
CURRICULUM
COURSE
DESCRIPTIONS

164 COURSE DESCRIPTIONS

ACADEMIC RELATED

		Class	Lab	Credit
ACA 111	College Student Success	1	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 communications. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACCOUNTING

ACC 115	College Accounting	3	2	4
Prerequisites:	None			
Corequisites:	None			

This course introduces basic accounting principles for a sole proprietorship. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization. *This course is intended for those who have not received credit for ACC 120.*

ACC 120	Principles of Financial Acct.	3	2	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

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		Class	Lab	Credit
ACC 121	Prin. of Managerial Acct.	3	2	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

ACC 131	Federal Income Taxes	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Topics include tax law, electronic research and methodologies and the use of technology for the preparation of individual and business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax laws, and complete federal tax returns for individuals, partnerships, and corporations.

ACC 140	Payroll Accounting	1	2	2
Prerequisites:	ACC 115 or ACC 120			
Corequisites:	None			

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.

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		Class	Lab	Credit
ACC 150	Accounting Software Appl.	1	2	2
Prerequisites:	ACC 115 or ACC 120			
Corequisites:	None			

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 solve accounting problems.

ACC 220	Intermediate Accounting I	3	2	4
Prerequisites:	ACC 121			
Corequisites:	None			

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and an extensive analyses of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC 226	Advanced Managerial Acct	3	0	3
Prerequisites:	ACC 121			
Corequisites:	None			

This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.

AGRICULTURE

		Class	Lab	Credit
AGR 110	Agricultural Economics	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course provides an introduction to basic economic principles in agriculture. Topics include supply and demand, the role of agriculture in the economy, economic systems, and micro- and macroeconomics. Upon completion, students should be able to explain economic systems, interpret supply and demand curves, and complete cost and revenue production schedules.

AGR 150	Ag-O-Metrics	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces basic calculations for agricultural applications. Topics include the metric system, land measurement, feed efficiency, rate of gain, chemical calibration, and payroll. Upon completion, students should be able to perform calculations that pertain to agricultural production.

AGR 226	Maint & Serv of Prod Faci	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides a detailed look at maintaining and servicing of production facilities. Emphasis is placed on maintaining electrical equipment, plumbing systems, mechanical equipment and basic welding and cutting practices. Upon completion, students should be able to troubleshoot and repair ventilation equipment, pumps and plumbing, feed lines, curtain controls, and basic electrical controls.

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**AIR CONDITIONING, HEATING
AND REFRIGERATION**

		Class	Lab	Credit
AHR 110	Intro to Refrigeration	2	6	5

Prerequisites: None

Corequisitees: None

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

AHR 120	HVACR Maintenance	1	3	2
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Prerequisites: None

Corequisites: None

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

ANIMAL SCIENCE

ANS 110	Animal Science	3	0	3
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Prerequisites: None

Corequisitees: None

This course introduces the livestock industry. Topics include nutrition, reproduction, production practices, diseases, meat processing, and marketing. Upon completion, students should be able to demonstrate a basic understanding of livestock production practices and the economic impact of livestock in North Carolina.

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		Class	Lab	Credit
ANS 115	Animal Feeds & Nutrition	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course covers the fundamentals of animal feeding and nutrition. Topics include nutrient requirements, digestion, feed formulation, and classification. Upon completion, students should be able to demonstrate a knowledge of nutritional requirements and feeding practices of farm animals.

ANS 120	Beef Production	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides an introduction to the beef cattle industry. Topics include reproduction, cattle management, marketing, anatomy and physiology, and pasture management. Upon completion, students should be able to demonstrate a basic understanding of beef cattle production practices and the economic impact of the beef cattle industry in North Carolina.

ANS 130	Poultry Production	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides an introduction to the poultry industry. Topics include anatomy and physiology, reproduction, incubation, and husbandry. Upon completion, students should be able to demonstrate a basic understanding of poultry production and the economic impact of the poultry industry in North Carolina.

ANS 140	Swine Production	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides an introduction to the swine industry. Topics include basic skills for breeding, farrowing, nursery, and grower/finisher. Upon completion, students should be able to demonstrate a basic understanding of swine production practices and the economic impact of the swine industry in North Carolina.

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		Class	Lab	Credit
ANS 141	Swine Herd Management	2	0	2
Prerequisites:	ANS 140			
Corequisites:	None			

This course is designed to expand topics covered in ANS 140. Emphasis is placed on management techniques as they relate to breeding, farrowing, nursery, and grower/finisher. Upon completion, students should be able to analyze and respond to management and production problems as they occur on the farm.

