testing, network vulnerabilities, and hacking. Topics include an overview of traditional network security, system hardening, and known weaknesses. Upon completion, students should be able to evaluate weaknesses of traditional and wireless network for the purpose of incident response, reconstruction, and forensic investigation.

CCT-251 Network Vulnerabilities II	**2**	**2**	**0**	**3**

Prerequisites: CCT-250
Corequisites: None
This course advances students' knowledge of penetration testing, network vulnerabilities, and hacking. Topics include analyzing advanced techniques for circumventing network security hardware and software. Upon completion, students should be able to assemble test kits for multiple operating systems, scan and footprint networks, and perform advanced forensic investigation.

CHM 130 Gen, Org, & Biochemistry	3	0	0	3

Prerequisites: None
Corequisites: None
This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. *This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.*

CHM 131 Introduction to Chemistry	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. *This course has been approved for transfer under the CAA as a general education course in Natural Science.*

	Class	Lab	Shop/Cli	Credit
CHM 131A Introduction to Chemistry Lab	0	3	0	1

Prerequisites: None
Corequisites: None
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. *This course has been approved for transfer under the CAA as a general education course in Natural Science.*

CHM 132 Organic and Biochemistry	3	3	0	4

Prerequisites: CHM 131 and CHM 131A or CHM 151
Corequisites: None
This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. *This course has been approved for transfer under the CAA as a general education course in Natural Science.*

CHM 151 General Chemistry I	3	3	0	4

Prerequisites: None
Corequisites: MAT 171 or MAT 175
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

CHM 152 General Chemistry II	3	3	0	4

Prerequisites: CHM 151 Corequisites: None
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

	Class	Lab	Shop/Cli	Credit
CIS 110 Introduction to Computers	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved for transfer under the CAA as a general education course mathematics (quantitative).*

CIS 111 Basic PC Literacy	1	2	0	2

Prerequisites: None Corequisites: None
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

CIS 115 Intro to Program & Logic	2	3	0	3

Prerequisites: None
Corequisites: None
This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. *This course has been approved for transfer under the CAA as a general education course mathematics (quantitative).*

CJC 100 Basic Law Enforcement Training	9	30	0	19

Prerequisites: None Corequisites: None
This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specific. Upon successful completion, the student will be able to demonstrate competence in the topics and areas required for the state comprehensive certification examination. This is a certificate-level course.

	Class	Lab	Shop/Cli	Credit
CJC 111 Intro to Criminal Justice	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice sys- tem and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

CJC 112 Criminology	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113 Juvenile Justice	3	0	0	3

Prerequisites: None Corequisites: None

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/ detention of juveniles, and case disposition.

CJC 121 Law Enforcement Operations	3	0	0	3

Prerequisites: None
Corequisites: None

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

	Class	Lab	Shop/Cli	Credit
CJC 131 Criminal Law	3	0	0	3

Prerequisites: None Corequisites: None

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132 Court Procedure & Evidence	3	0	0	3

Prerequisites: None Corequisites: None

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141 Corrections	3	0	0	3

Prerequisites: None Corequisites: None

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

CJC 212 Ethics & Comm Relations	3	0	0	3

Prerequisites: None Corequisites: None

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems, social change, values, and norms, cultural diversity, citizen involvement in criminal justice issues,
and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

	Class	Lab	Shop/Cli	Credit
CJC 213 Substance Abuse	3	0	0	3

Prerequisites: None Corequisites: None

This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

CJC 221 Investigative Principles	3	2	0	4

Prerequisites: None Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 231 Constitutional Law	3	0	0	3

Prerequisites: None Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the UnitedStates Constitution and the rights/ procedures as interpreted by the courts.

CJC 241 Community-Based Corrections	3	0	0	3

Prerequisites: None Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

	Class	Lab	Shop/Cli	Credit
COM 110 Introduction to Communication	3	0	0	3

Prerequisites: None Corequisites: None
This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. This course has been approved for transfer under the CAA as a course in English composition.

COM 120 Introduction to Communication	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations.

COM 231 Public Speaking	3	0	0	3

Prerequisites: None Corequisites: None
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well- organized speeches and participate in group discussion with appropriate audiovisual support. This course has beenapproved for transfer under the CAA as a course in English composition. This is a UGETC course.

COS 111 Cosmetology Concepts I	4	0	0	4

Prerequisites: None Corequisites: COS 112
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

	Class	Lab	Shop/Cli	Credit
COS 112 Salon I	0	24	0	8

Prerequisites: None Corequisites: COS 111
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS 113 Cosmetology Concepts II	4	0	0	4

Prerequisites: COS 111, COS 112
Corequisites: COS 114
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

	Class	Lab	Shop/Cli	Credit
COS 114 Salon II	0	24	0	8

Prerequisites: COS 111, COS 112
Corequisites: COS 113
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 115 Cosmetology Concepts III	4	0	0	4

Prerequisites: COS 111, COS 112
Corequisites: COS 116
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS 116 Salon III	0	12	0	4

Prerequisites: COS 111, COS 112
Corequisites: COS 115
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 117 Cosmetology Concepts IV	2	0	0	2

Prerequisites: COS 111, COS 112
Corequisites: COS 118
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 118 Salon IV	0	21	0	7

Prerequisites: COS 111, COS 112
Corequisites: COS 117
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

	Class	Lab	Shop/Cli	Credit
COS 223 Contemporary Hair Coloring	1	3	0	2

Prerequisites: COS 111, COS 112
Corequisites: None

This course covers basic color concepts, hair coloring problems and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge and other related topics. Upon completion, students should be able to identify a client's color needs and safely and competently perform color applications and correct problems.

CSC 139 Visual BASIC Programming	2	3	0	3

Prerequisites: None
Corequisites: None
This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event- driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

CSC 134 C++ Programming	2	3	0	3

Prerequisites: None
Corequisites: None
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

CSC 151 JAVA Programming	2	3	0	3

Prerequisites: None
Corequisites: None
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should
be able to design, code, test, debug JAVA language programs. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

CTI 110 Web, Pgm, & Db Foundation	2	2	0	3

Prerequisites: None
Corequisites: None
This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

	Class	Lab	Shop/Cli	Credit
CTI 120 Network & Sec Foundation	2	2	0	3

Prerequisites: None
Corequisites: None

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

CTS 115 Info Sys Business Concepts 3 0 0 3
Prerequisites: DRE 098
Corequisites: None
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for under- standing business challenges and developing/managing information systems to con- tribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement*.