ANS 150	Animal Health Management	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces animal diseases and health management. Topics include identification, prevention, control, and treatment of diseases. Upon completion, students should be able to recognize disease symptoms, recommend treatments, identify preventive steps, and develop biosecurity procedures.

ANS 160	Animal Waste Management	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces proper animal waste management. Emphasis is placed on waste management practices, environmental laws and issues relating to animal waste, soil and water conservation, and dead animal disposal. Upon completion, students should be able to calculate proper application rates, apply best management practices, and identify methods of animal waste collection, storage, and utilization.

ANS 193	Selected Topics in Animal Science	2	2	3
Prerequisites:	Permission of department chair			
Corequisites:	None			

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

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	Class	Lab	Credit	
ANS 210	Livestock Production Issues	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course explores areas associated with livestock production. Emphasis is placed on monthly work schedules; qualities of a successful manager; and recruiting, motivating, and retaining employees. Upon completion, students should be able to prepare a livestock management program, write a resume, complete an interview, and identify ways to improve community relations.

ANS 212	Livestock Records & Analy	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces records and record keeping systems utilized in the livestock industry. Topics include heritability, cattle performance data, swine performance data, and poultry production. Upon completion, students should be able to select animals based on performance records, evaluate performance of operations, and complete production records.

ANS 213	Animal Reproduction	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course covers principles of reproductive physiology and their practical farm applications. Emphasis is placed on cattle and swine reproduction. Upon completion, students should be able to recognize reproductive anatomy, describe hormone function, and be able to breed animals naturally and artificially.

ART

ART 111	Art Appreciation	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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		Class	Lab	Credit
ART 114	Art History Survey I	3	0	3

Prerequisites: None

Corequisites: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ART 115	Art History Survey II	3	0	3
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Prerequisites: None

Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate a historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ART 116	Survey of American Art	3	0	3
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Prerequisites: None

Corequisites: None

This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

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		Class	Lab	Credit
ART 131	Drawing I	0	6	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

ART 240	Painting I	0	6	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

BIOLOGY

BIO 090	Foundations of Biology	3	2	4
Prerequisites:	None			
Corequisites:	RED 090			

This course introduces basic biological concepts. Topics include basic biochemistry, cell structure and function, interrelationships among organisms, scientific methodology, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level biology courses.

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		Class	Lab	Credit
BIO 110	Principles of Biology	3	3	4
Prerequisites:	None			
Corequisites:	None			

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

BIO 111	General Biology I	3	3	4
Prerequisites:	None			
Corequisites:	None			

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, 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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

BIO 112	General Biology II	3	3	4
Prerequisites:	BIO 111			
Corequisites:	None			

This course is a continuation of BIO 111. Emphasis is placed on organisms, 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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

		Class	Lab	Credit
BIO 120	Introductory Botany	3	3	4
Prerequisites: BIO 110 or BIO 111				
Corequisites: None				

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and nonseed plants. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

BIO 130	Introductory Zoology	3	3	4
Prerequisites: BIO 110 or BIO 111				
Corequisites: None				

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

BIO 140	Environmental Biology	3	0	3
Prerequisites: None				
Corequisites: None				

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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		Class	Lab	Credit
BIO 140A	Environmental Biol Lab	0	3	1
Prerequisites:	None			
Corequisites:	BIO 140			

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

BIO 168	Anatomy and Physiology I	3	3	4
Prerequisites:	High School Biology and Chemistry or BIO 110 and CHM 092			
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 interrelationship. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

BIO 169	Anatomy and Physiology II	3	3	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 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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

COURSE DESCRIPTIONS 177

		Class	Lab	Credit
BIO 275	Microbiology	3	3	4
Prerequisites:	BIO 110 or BIO 112 or BIO 168			
Corequisites:	None			

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

BLUEPRINT READING

BPR 111	Blueprint Reading	1	2	2
Prerequisites:	None			
Corequisites:	None			

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

BPR 121	Blueprint Reading: Mech	1	2	2
Prerequisites:	BPR 111			
Corequisites:	None			

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

BPR 130	Blueprint Reading/Const	1	2	2
Prerequisites:	None			
Corequisites:	None			

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

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BUSINESS

		Class	Lab	Credit
BUS 110	Introduction to Business	3	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

BUS 115	Business Law I	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

BUS 116	Business Law II	3	0	3
Prerequisites:	BUS 115			
Corequisites:	None			

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 121	Business Math	2	2	3
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.