CTS 120 Hardware/Software Support 2 3 0 3
Prerequisites: None Corequisites: None
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non- functioning personal computers.

CTS 130 Spreadsheet 2 2 0 3
Prerequisites: CIS 110, CIS 11
or OST 137
Corequisites: None
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

	Class	Lab	Shop/Cli	Credit
CTS 285 Systems Analysis & Design	3	0	0	3

Prerequisites: CIS 115
Corequisites: None
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CTS 289 System Support Project	1	4	0	3

Prerequisites: CTS 285
Corequisites: None
This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation.

DBA 110 Database Concepts	2	3	0	3

Prerequisites: CIS 110, CIS 111 or CIS115
Corequisites: None
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

DEN 110 Orofacial Anatomy	2	2	0	3

Prerequisites: Acceptance into Dental Hygiene program Corequisites: None
This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.

DEN 111Infection/Hazard Control	2	0	0	2

Prerequisites: Acceptance into Dental Hygiene program Corequisites: None
This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicableNorth Carolina laws.

		Class	Lab	Shop/Cli	Credit
DEN 112		2	3	0	3
Dental Radiography	Acceptance into Dental Hygiene program				
Prerequisites:	None				

Corequisites: DEN 110, DEN 111
This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

DEN 120 Dental Hygiene Pre-clinic Lec. 2 0 0 2
Prerequisites: Acceptance into Dental Hygiene program Corequisites: DEN 121
This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate knowledge of dental hygiene instrumentation.

DEN 121 Dental Hygiene Pre-clinic Lab 0 6 0 2
Prerequisites: Acceptance into Dental Hygiene program Corequisites: DEN 120
This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures.

DEN 123 Nutrition/Dental Health 2 0 0 2
Prerequisites: Acceptance into Dental Hygiene program Corequisites: None
This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual patient needs. Topics include the study of the food pyramid, nutrient functions, Recommended Daily Allowances, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.

DEN 124 Periodontology 2 0 0 2
Prerequisites: DEN 110 Corequisites: None
This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.

	Class	Lab	Shop/Cli	Credit
DEN 125 Dental Office Emergencies	0	2	0	1

Prerequisites: Acceptance into Dental Hygiene program
Corequisites: None
This course provides a study of the management of dental office emergencies. Topics include methods of prevention, necessary equipment/drugs, medico legal considerations, recognition and effective initial management of a variety of emergencies. Upon completion, the student should be able to recognize, assess and manage various dental office emergencies and activate advanced medical support when indicated.

DEN 130 Dental Hygiene Theory I	2	0	0	2

Prerequisites: DEN 120
Corequisites: DEN 131
This course is a continuation of the didactic dental hygiene concepts necessary for providing an oral prophylaxis. Topics include deposits/removal, instrument sharpening, patient education, fluorides, planning for dental hygiene treatment, charting, and clinical records and procedures. Upon completion, students should beable
to demonstrate knowledge needed to complete a thorough oral prophylaxis.

DEN 131 Dental Hygiene Clinic I	0	0	9	3

Prerequisites: DEN 121
Corequisites: DEN 130
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete thenecessary dental hygiene treatment.

DEN 140 Dental Hygiene Theory II	1	0	0	1

Prerequisites: DEN 130
Corequisites: DEN 141
This course provides a continuation of the development, theory, and practice of patient care. Topics include modification of treatment for special needs patients, advanced radiographic interpretation, and ergonomics. Upon completion, students should be able to differentiate necessary treatment modifications, effective ergonomic principles, and radiographic abnormalities.

DEN 141 Dental Hygiene Clinic II	0	0	6	2

Prerequisites: DEN 131
Corequisites: DEN 140
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

	Class	Lab	Shop/Cli	Credit
DEN 220 Dental Hygiene Theory III	2	0	0	2

Prerequisites: DEN 140
Corequisites: DEN 221
This course provides a continuation in developing the theories and practices of patient care. Topics include periodontal debridement, pain control, subgingivalirrigation,
air polishing, and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised patients.

DEN-221 Dental Hygiene Clinic III	0	0	12	4

Prerequisites: DEN-141
Corequisites: DEN 220
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with moderate to advanced periodontal involvement and moderate deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-222 General & Oral Pathology	2	0	0	2

Prerequisites: BIO-163, BIO-165, or BIO-168, DEN 110, DEN 111
Corequisites: None
This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.

DEN-223 Dental Pharmacology	2	0	0	2

Prerequisites: CHM 130 DEN 125
Corequisites: BIO-163, BIO-165, or BIO-168, DEN 224
This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and basic principles of anesthesiology. Emphasis is placed on knowledge of drugs in overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient's general health or drug usage may require modification of the treatment procedures.

DEN 224 Materials and Procedures	1	3	0	2

Prerequisites: DEN 111 Corequisites: None
This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventive materials, fabrication of casts and appliances, and chairside functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chairside functions.

	Class	Lab	Shop/Cli	Credit
DEN 230 Dental Hygiene Theory IV	1	0	0	1

Prerequisites: DEN 220
Corequisites: DEN 231
This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties and completion of a case presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry and principles of case presentations.

DEN 231 Dental Hygiene Clinic IV	0	0	12	4

Prerequisites: DEN 221
Corequisites: DEN 230
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating patients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN 232 Community Dental Health	2	0	3	3

Prerequisites: Acceptance into Dental Hygiene program Corequisites: None
This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventive dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.

DEN 233 Professional Development	2	0	0	2

Prerequisites: Acceptance into Dental Hygiene program Corequisites: None
This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, résumés, interviews, and legal liabilities as health care professionals. Upon completion, students should be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.

DFT 170 Engineering Graphics	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces basic engineering graphics skills, equipment, and applications (manual and computer-aided). Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorial drawings, and sectional and auxiliary views. Upon completion, students should be able to demonstrate an understanding of basic engineering graphic principles and practices. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

ECO 251 Principles of Microeconomics	3	0	0	3

Prerequisites: DMA 010, DMA 020, DMA 030, DRE 098
Corequisites: None
This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion,students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved for transfer under the CAA general education course in social/behavioral sciences.*

	Class	Lab	Shop/Cli	Credit
ECO 252 Principles of Macroeconomics	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

EDU 119 Intro to Early Child Education	4	0	0	4

Prerequisites: None
Corequisites: None
This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional develop- mentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, appropriate environments, schedules, and activity plans.

EDU 131 Child, Family, & and Community	3	0	0	3

Prerequisites: None
Corequisites: None
This course covers the development of partnerships between culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

EDU 144 Child Development I	3	0	0	3

Prerequisites: None
Corequisites: None
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/ physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

	Class	Lab	Shop/Cli	Credit EDU 145 Child
Development II	3	0	0	3

Prerequisites: EDU 144 Corequisites: None
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of develop- mental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence- based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

EDU 146 Child Guidance 3 0 0 3
Prerequisites: None Corequisites: None
This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

EDU 151 Creative Activities 3 0 0 3
Prerequisites: None Corequisites: None
This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

	Class	Lab	Shop/Cli	Credit
EDU 153 Health, Safety and Nutrition	3	0	0	3

Prerequisites: None Corequisites: None

This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

EDU 214 Early Childhood Interm. Prac.	1	9	0	4

Prerequisites: Take one set: EDU 119, EDU 144, EDU 146 or PSY 244, EDU 119 and EDU 146
Corequisites: None
This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting with the implementation of developmentally appropriate activities and environments for all children; modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits. GPA
2.0 or higher and 9 semester hours credit (9SHC), three semester hours credit (3SHC) of which must come from the core.

EDU 216 Foundations of Education	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces the examination of the American educational systems and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in birth through grade 12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/ traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level.

	Class	Lab	Shop/Cli	Credit
EDU 221 Children with Exceptionalities	3	0	0	3

Prerequisites: Take One Set Set 1: EDU 144, EDU 145
Set 2: PSY 244 PSY 245

Corequisites: None

This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development.

EDU 234 Infants, Toddlers, & Twos 3 0 0 3

Prerequisites: EDU 119

Corequisites: None

This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, working with diverse families to provide positive, supportive, and engaging early learning activities and interactions through field experiences and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive curriculum planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

EDU 250 Teacher Licensure Preparation 3 0 0 3

Prerequisites: None

Corequisites: Take One Set: Set 1: ENG-111 and MAT-143
Set 2: ENG-111 and MAT-152 Set 3: ENG-111 and MAT-171

This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.

	Class	Lab	Shop/Cli	Credit
EDU 261 Early Childhood Admin. I	3	0	0	3

Prerequisites: None Corequisites: EDU 119

This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

EDU 262 Early Childhood Admin. II 3 0 0 3

Prerequisites: EDU 119,EDU 261 Corequisites: None

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement
and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.

EDU 271 Educational Technology 2 2 0 3

Prerequisites: None Corequisites: None

This course introduces the ethical use of technology to enhance teaching and learning in all educational settings. Emphasis is placed on technology concepts, ethical issues, digital citizenship, instructional strategies, assistive technology, and the use of technology for professional development and communication. Upon completion, students should be able to discuss technology concepts, ethically use a variety of technology resources, demonstrate appropriate technology skills in educational environments, and identify assistive technology.

EDU 280 Language & Literacy Exper. 3 0 0 3

Prerequisites: None Corequisites: None

This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

	Class	Lab	Shop/Cli	Credit
EDU 284 Early Childhood Capstone Prac.	1	9	0	4

Prerequisites: Take one set:

Set 1: EDU 119, EDU 144, EDU 145, EDU 146, and EDU 151
Set 2: EDU 119, PSY-244, PSY 245, EDU 146, and EDU 151
Set 3: EDU 119, PSY 245, EDU 144, EDU 146, and EDU 151
Set 4: EDU 119, PSY 244, EDU 145, EDU 146, and EDU 151

Corequisites: DRE 098

This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments. To be taken final semester prior to graduation. GPA 2.0 or higher

EDU 288 Adv. Issues in Early Childhood Ed.	2	0	0	2

Prerequisites: None Corequisites: None

This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

EGR 131 Intro to Electronics Tech	1	2	0	2

Prerequisites: None Corequisites: None

This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem-solving techniques, and use a scientific calculator.

EGR 150 Intro to Engineering	1	2	0	2

Prerequisites: None Corequisites: None

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

EGR 210 Intro to Elec/Comp Eng Lab	1	3	0	2

Prerequisites: MAT 271; PHY251

Corequisites: None

This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

EGR 212 Logic System Design I	3	0	0	3

Prerequisites: MAT 271; PHY251

Corequisites: None

This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

	Class	Lab	Shop/Cli	Credit
EGR 214 Numerical Methods for Engineers	3	0	0	3

Prerequisites: MAT 272
Corequisites: None
This course introduces contemporary methods and tools for numerical analysis in engineering. Topics include numerical methods in differentiation, integration, root-finding, linear and non-linear regressions. Upon completion, students should be able to demonstrate: basic structured programming concepts involving decision making, loops, functions, and parameter passing: common numerical methods used in engineering analysis; estimation of the amount of error inherent in different numerical methods; assessment of numerical efficiency; method assessment of numerical efficiency; and convergence properties of different numerical methods.. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

EGR 220 Engineering Statics	3	0	0	3

Prerequisites: PHY 251
Corequisites: MAT 272
This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability analyze systems of forces in static equilibrium. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

EGR 225 Engineering Dynamics	3	0	0	3

Prerequisites: EGR 220
Corequisites: MAT 273
This course introduces the concepts of engineering based on forces in equilibrium. Topics include This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

ELC 131 Circuit Analysis I	3	3	0	4

Prerequisites: None Corequisites: None

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC 117 Motors and Controls	2	6	0	4

Prerequisites: None Corequisites: None
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC 128 Intro to PLC	2	3	0	3

Prerequisites: None Corequisites: None
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

	Class	Lab	Shop/Cli	Credit
ELC 135 Electrical Machines	2	2	0	3

Prerequisites: None
Corequisites: None
This course covers magnetic circuits, transformers, DC/AC machines, and the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC machine circuits.

ELC 136 Electrical Machines II	3	3	0	4

Prerequisites: None
Corequisites: None
This course covers DC/AC machine fundamentals including applications and control. Topics include control devices and induction single and polyphase AC motors, DC motors, stepper, and special purpose motors. Upon completion, students should be able to perform regulation and efficiency calculations and apply motor theory to practical control applications.

ELC 220 Photovoltaic Sys Tech	2	3	0	3

Prerequisites: None Corequisites: None
This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (pv) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications.