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		Class	Lab	Credit
BUS 137	Principles of Management	3	0	3
Prerequisites: None				
Corequisites: None				
<p>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.</p>				
BUS 152	Human Relations	3	0	3
Prerequisites: None				
Corequisites: None				
<p>This course introduces the concepts of effective human interaction in the business work environment. Topics include effective communication techniques, motivation, ego states, stress, and conflict. Upon completion, students should be able to explain the importance of human relations, apply motivational techniques, and implement strategies for resolving work-related conflicts.</p>				
BUS 153	Human Resource Mgt	3	0	3
Prerequisites: None				
Corequisites: None				
<p>This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.</p>				
BUS 193	Selected Topics in Business Administration	3	0	3
Prerequisites: None				
Corequisites: None				
<p>This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.</p>				

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		Class	Lab	Credit
BUS 240	Business Ethics	3	0	3
Prerequisites: None				
Corequisites: None				

This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

BUS 260	Business Communication	3	0	3
Prerequisites: ENG 111 and one of the following: OST 080, OST 132, CIS 110, or CIS 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 workplace.

CARPENTRY

CAR 111	Carpentry I	3	15	8
Prerequisites: None				
Corequisites: None				

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision. This is a diploma-level course.

CAR 110	Introduction to Carpentry	2	0	2
Prerequisites: None				
Corequisites: None				

This course introduces the student to the carpentry trade. Topics include duties of a carpenter, hand and power tools, building materials, construction methods, and safety. Upon completion, students should be able to identify hand and power tools, common building materials, and basic construction methods.

	Class	Lab	Credit
CAR 112 Carpentry II	3	15	8
Prerequisites: None			
Corequisites: None			

This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

CAR 113 Carpentry III	3	9	6
Prerequisites: CAR 111			
Corequisites: None			

This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, speciality framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision.

CAR 114 Residential Bldg Codes	3	0	3
Prerequisites: None			
Corequisites: None			

This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

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CHEMISTRY

		Class	Lab	Credit
CHM 092	Fundamentals of Chemistry	3	2	4
Prerequisites:	MAT 070			
Corequisites:	None			
<p>This course covers fundamentals of chemistry with laboratory applications. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts and demonstrate basic laboratory skills necessary for success in college-level science courses.</p>				
CHM 131	Introduction to Chemistry	3	0	3
Prerequisites:	None			
Corequisites:	None			
<p>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. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.</i></p>				
CHM 131A	Intro to Chemistry Lab	0	3	1
Prerequisites:	None			
Corequisites:	CHM 131			
<p>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. <i>This course has been approved to satisfy the Comprehensive Agreement general education core requirement in natural sciences/mathematics.</i></p>				

		Class	Lab	Credit
CHM 151	General Chemistry I	3	3	4
Prerequisites: None				
Corequisites: None				

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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CHM 152	General Chemistry II	3	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

INFORMATION SYSTEMS

CIS 110	Introduction to Computers	2	2	3
Prerequisites: Keyboarding competency level established by department				
Corequisites: None				

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. Assignments will introduce the use of word processing, spreadsheet, and database software in the Windows environment. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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		Class	Lab	Credit
CIS 111	Basic PC Literacy	1	2	2
Prerequisites:	Keyboarding competency level establish by department			
Corequisites:	None			

This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

CIS 115	Intro to Prog & Logic	2	2	3
Prerequisites:	MAT 070			
Corequisites:	None			

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. 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, Visual BASIC. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics (quantitative option).*

CIS 120	Spreadsheet I	2	2	3
Prerequisites:	MAT 070 and CIS 110 or CIS 111 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; software for this course is Microsoft Excel. Enhanced features will include advanced functions, macros, multiple worksheets, and data analysis features.

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	Class	Lab	Credit
CIS 130	Survey of Operating Systems	2	3
Prerequisites: None			
Corequisites: None			

This course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance.

CIS 152	Database Concepts & Apps	2	2	3
Prerequisites: CIS 110 or CIS 111 or CIS 115				
Corequisites: None				

This course introduces database design and creation using a DBMS project. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptance design practices. Software for this course is Microsoft Access.

CIS 153	Database Applications	2	2	3
Prerequisites: CIS 152				
Corequisites: None				

This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

CIS 162	MM Presentation Software	2	2	3
Prerequisites: CIS 110 or CIS 111 and OST 136				
Corequisites: None				

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner.

186 COURSE DESCRIPTIONS

		Class	Lab	Credit
CIS 165	Desktop Publishing I	2	2	3
Prerequisites:	OST 136			
Corequisites:	None			

This course provides an introduction to desktop publishing software capabilities. Emphasis is placed on efficient use of a page layout software package to create, design, and print publications; hardware/software compatibility; and integration of specialized peripherals. Upon completion, students should be able to prepare publications given design specifications.

CIS 172	Intro to the Internet	2	3	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools.

CIS 174	Network System Manager I	2	2	3
Prerequisites:	NET 110 or permission of department chair			
Corequisites:	None			

This course covers effective network management. Topics include network file system design and security, login scripts and user menus, printing services, e-mail, and backup. Upon completion, students should be able to administer an office network system.

CIS 175	Network Management I	2	2	3
Prerequisites:	NET 110 or permission of department chair			
Corequisites:	None			

This course covers fundamental network administration and system management. Topics include accessing and configuring basic network services, managing directory services, and using network management software. Upon completion, students should be able to apply system administrator skills in developing a network management strategy.

		Class	Lab	Credit
CIS 215	Hardware Install/Main	2	3	3
Prerequisites: CIS 110 or CIS 111 or CIS 115				
Corequisites: None				

This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

CIS 216	Software Install/Main	1	2	2
Prerequisites: CIS 130				
Corequisites: None				

This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software.

CIS 217	Computer Train & Support	2	2	3
Prerequisites: CIS 120 and CIS 152 and CIS 162 and OST 136				
Corequisites: None				

This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users.

CIS 220	Spreadsheets II	1	2	2
Prerequisites: CIS 120				
Corequisites: None				

This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

188 *COURSE DESCRIPTIONS*

		Class	Lab	Credit
CIS 274	Network System Manager II	2	2	3
Prerequisites:	CIS 174			
Corequisites:	None			

This course is a continuation of CIS 174 focusing on advanced network management, configuration, and installation. Emphasis is placed on server configuration files, startup procedures, server protocol support, memory and performance concepts, and management and maintenance. Upon completion, students should be able to install and upgrade networks and servers for optimal performance.

CIS 275	Network Management II	2	2	3
Prerequisites:	CIS 175			
Corequisites:	None			

This course is a continuation of CIS 175 focusing on advanced enterprise networks. Topics include directory service tree planning, management distribution and protection, improving network security, auditing the network, printing, networking, and system administration of an Internet node. Upon completion, students should be able to manage client services and network features and optimize network performance.

CIS 287	Network Support	2	2	3
Prerequisites:	CIS 274 or CIS 275			
Corequisites:	None			

This course provides experience using CD ROM and on-line research tools and hands-on experience for advanced hardware support and troubleshooting. Emphasis is placed on troubleshooting network adapter cards and cabling, network storage devices, the DOS workstation, and network printing. Upon completion, students should be able to analyze, diagnose, research, and fix network hardware problems.

CRIMINAL JUSTICE

		Class	Lab	Credit
CJC 100	Basic Law Enforcement Training	8	30	18

Prerequisites: None
 Corequisites: None

This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination. *This is a certificate-level course.*

CJC 111	Intro to Criminal Justice	3	0	3
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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 system 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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

CJC 112	Criminology	3	0	3
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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.

190 COURSE DESCRIPTIONS

		Class	Lab	Credit
CJC 113	Juvenile Justice	3	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 Oper	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces fundamental law enforcement operations. Topics include the contemporary evaluation 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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

CJC 131	Criminal Law	3	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.

COURSE DESCRIPTIONS 191

	Class	Lab	Credit	
CJC 132	Court Procedure & Evid	3	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	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

CJC 151	Intro to Loss Prevention	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

192 COURSE DESCRIPTIONS

	Class	Lab	Credit	
CJC 160	Terrorism: Underlying Issues	3	0	3
Prerequisite:	None			
Corequisite:	None			

This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorists groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, nuclear terrorism; and planning considerations involving threat assessments. Upon completion, the student should be able to identify and discuss the methods used in terrorists' activities and complete threat assessment for terrorists' incidents.

CJC 212	Ethics & Comm Relations	3	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.

CJC 213	Substance Abuse	3	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 215	Organ & Administration	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

COURSE DESCRIPTIONS 193

		Class	Lab	Credit
CJC 221	Investigative Principles	3	2	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 222	Criminalistics	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

CJC 223	Organized Crime	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

194 COURSE DESCRIPTIONS

		Class	Lab	Credit
CJC 231	Constitutional Law	3	0	3
Prerequisites:	None			
Corequisites:	None			

This 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 United States Constitution and the rights/procedures as interpreted by the courts.