ELC 221 Adv PV Sys Designs	2	3	0	3

Prerequisites: ELC 220 Corequisites: None
This course introduces specific elements in photovoltaic (pv) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

	Class	Lab	Shop/Cli	Credit
ELC 228 PLC Applications	2	6	0	4

Prerequisites: ELC 128 Corequisites: None

This course covers programming and applications of programmable logic controllers. Emphasis is placed on programming techniques, networking, specialty I/O modules, and system troubleshooting. Upon completion, students should be able to specify, implement, and maintain complex PLC controlled systems.

ELC 229 Applications Project	1	3	0	2

Prerequisites: ATR 280 and ELC 128 Corequisites: None

This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project.

ELN 110 Survey of Electronics	2	2	0	3

Prerequisites: None Corequisites: ELC 131

This course introduces fundamental electrical and electronic concepts for non-electron- ic majors. Emphasis is placed on terminology and devices used in basic electronic and digital applications. Upon completion, students should be able to demonstrate a grasp of the fundamentals of modern electronic circuits.

ENG 011 Writing and Inquiry Support	1	2	0	2

Prerequisites: None

Corequisites: None

This course is designed to support students in the development of skills necessary for success in ENG 111 by complementing, supporting, and reinforcing ENG 111 Student Learning Outcomes. Emphasis is placed on developing a growth mindset, expanding skills for use in active reading and writing processes, recognizing organizational relationships within texts from a variety of genres and formats, and employing appropriate technology when reading and composing texts. Upon completion, students should be able to apply active reading strategies to college-level texts and produce unified, well-developed writing using standard written English.

ENG 111 Writing & Inquiry	3	0	0	3

Prerequisites: None

Corequisites: ENG 011

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. *This course has been approved for transfer under the CAA as a general education course in English composition. This is a Universal General Education Transfer Component (UGETC) course.*

	Class	Lab	Shop/Cli	Credit
ENG 112 Writing/Research in the Disc	3	0	0	3

Prerequisites: ENG 111
Corequisites: None
This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. *This course has been approved for transfer under the CAA as a general education course in English composition. This is a UGETC course.*

ENG 114 Prof. Research & Reporting	3	0	0	3

Prerequisites: ENG 111
Corequisites: None
This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able towork individually and collaboratively to produce well-designed business and professional written and oral presentations. *This course has been approved for transfer under the CAA as a general education course in English composition.*

ENG 131 Introduction to Literature	3	0	0	3

Prerequisites: ENG 111
Corequisites: ENG 112, ENG 113 or ENG 114
This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. *This course has been approved for transfer under the CAA as a general education course in English composition.*

ENG 231 American Literature I	3	0	0	3

Prerequisites: Take one: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. *This course has been approved fortransfer under the CAA as a general education course in English composition. This is a UGETC course.*

	Class	Lab	Shop/Cli	Credit
ENG 232 American Literature II	3	0	0	3

Prerequisites: Take one: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course inhumanities/fine arts. This is a UGETC course.*

ENG 241 British Literature I 3 0 0 3
Prerequisites: Take one: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts. This is a UGETC course.*

ENG 242 British Literature II 3 0 0 3
Prerequisites: Take one: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical back ground, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts. This is a UGETC course.*

FRE 111 Elementary French I 3 0 0 3
Prerequisites: None Corequisites: None
This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. *This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a general education core requirement course in humanities/fine arts.*

FRE 112 Elementary French II 3 0 0 3
Prerequisites: FRE 111 Corequisites: None
This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. *This course has been approved for transferunder the CAA as a general education core requirement course in humanities/fine arts.*

	Class	Lab	Shop/Cli	Credit
	3	0	0	3

GRO-120Gerontology

Prerequisites: None Corequisites: None
This course covers the psychological, social, and physical aspects of aging. Emphasis is placed on the factors that promote mental and physical well-being. Upon completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

HBI-110 Issues and Trends in HBI **3** **0** **0** **3**
Prerequisites: none
Corequisites: none
This course is a survey of current and emerging technology applications and data standards in the healthcare industry. Topics include the history, implementation, use, management, and impact of information technology in healthcare settings. Upon completion, students should have an understanding of the current trends and issues in healthcare informatics

HEA 110 Personal Health/Wellness 3 0 0 3
Prerequisites: None Corequisites: None
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. *This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a premajor and/ or elective course requirement.*

HIS 111 World Civilizations I 3 0 0 3
Prerequisites: None Corequisites: None
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a Universal General Education Transfer Component (UGETC) course.*

HIS 112 World Civilizations II 3 0 0 3
Prerequisites: None
Corequisites: None
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a UGETCcourse.*

HIS 131 American History I 3 0 0 3
Prerequisites: None Corequisites: None
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a UGETC course.*

	Class	Lab	Shop/Cli	Credit
HIS 132 American History II	3	0	0	3

Prerequisites: None Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a UGETC course.*

HSE 110 Introduction to Human Services	2	2	0	3

Prerequisites: None Corequisites: None

This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

HSE 112 Group Process I	1	2	0	2

Prerequisites: None Corequisites: None

This course introduces interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to show competence in identifying and explaining how people are influenced by their interactions in group settings.

HSE 123 Interviewing Techniques	2	2	0	3

Prerequisites: None Corequisites: None

This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

HSE 125 Counseling	2	2	0	3

Prerequisites: None Corequisites: None

This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self- exploration, problem solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

	Class	Lab	Shop/Cli	Credit
HSE 155 Community Resources Manag.	2	0	0	2

Prerequisites: None Corequisites: None

This course focuses on the working relationships between human services agencies and the community. Emphasis is placed on identification and observation of community resources which contribute to the achievement of the human services mission. Upon completion, students should be able to demonstrate knowledge about mobilizing of community resources, marshaling public support, and determining appropriate sources of funding.

HSE 210 Human Services Issues	2	0	0	2

Prerequisites: Successful completion of 12 SHC in HSE Curriculum Corequisites: None

This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

HSE 220 Case Management	2	2	0	3

Prerequisites: HSE 110 Corequisites: None

This course covers the variety of tasks associated with professional case management. Topics include treatment planning, needs assessment, referral procedures, and follow- up and integration of services. Upon completion, students should be able to effectively manage the care of the whole person from initial contact through termination of services.

HSE 225 Crisis Intervention	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the basic theories and principles of crisis intervention. Empha- sis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

HUM 115 Critical Thinking	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

	Class	Lab	Shop/Cli	Credit
HUM 120 Cultural Studies	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

HUM 160 Introduction to Film	2	2	0	3

Prerequisites: None Corequisites: None

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

HYD 110 Hydraulics/Pneumatics I	2	3	0	3

Prerequisites: None Corequisites: None

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application and troubleshooting.

ISC 112 Industrial Safety	2	0	0	2

Prerequisites: None Corequisites: None

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

LDR-110 Introduction to Leadership (3 Credits)

This course introduces students to concepts, models and practices of leadership that are effective in governmental, business, civic, community and political organizations. Emphasis is placed on the purposes and structures of various types of organizations and examines the leadership styles and strategies that align with these organizations. Upon completion, students should be able to recognize and apply the elements effective leadership in a variety of contexts.

Requisites:

None

LDR-210 Leadership Capacity Assessment (3 Credits)

This course introduces the methodologies and processes to better understanding one's capacity to lead. Topics include conceptualizing motivation, identifying good leadership traits, creating a vision, understanding influence, overcoming obstacles and developing leadership capacity. Upon completion, students should be able to identify their strengths and weaknesses as a leader.

Requisites:

Take LDR-110 - Must be completed prior to taking this course.

LDR-225 Leading Change (3 Credits)

This course provides the opportunity to develop the knowledge base necessary to lead and manage organizational change with an emphasis on a 360-degree approach to understanding change. Emphasis is placed on various aspects of implementing change, such as: addressing the human psychology of change through innovative technology, social media, theoretical frameworks, understanding change agents, and operations. Upon completion, students should be able to demonstrate knowledge and practical skills in how to connect change with strategy, anticipate resistance, assess readiness, and measure sustainability.

Requisites:

Take LDR-110 - Must be completed prior to taking this course.

MAT 010 Math Measurement & Lit. Sup. 0 2 0 1
Prerequisites: None
Corequisites: None
This course provides an opportunity to customize foundational math content specific to Math Measurement & Literacy.
Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Math Measurement & Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT 110 Math Measurement & Literacy 2 2 0 3
Prerequisites: None
Corequisites: MAT 010
This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

MAT 043 Quantitative Literacy Support 1 2 0 2
Prerequisites: None
Corequisites: None
This course provides an opportunity to customize foundational math content specific to Quantitative Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Quantitative Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT 052 Statistical Methods I Support 1 2 0 2
Prerequisites: None
Corequisites: None
This course provides an opportunity to customize foundational math content specific to Statistical Methods I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Statistical Methods I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT 071 Fast Track Intro Algebra 1 0 0 1
Prerequisites: None
Corequisites: None
This course provides an opportunity to customize foundational math content specific to Precalculus Algebra. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in PrecalculusAlgebra by obtaining skills through a variety of instructional strategies with emphasis placed on the most essentialprerequisite knowledge.

	Class	Lab	Shop/Cli	Credit
MAT143 Quantitative Literacy	2	2	0	3

Prerequisites: None
Corequisites: MAT 043

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should
be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative). This is a Universal General Education Transfer Component (UGETC) course.*

MAT 152	3	2	0	4
Statistical Methods I				

Prerequisites: MAT 052
Corequisites: None

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon comple- tion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative). This is a UGETC course.*

MAT 171 Precalculus Algebra	3	2	0	4

Prerequisites: None
Corequisites MAT 071

This course is designed to develop topics which are fundamental to the study of calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential and logarithmic) in multiple representations.
Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative). This is a UGETC course.*

	Class	Lab	Shop/Cli	Credit
MAT172 Precalculus Trigonometry	3	2	0	4

Prerequisites MAT 171 Corequisites None

This course is designed to develop an understanding of topics which are fundamental to the study of calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative).*
This is a UGETC course.

MAT 271 Calculus I	3	2	0	4

Prerequisites: MAT 172
Corequisites: None

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative).*
This is a UGETC course.

MAT 272 Calculus II	3	2	0	4

Prerequisites: MAT 271
Corequisites: None

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in mathematics (quantitative). This is a UGETC course.*

MAT 273 Calculus III	**3**	**2**	**0**	**4**

Prerequisites: Mat 272 Corequisites: None

This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology

MAT 280 Linear Algebra	2	2	0	3

Prerequisites: MAT 271
Corequisites: None

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

Competencies

·Student Learning Outcomes

1. Use analytical and graphical representations to apply vector operations in multiple-dimensions.

2. Solve systems of linear equations using multiple manual and technology-based methods; these methods will include but are not limited to Gaussian and Gauss-Jordan.

3. Use eigenvalues, eigenvectors and diagonalization to solve problems in appropriate situations.

4. Use matrix operations and linear transformations to solve problems in appropriate situations.

5. Demonstrate knowledge of orthogonal projections and orthogonal complements of subspaces, and apply to appropriate situations.

6. Use the fundamental concept of a basis for a subspace to give a precise definition of dimensions and rank, and to solve problems in appropriate situations.

7. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

MAT 285 Differential Equations 2 2 0 3

Prerequisites: MAT 272

Corequisites: None

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

Competencies

·Student Learning Outcomes

1. Find general solutions to first-order, second-order, and higher-order homogeneous and non-homogeneous differential equations by manual and technology-based methods.

2. Identify and apply initial and boundary values to find particular solutions to first-order, second-order, and higher order homogeneous and non-homogeneous differential equations by manual and technology-based methods, and analyze and interpret the results.

3. Select and apply appropriate methods to solve differential equations; these methods will include, but are not limited to, undetermined coefficients, variation of parameters, eigenvalues and eigenvectors, LaPlace and inverse LaPlace transforms.

4. Select and apply series techniques to solve differential equations; these techniques will include but are not limited to Taylor series.

5. Select and apply numerical analysis techniques to solve differential equations; these techniques will include but are not limited to Euler, Improved Euler, and Runge-Kutta.

6. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

	Class	Lab	Shop/Cli	Credit
MEC 111 Machine Processes I	1	4	0	3

Prerequisites: None
Corequisites: None

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use andcare of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely manufacture simple parts to specified tolerances.

MEC 128 CNC Machining Processes	2	4	0	4

Prerequisites: None
Corequisites: None
This course covers programming, setup, and operations of CNC turning, milling, and other CNC machines. Topics include programming formats, control functions, program editing, and part production and inspection. Upon completion, students should be able to manufacture simple parts using CNC machines.

MED 120 Survey Of Med Terminology	2	0	0	2

Prerequisites: None Corequisites: None
This course introduces the vocabulary, abbreviations and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes and word roots. Upon completion, students should be able to pronounce, spell and define accepted medical terms.