COOPERATIVE EDUCATION

		Class	Lab	Work	Credit
COE 110	World of Work	1	0	0	1
Prerequisites:	CIS 110 or CIS 111				
Corequisites:	None				

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethics, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

COE 111	Co-op Work Exp I	0	0	10	1
Prerequisites:	None				
Corequisites:	None				

This course provides work 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.

COURSE DESCRIPTIONS 195

		Class	Lab	Work	Credit
COE 112	Co-op Work Exp I	0	0	20	2
Prerequisites: None					
Corequisites: None					

This course provides work 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.

COE 121	Co-op Work Exp II	0	0	10	1
Prerequisites: None					
Corequisites: None					

This course provides work 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.

COE 122	Co-op Work Exp II	0	0	20	2
Prerequisites: None					
Corequisites: None					

This course provides work 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.

196 COURSE DESCRIPTIONS

		Class	Lab	Work	Credit
COE 131	Co-op Work Exp III	0	0	10	1
Prerequisites:	None				
Corequisites:	None				

This course provides work 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.

COE 132	Co-op Work Exp III	0	0	20	2
Prerequisites:	None				
Corequisites:	None				

This course provides work 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.

COMMUNICATION

		Class	Lab	Credit
COM 110	Introduction to Communication	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

COURSE DESCRIPTIONS 197

		Class	Lab	Credit
COM 231	Public Speaking	3	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 audio-visual support. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.

COSMETOLOGY

COS 111	Cosmetology Concepts I	4	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.

COS 112	Salon I	0	24	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.

198 COURSE DESCRIPTIONS

		Class	Lab	Credit
COS 113	Cosmetology Concepts II	4	0	4
Prerequisites:	COS 111 and 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.

COS 114	Salon II	0	24	8
Prerequisites:	COS 112			
Corequisites:	COS 113			

This course provides experience in 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	4
Prerequisites:	COS 111 and 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	4
Prerequisites:	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.

COURSE DESCRIPTIONS 199

		Class	Lab	Credit
COS 117	Cosmetology Concepts IV	2	0	2
Prerequisites:	COS 113 and COS 115			
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	7
Prerequisites:	COS 114 and COS 116			
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.

COS 121	Manicure/Nail Tech I	4	6	6
Prerequisites:	None			
Corequisites:	None			

This course covers techniques of nail technology, hand and arm massage, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, massage, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, massage, decorating, and artificial applications in a salon setting.

COS 123	Contemporary Hair Coloring 1	3	2
Prerequisites:	COS 111 and 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.

200 COURSE DESCRIPTIONS

		Class	Lab	Credit
COS 140	Contemporary Design	1	3	2
Prerequisites:	COS 111 and COS 112			
Corequisites:	None			

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design concepts.

COS 160	Design Application	1	3	2
Prerequisites:	None			
Corequisites:	None			

This course provides an overview of the design concepts used in cosmetology. Topics include the application of art principles and elements to artistically design hair, nails, and make-up and other related topics. Upon completion, students should be able to demonstrate knowledge and techniques associated with design.

COS 222	Manicure/Nail Tech II	4	6	6
Prerequisites:	COS 121			
Corequisites:	None			

This course covers advanced techniques of nail technology and hand and arm massage. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

COS 224	Trichology & Chemistry	1	3	2
Prerequisites:	None			
Corequisites:	None			

This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, chemical reactions on hair.

COURSE DESCRIPTIONS 201

	Class	Lab	Credit	
COS 251	Manicure Instr Concepts	8	0	8
Prerequisites:	NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon			
Corequisites:	COS 252			

This course introduces manicuring instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervision techniques, and assess student classroom performance.

COS 252	Manicure Instr Practicum	0	15	5
Prerequisites:	NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon			
Corequisites:	COS 251			

This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements.

COS 271	Instructor Concepts I	5	0	5
Prerequisites:	Cosmetology License and six months experience as a licensed cosmetologist			
Corequisites:	COS 272			

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

202 COURSE DESCRIPTIONS

		Class	Lab	Credit
COS 272	Instructor Practicum I	0	21	7
Prerequisites:	Cosmetology License and six months experience as a licensed cosmetologist			
Corequisites:	COS 271			

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

COS 273	Instructor Concepts II	5	0	5
Prerequisites:	COS 271 and COS 272			
Corequisites:	COS 274			

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

COS 274	Instructor Practicum II	0	21	7
Prerequisites:	COS 271 and COS 272			
Corequisites:	COS 273			

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. *This is a certificate-level course.*

CONSTRUCTION

	Class	Lab	Credit
CST 131 OSHA/Safety/Certification	2	2	3
Prerequisites: None			
Corequisites: None			

This course covers the concepts of work site safety. Topics include OSHA regulations, tool safety, and certifications which relate to the construction industry. Upon completion, students should be able to identify and maintain a safe working environment based on OSHA regulations and maintain proper records and certifications.

CST 211 Construction Surveying	2	3	3
Prerequisites: MAT 120 or MAT 121			
Corequisites: None			

This course covers field surveying applications for residential and commercial construction. Topics include building layout and leveling, linear measurement and turning angles, plumbing vertical members, and topographic and utilities surveys. Upon completion, students should be able to properly and accurately use surveying equipment to lay out residential and commercial buildings.

CST 221 Statics/Structures	3	3	4
Prerequisites: MAT 120 or MAT 121 and CST 112 or CAR 112			
Corequisites: None			

This course covers the principles of statics and strength of materials as applied to structural building components. Topics include forces on columns, beams, girders, and footings and connection points when timber, steel, and concrete members are used. Upon completion, students should be able to accurately analyze load conditions present in structural members.

204 COURSE DESCRIPTIONS

	Class	Lab	Credit
CST 241 Planning/Estimating I	2	2	3
Prerequisites: BPR 130 or MAT 120 or MAT 121			
Corequisites: None			

This course covers the procedures involved in planning and estimating a residential structure. Topics include labor and equipment with emphasis placed on quantity take-off of materials necessary to construct a residential structure. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs and plan the labor to construct a residential structure.

DRAFTING

DFT 117 Technical Drafting	1	2	2
Prerequisites: None			
Corequisites: None			

This course introduces basic drafting practices for non-drafting majors. Emphasis is placed on instrument use and care, shape, and size description, sketching, and pictorials. Upon completion, students should be able to produce drawings of assigned parts.

DFT 119 Basic CAD	1	2	2
Prerequisites: None			
Corequisites: None			

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

COURSE DESCRIPTIONS 205

		Class	Lab	Credit
DFT 151	CAD I	2	3	3
Prerequisites: None				
Corequisites: None				

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

DFT 152	CAD II	2	3	3
Prerequisites: DFT 151				
Corequisites: None				

This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

DFT 192	Selected Topics In CAD I	0	4	2
Prerequisites: None				
Corequisites: None				

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

DFT 193	Selected Topics in Basic CAD	1	5	3
Prerequisites: None				
Corequisites: None				

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

206 COURSE DESCRIPTIONS

ECONOMICS

		Class	Lab	Credit
ECO 151	Survey of Economics	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirements in social/behavioral sciences.*

ECO 251	Prin of Microeconomics	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces economic analysis of individuals, businesses, and industry choices 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 effectively achieve economic objectives. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

ECO 252	Prin of Macroeconomics	3	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.*

EDUCATION

		Class	Lab	Credit
EDU 111	Early Childhood Cred I	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

EDU 112	Early Childhood Cred II	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/sanitation/nutrition practices that promote healthy environments for children.

EDU 113	Family/Early Child Cred	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

208 COURSE DESCRIPTIONS

EDU 118 Teacher Associate 3 0 3
Principles & Practices

Prerequisites: None

Corequisites: None

This course covers the teacher associate's role in the educational system. Topics include history of education, professional responsibilities and ethics, cultural diversity, communication skills, and identification of the optimal learning environment. Upon completion, students should be able to describe the supporting professional role of the teacher associate, demonstrate positive communication, and discuss educational philosophy.

EDU 119 Intro to Early Childhood Ed 4 0 4

Prerequisites: None

Corequisites: None

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for children. Topics include historical foundations, program types, career options, professionalism, and creating inclusive environments and curriculum that are responsive to the needs of children and families. Upon completion, students should be able to design career plans and develop appropriate schedules, environments and activity plans while incorporating adaptations for children with exceptionalities.

COURSE DESCRIPTIONS 209

		Class	Lab	Credit
EDU 131	Child, Family, & Comm.	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers the development of partnerships between families, inclusive programs for children/schools that serve young children with and without disabilities, and the community. Emphasis is placed on requisite skills and benefits for successfully establishing, supporting, and maintaining respectful collaborative relationships between today's diverse families, centers/schools, and community resources. Upon completion, students should be able to describe appropriate relationships with parents/caretakers, center/school colleagues, and community agencies that enhance the educational experiences/well-being of all children.