MED 121 Medical Terminology I	3	0	0	3

Prerequisites: None
Corequisites: None
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122 Medical Terminology II	3	0	0	3

Prerequisites: MED 121
Corequisites: None
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

	Class	Lab	Shop/Cli	Credit MED 130 Administrative
Office Proc. I	1	2	0	2

Prerequisites: None
Corequisites: None
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED 232 Medical Insurance Coding	1	3	0	2

Prerequisites: MED 121 Corequisites: None
This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

MKT 120 Principles of Marketing	3	0	0	3

Prerequisites: None Corequisites: None
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MLT 110 Introduction to MLT	2	3	0	3

Prerequisites: Acceptance into the Medical Laboratory Technology program Corequisites: None
This course introduces all aspects of the medical laboratory profession. Topics include health care/laboratory organization, professional ethics, basic laboratory techniques, safety, quality assurance, and specimen collection. Upon completion, students should be able to demonstrate a basic understanding of laboratory operations and be able to perform basic laboratory skills.

MLT 111 Urinalysis & Body Fluids	1	3	0	2

Prerequisites: MLT 110 Corequisites: None
This course introduces the laboratory analysis of urine and body fluids. Topics include physical, chemical, and microscopic examination of the urine and body fluids. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting urinalysis and body fluid tests.

	Class	Lab	Shop/Cli	Credit
MLT 120 Hematology/Hemostasis I	3	3	0	4

Prerequisites: MLT 110 Corequisites: None
This course introduces the theory and technology used in analyzing blood cells and the study of hemostasis. Topics include hematology, hemostasis, and related laboratory testing. Upon completion, students should be able to demonstrate theoretical comprehension of hematology/hemostasis, perform diagnostic techniques, and correlate laboratory findings with disorders.

MLT 125 Immunohematology I	4	3	0	5

Prerequisites: MLT 110 Corequisites: None
This course introduces the immune system and response; basic concepts of antigens, antibodies, and their reactions; and applications in transfusion medicine and serodiagnostic testing. Emphasis is placed on immunological and blood banking techniques including concepts of cellular and humoral immunity and pretransfusion testing. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting routine immunological and blood bank procedures.

MLT 130 Clinical Chemistry I	3	3	0	4

Prerequisites: MLT 110 Corequisites: None
This course introduces the quantitative analysis of blood and body fluids and their variations in health and disease. Topics include clinical biochemistry, methodologies, instrumentation, and quality control. Upon completion, students should be able to demonstrate theoretical comprehension of clinical chemistry, perform diagnostic techniques, and correlate laboratory findings with disorders.

MLT 141 General Clinical Micro	2	2	0	3

Prerequisites: BIO 175, MLT 110 Corequisites: None
This course is a comprehensive survey of clinical microbiology. Emphasis is placed on morphology and identification of pathogenic organisms covering both basic and special areas of clinical microbiology. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting clinical microbiology procedures.

MLT 216 Professional Issues	0	2	0	1

Prerequisites: MLT 110 Corequisites: None
This course surveys professional issues in preparation for career entry. Emphasis is placed on work readiness and theoretical concepts in microbiology, immunohematology, hematology, and clinical chemistry. Upon completion, students should be able to demonstrate competence in career entry-level areas and be prepared for the national certification examination.

	Class	Lab	Shop/Cli	Credit
MLT 251 MLT Practicum I	0	0	3	1

Prerequisites: MLT 111, MLT 115, MLT 120, MLT 125
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

MLT 253 MLT Practicum I	0	0	9	3

Prerequisites: MLT 111, MLT 115, MLT 120, MLT 125, MLT 130, MLT 141, MLT 216
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

MLT 254 MLT Practicum I	0	0	12	4

Prerequisites: MLT 111, MLT 115, MLT 120, MLT 125, MLT 130, MLT 141, MLT 216
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

MLT 263 MLT Practicum II	0	0	9	3

Prerequisites: MLT 111, MLT 115, MLT 120, MLT 125, MLT 130, MLT 141, MLT 216
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

MLT 273 MLT Practicum III	0	0	9	3

Prerequisites: MLT 111, MLT 115, MLT 120, MLT 125, MLT 130, MLT 141, MLT 216
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

MNT 110 Intro. to Maint Procedures	1	3	0	2

Prerequisites: None Corequisites: None
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

	Class	Lab	Shop/Cli	Credit
MUS 110 Music Appreciation	3	0	0	3

Prerequisites: None Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the CAA. This course has been approved for transfer under the CAA as a general education course in humanities/fine arts. This is a UGETC course.*

MUS 112 Introduction to Jazz	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts. This is a UGETC course.*

MUS 210 History of Rock Music	3	0	0	3

Prerequisites: None Corequisites: None

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

NAS 101 Nurse Aide I	3	4	3	6

Prerequisites: None Corequisites: None

This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/ rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry.

	Class	Lab	Shop/Cli	Credit
NAS 102 Nurse Aide II	3	2	6	6

Prerequisites: NAS 101
Corequisites: None
This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry.

NAS 107 Medication Aide	0	2	0	1

Prerequisites: None
Corequisites: None
This course will cover the six rights of medication administration for non-licensed personnel. Topics will include medication administration via the oral, topical and installation routes, medical asepsis, hand hygiene, terminology and legal implications. Upon completion, students should be able to demonstrate skills necessary to qualify as a medication aide with the North Carolina Medication Aide Registry.

NET 125Introduction to Networks	1	4	0	3

Prerequisites: None
Corequisites: None
This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

NOS 110 Operating System Concepts	2	3	0	3

Prerequisites: CIS 110
Corequisites: None
This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is place on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

NOS 130 Windows Single User	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

	Class	Lab	Shop/Cli	Credit
NOS 230 Windows Administration I	2	2	0	3

Prerequisites: None
Corequisites: None

This course covers the installation and configuration of a Windows server operating system. Emphasis is placed on the basic configuration on core network services, Active Director and group policies. Upon completion students should be able to install and configure a Windows server operating system.

NUR 101 Practical Nursing I	7	6	6	11

Prerequisites: Admission into the PN program
Corequisites: None

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence- based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

NUR 102 Practical Nursing II	7	0	9	10

Prerequisites: NUR 101
Corequisites: None

This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

NUR 103 Practical Nursing III	6	0	9	9

Prerequisites: NUR 102
Corequisites: None

This course is designed to assimilate the concepts within the three domains ofthe individual, healthcare, and nursing. Emphasis is placed on biophysical and psychosocial concepts, professional behaviors, healthcare systems, health policy, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide safe, quality, and individualized entry level nursing care.

	Class	Lab	Shop/Cli	Credit NUR 111 Intro to Health
Concepts	4	6	6	8

Prerequisites: Admission into the ADN program Corequisites: None
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 112 Health-Illness Concepts	3	0	6	5

Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid- base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health- wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 113 Family Health Concepts	3	0	6	5

Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 114 Holistic Health Concepts	3	0	6	5

Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/ affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

	Class	Lab	Shop/Cli	Credit
NUR 211 Health Care Concepts	3	0	6	5

Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-well- ness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 212 Health System Concepts	3	0	6	5

Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/ loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based prac- tice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 213 Complex Health Concepts	4	3	15	10

Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212
Corequisites: None
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/ electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness- illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

OST 131 Keyboarding	1	2	0	2

Prerequisites: None
Corequisites: None
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

OST 134 Text Entry & Formatting	2	2	0	3

Prerequisites: OST 131
Corequisites: None
This course is designed to provide skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability.

	Class	Lab	Shop/Cli	Credit
OST 136Word Processing	2	2	0	3

Prerequisites:
Corequisites: None
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

OST 148 Med. Ins & Billing	3	0	0	3

Prerequisites: MED 121, Corequisites: None
This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

OST 149 Medical Legal Issues	3	0	0	3

Prerequisites:
Corequisites: None
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professionallyabilities; and medical practiceliability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

OST 164Office Editing	3	0	0	3

Prerequisites:
Corequisites: None
This course provides a comprehensive study of editing skills needed in the work place Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 181Office Procedures	2	2	0	3

Prerequisites: None Corequisites: None
This course introduces the skills and procedures needed in today's office. Topics include effectively interacting with co-Workers and the public, processing simple financial and information documents, and performing functions typical oftoday's offices. Upon completion, students should be able to display skills and decision-making abilities essential lfor functioning in the total office context.

OST 184 Records Management	2	2	0	3

Prerequisites: DRE 098 Corequisites: None
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to setup and maintain a records management system.

	Class	Lab	Shop/Cli	Credit
OST 233 Office Publications Design	2	2	0	3

Prerequisites: OST 136
Corequisites: None
This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

OST 243 Medical Office Simulation	2	2	0	3

Prerequisites: OST 148
Corequisites: None
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

OST 284 Emerging Technologies	1	2	0	2

Prerequisites: None
Corequisites: None
This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional.

OST-286 Professional Development	3	0	0	3

State Prerequisites: None State
Corequisites: None
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

OST 289 Office Admin Capstone	2	2	0	3

Prerequisites: OST-134 or OST 136, OST-164
Corequisites: None
This course is designed to be a capstone course for the office professional and provides a working knowledge of administrative office procedures. Emphasis is placed on written and oral communication skills, office software applications, office procedures, ethics, and professional development. Upon completion, students should be able to adapt in an office environment.

	Class	Lab	Shop/Cli	Credit
PBT 100 Phlebotomy Technology	5	2	0	6

Prerequisites GED® or HS Diploma
Corequisites: PBT 101
This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. *This is a certificate-level course.*

PBT 101 Phlebotomy Practicum	0	0	9	3

Prerequisites: GED® or HS Diploma
Corequisites: PBT 100
This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings. *This is a certificate-level course.*

PED 110 Fit and Well for Life	1	2	0	2

Prerequisites: None
Corequisites: None
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. *This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a premajor and/or elective course requirement.*

PED 111 Physical Fitness I	0	3	0	1

Prerequisites: None
Corequisites: None
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

	Class	Lab	Shop/Cli	Credit
PED 117 Weight Training I	0	3	0	1

Prerequisites: None
Corequisites: None

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

PED 121 Walk, Jog, Run	0	3	0	1

Prerequisites: None
Corequisites: None
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

PED 130 Tennis-Beginning	0	2	0	1

Prerequisites: None
Corequisites: None
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.*

PHY 110 Conceptual Physics	3	0	0	3

Prerequisites: None
Corequisites: None
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a Universal General Education Transfer Component (UGETC) course.*

	Class	Lab	Shop/Cli	Credit PHY 110A Conceptual
Physics Lab	0	2	0	1

Prerequisites: None Corequisites: PHY 110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

PHY 251 General Physics I 3 3 0 4
Prerequisites: MAT 271
Corequisites: MAT 272
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

PHY 252 General Physics II 3 3 0 4
Prerequisites: MAT 272 and PHY 251 Corequisites: None
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This is a UGETC course.*

POL 120 American Government 3 0 0 3
Prerequisites: None Corequisites: None
This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a UGETC course.*

	Class	Lab	Shop/Cli	Credit
PSY 118 Interpersonal Psychology	3	0	0	3

Prerequisites: None Corequisites: None

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/ leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

PSY 150 General Psychology 3 0 0 3

Prerequisites: None Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a ba- sic knowledge of the science of psychology. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences. This is a UGETC course.*

PSY 241 Developmental Psychology 3 0 0 3

Prerequisites: PSY 150 Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. *This course has been approved for transfer under the CAA as a general education course in social/ behavioral sciences.*

PSY 281 Abnormal Psychology 3 0 0 3

Prerequisites: PSY 150 Corequisites: None

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences.*

	Class	Lab	Shop/Cli	Credit
REL 110 World Religions	3	0	0	3

Prerequisites: None
Corequisites: ENG 111

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

SAB 252 Twelve Step Study 3 0 0 3

Prerequisites: None Corequisites: None

This course studies various support groups based on the twelve-step model with a focus on their relationship to treatment. Topics include a study of the twelve steps and traditions of Alcoholics Anonymous and Narcotics Anonymous and their use in professional settings. Upon completion, students should be able to demonstrate a working knowledge of the twelve-step programs.