EDU 144	Child Development I	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers the theories of child development, developmental sequences, and factors that influence children's development, from conception through pre-school for all children. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and the multiple influences on development and learning of the whole child. Upon completion, students should be able to identify typical and atypical developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

EDU 145	Child Development II	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers theories of child development, developmental sequences, and factors that influence children's development, from pre-school through middle childhood for all children. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development multiple influences on development and learning of the whole child. Upon completion, students should be able to identify typical and atypical developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

210 COURSE DESCRIPTIONS

		Class	Lab	Credit
EDU 146	Child Guidance	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces practical principles and techniques for providing developmentally appropriate guidance for all children with and without disabilities, including those at risk. Emphasis is placed on encouraging self-esteem, cultural awareness, effective communication skills, direct/indirect techniques/strategies and observation to understand the underlying causes of behavior. Upon completion, students should be able to demonstrate appropriate interactions with children and families and promote conflict resolution, self-control, self-motivation, and self-esteem in children.

EDU 151	Creative Activities	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers planning, creation and adaption of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and physical skills, and dramatics. Upon completion, students should be able to create, manage, adapt and evaluate developmentally supportive learning materials, experiences and environments.

EDU 153	Health, Safety, & Nutrition	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course focuses on promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, implement safe learning environments, and adhere to state regulations.

COURSE DESCRIPTIONS 211

		Class	Lab	Credit
EDU 186	Reading and Writing Methods	3	0	3

Prerequisites: None

Corequisites: None

This course covers concepts, resources, and methods for teaching reading and writing to school-age children. Topics include the importance of literacy, learning styles, skills assessment, various reading and writing approaches, and instructional strategies. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate reading and writing experiences.

EDU 221	Children with Exceptionalities	3	0	3
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Prerequisites: EDU 144 and EDU 145 or PSY 244 and PSY 245

Corequisites: None

This course, based on the foundation of typical development, introduces working with children with exceptionalities. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the learning environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, collaborate with families and professionals to plan, implement, and evaluate inclusion strategies.

EDU 234	Infants, Toddlers & Twos	3	0	3
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Prerequisites: None

Corequisites: None

This course covers the skills needed to effectively implement group care for infants, toddlers, and two-year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

212 COURSE DESCRIPTIONS

		Class	Lab	Credit
EDU 235	School-Age Dev & Program	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course presents developmentally appropriate practices in group care for school-age children. Topics include principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for children five to twelve years of age and plan and implement age-appropriate activities.

EDU 252	Math & Science Activities	3	0	3
Prerequisites:	None			
Corerequisites:	None			

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

EDU 261	Early Childhood Admin I	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision.

EDU 262	Early Childhood Admin II	3	0	3
Prerequisites:	EDU 261			
Corequisites:	None			

This course provides a foundation for budgetary, financial, and personnel management of the child care center. Topics include budgeting, financial management, marketing, hiring, supervision, and professional development of a child care center. Upon completion, students should be able to formulate marketing, financial management, and fund development plans and develop personnel policies, including supervision and staff development plans.

COURSE DESCRIPTIONS 213

		Class	Lab	Credit
EDU 271	Educational Technology	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, use a variety of technology resources and demonstrate appropriate technology skills in education environments.

EDU 275	Effective Teacher Training	2	0	2
Prerequisites:	None			
Corequisites:	None			

This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles, and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

EDU 280	Language & Literacy Experiences	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course explores the continuum of children's communication development, including verbal and written language acquisition and other forms of communication. Topics include selection of literature and other media, the integration of literacy concepts throughout the classroom environment, inclusive practices and appropriate assessments. Upon completion, students should be able to select, plan, implement, and evaluate developmentally appropriate literacy experiences.

214 COURSE DESCRIPTIONS

		Class	Lab	Credit
EDU 285	Internship Experiences- School-Age Children	1	0	1
Prerequisites:	ENG 111			
Corequisites:	COE 121 or COE 122			

This course provides an opportunity to discuss internship experiences with peers and faculty. Emphasis is placed on evaluating and integrating practicum experiences. Upon completion, students should be able to demonstrate competence in early childhood education.

ELECTRICITY

ELC 111	Intro to Electricity	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC 113	Basic Wiring I	2	6	4
Prerequisites:	None			
Corequisites:	None			

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring and electrical distribution equipment associated with basic electrical installations.

COURSE DESCRIPTIONS 215

	Class	Lab	Credit
ELC 128 Intro to PLC	2	3	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 install PLCs and create simple programs.