SEC 110 Security Concepts 2 2 0 3

Prerequisites: None
Corequisites: None

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

SOC 210 Introduction to Sociology 3 0 0 3

Prerequisites: None Corequisites: None

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved for transfer under the Comprehensive Articulation Agreement (CAA) as a general education course in social/behavioral sciences. This is a Universal General Education Transfer Component (UGETC) course.*

	Class	Lab	Shop/Cli	Credit
SOC 213 Sociology of the Family	3	0	0	3

Prerequisites: None None
Corequisites:

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences.*

SOC 220 Social Problems 3 0 0 3

Prerequisites: None Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. *This course has been approved for transfer under the CAA as a general education course in social/behavioral sciences.*

SOC 240 Social Psychology 3 0 0 3

Prerequisites: None
Corequisites: None

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. *This course has been approved to satisfy the CAA general education core requirement in social/behavioral sciences.*

SPA 111 Elementary Spanish I 3 0 0 3

Prerequisites: None
Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

	Class	Lab	Shop/Cli	Credit
SPA 112 Elementary Spanish II	3	0	0	3

Prerequisites: SPA 111
Corequisites: None
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. *This course has been approved for transfer under the CAA as a general education course in humanities/fine arts.*

SWK 110 Introduction to Social Work	3	0	0	3

Prerequisites: None Corequisites: None
This course examines the historical development, values, orientation, and professional standards of social work and focuses on the terminology and broader systems of social welfare. Emphasis is placed on the various fields of practice including those agencies whose primary function is financial assistance, corrections, mental health, and protective services. Upon completion, students should be able to demonstrate an understanding of the knowledge, values, and skills of the social work professional.

SWK 113 Working with Diversity	3	0	0	3

Prerequisites: None Corequisites: None
This course examines and promotes understanding, sensitivity, awareness, and knowledge of human diversity. Emphasis is placed on professional responsibilities, duties, and skills critical to multicultural human services practice. Upon completion, students should be able to integrate and expand knowledge, skills, and cultural awareness relevant to diverse populations.

SWK-115 Community Resources	2	2	0	3

Prerequisites: Take SWK-110 Corequisites: None
This course introduces community resources essential to social work practice. Emphasis is placed on awareness of and interaction with community service personnel. Upon completion, students should be able to identify resources and assess critical community needs.

SWK-214 Social Work Law	3	0	0	3

Prerequisites: Take SWK-110 Corequisites: None
This course introduces the major provisions of social services law, current trends, legislative developments, and court procedures. Emphasis is placed on the interpretation of the laws and court decisions related to various social services populations. Upon completion, students should be able to interpret these laws and their implications for social services practice.

	Class	Lab	Shop/Cli	Credit
SWK-220 SWK Issues in Client Services	3	0	0	3

Prerequisites: None

Corequisites: None
This course introduces the professional standards, values, and issues in social services. Topics include confidentiality, assessment of personal values, professional responsibilities, competencies, and ethics. Upon completion, students should be able to under- stand and discuss multiple ethical issues applicable to social work and apply various decision-making models to current issues.

TRN 110 Intro to Transport Tech 1 2 0 2
Prerequisites: None
Corequisites: None
This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

TRN 120 Basic Transportation Electricity 4 3 0 5
Prerequisites: None
Corequisites: None
This course covers basic electrical theory, wiring diagrams, test equipment, anddiagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring,battery, starting, charging, and electrical concerns.

TRN 140Transportation Climate Control 1 2 0 2
Prerequisites: None
Corequisites: TRN 140A
This course covers the theory of refrigeration and heating, electrical/electronic/ pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling
of refrigerants, and safety and environmental regulations. Upon completion, students
should be able to diagnose and repair vehicle climate control systems.

	Class	Lab	Shop/Cli	Credit TRN 140A Transp. Climate
Control Lab	1	2	0	2

Prerequisites: None
Corequisites: TRN 140
This course provides experiences for enhancing student skills in the diagnosis and re- pair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

TRN 170 PC Skills for Transportation	1	2	0	2

Prerequisites: None
Corequisites: None
This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

WBL 110 World of Work	1	0	0	1

Prerequisites: None
Corequisites: None
This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

WBL 111 Work Based Learning 1	0	0	10	1

Prerequisites: 9 SHC in HSE program
Corequisites: WBL 115
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL 115 Work Based Learning Seminar I	1	0	0	1

Prerequisites: 9 SHC in HSE program
Corequisites: WBL 111
This course is designed to be taken during the same semester as WBL 111. This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

	Class	Lab	Shop/Cli	Credit
WBL 121 Work Based Learning II	1	0	10	1

Prerequisites: 15 SHC in HSE program
Corequisites: WBL 125
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL 125 Work Based Learning Seminar I	1	0	0	1

Prerequisites: WBL 111, WBL 115 15 SHC in HSE program
Corequisites: WBL121
This course is designed to be taken during the same semester as WBL 121. It allows students to reflect on what they are learning during their co-op work experience and to make connections between academic concepts and their application in the field. Emphasis is placed on integrating classroom learning with related work experience. Through weekly seminars, students will keep a journal of their work experience and write a paper on both WBL experiences.

WEB 110 Internet/Web Fundamentals	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand- coded website created with mark-up language, and effectively use and understand the function of search engines.

WEB 111 Intro to Web Graphics	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.

	Class	Lab	Shop/Cli	Credit WEB 120 Intro. to Internet
Multimedia	2	2	0	3

Prerequisites: None
Corequisites: None
This is the first of two courses covering the creation of internet multimedia. Topics include internet multimedia file types, file type conversion, acquisition of digital audio/ video, streaming audio/video and graphics animation plug-in programs and other related topics. Upon completion, students should be able to create internet multimedia presentations utilizing a variety of methods and applications.

WEB 140 Web Development Tools	2	2	0	3

Prerequisites: None
Corequisites: None
This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

WLD 110 Cutting Processes	1	3	0	2

Prerequisites: None
Corequisites: None
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

WLD 112 Basic Welding Processes	1	3	0	2

Prerequisites: None
Corequisites: None
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD 115 SMAW (Stick) Plate	2	9	0	5

Prerequisites: None
Corequisites: None
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4

Prerequisites: WLD 115
Corequisites: None
This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

	Class	Lab	Shop/Cli	Credit
WLD 121 GMAW (MIG) FCAW/Plate	2	6	0	4

Prerequisites: None
Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD 131 GTAW (TIG) Plate	2	6	0	4

Prerequisites: None
Corequisites: None
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3

Prerequisites: WLD 131
Corequisites: None
This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

WLD 141 Symbols & Specifications	2	2	0	3

Prerequisites: None
Corequisites: None
This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 151 Fabrication I	2	6	0	4

Prerequisites: WLD 115, WLD 121, or WLD 131
Corequisites: None
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

	Class	Lab	Shop/Cli	Credit
WLD 262 Inspection and Testing	2	2	0	3

Prerequisites: None
Corequisites: None

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

Common Course Library (in part) as presented on the North Carolina Community College website:
https://webadvisor.nccommunitycolleges.edu/WebAdvisor/WebAdvisor?type=M&constituency=WBAP&pid=CORE-WBAP&TOKENIDX=177603832