ENGLISH

ENG 080 Writing Foundations	3	2	4
Prerequisites: None			
Corequisites: None			

This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified coherent paragraph. *This course does not satisfy the developmental reading and writing prerequisite for ENG 111.*

ENG 090 Composition Strategies	3	0	3
Prerequisites: ENG 080			
Corequisites: ENG 090A			

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. *This course satisfies the developmental writing requirement for ENG 111.*

216 COURSE DESCRIPTIONS

	Class	Lab	Credit
ENG 090A Composition Strategies Lab	0	2	1
Prerequisites: ENG 080			
Corequisites: ENG 090			

This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completions, students should be able to compose a variety of paragraphs and a unified, coherent essay.

ENG 111 Expository Writing	3	0	3
Prerequisites: ENG 090 and RED 090			
Corequisites: None			

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

ENG 113 Literature-Based Research	3	0	3
Prerequisites: ENG 111			
Corequisites: None			

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading, and thinking and the analysis and interpretation of prose, poetry, and drama; plot, characterization, theme, cultural, context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

COURSE DESCRIPTIONS 217

		Class	Lab	Credit
ENG 114	Prof Research & Reporting	3	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 to work individually and collaboratively to produce well-designed business and professional written and oral presentations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

ENG 231	American Literature I	3	0	3
Prerequisites: ENG 113 or ENG 114				
Corequisites: None				

This course covers selected works in American literature from its beginning 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 interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 232	American Literature II	3	0	3
Prerequisites: 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 interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

218 COURSE DESCRIPTIONS

		Class	Lab	Credit
ENG 241	British Literature I	3	0	3
Prerequisites:	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 242	British Literature II	3	0	3
Prerequisites:	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 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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 261	World Literature I	3	0	3
Prerequisites:	ENG 113 or ENG 114			
Corequisites:	None			

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginning through the seventeenth century. 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 selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

COURSE DESCRIPTIONS 219

		Class	Lab	Credit
ENG 262	World Literature II	3	0	3
Prerequisites:	ENG 113 or ENG 114			
Corequisites:	None			

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century 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 interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 274	Literature by Women	3	0	3
Prerequisites:	ENG 113 or ENG 114			
Corequisites:	None			

This course provides an analytical study of the works of several women authors. Emphasis is placed on historical and cultural context, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

220 COURSE DESCRIPTIONS

HEALTH

		Class	Lab	Clinic	Credit
HEA 110	Pers 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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

HEA 112	First Aid & CPR	1	2	0	2
Prerequisites:	None				
Corequisites:	None				

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

HEALTH CARE TECHNOLOGY

HCT 101	Health Care Tech	6	2	6	9
Prerequisites:	High School Graduate and CNA Certified				
Corequisites:	None				

This course covers the basic skills necessary for employment as a multi-skilled health care workers. Topics include skills necessary for listing as a Nursing Assistant II, basic clerical and dietary functions, communication, medical terminology, and quality control principles. Upon completion, students should be able to perform a variety of skills and assist licensed health care providers.

COURSE DESCRIPTIONS 221

	Class	Lab	Clinic	Credit
HCT 102 Basic Phlebotomy and EKG	1	2	3	3

Prerequisites: None

Corequisites: HCT 101 and NAS 102

This course covers the basic skills necessary for performing venipuncture, drawing blood specimens, and performing basic 12-lead electrocardiograms. Topics include venipuncture and finger stick techniques, requirements for common specimen collection, and obtaining a 12-lead EKG. Upon completion, students should be able to perform phlebotomy and EKG skills.

HCT 103 Environmental Maintenance	1	2	3	3
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Prerequisites: None

Corequisites: HCT 101

This course covers the principles of maintaining a safe therapeutic environment in a health care agency. Topics include quality control, set up and operation of common medical equipment, and necessary housekeeping and maintenance functions at the unit level. Upon completion, students should be able to manage materials and equipment and perform housekeeping and maintenance functions common to health care agencies.

HCT 104 Restorative Care	1	2	3	3
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Prerequisites: None

Corequisites: HCT 101

This course covers the principles of move, gait, and restoration of function. Topics include range of motion across the life span, improving gait and the ability to transfer, and the use of common assistive devices. Upon completion, students should be able to assist with implementing a plan of care for strengthening muscles, improving mobility, and facilitating transfer.

HCT 105 Basic Respiratory Skills	1	2	3	3
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Prerequisites: None

Corequisites: HCT 101

This course covers the basics of oxygenation and ventilation and principles of common therapy to improve oxygenation and ventilation. Topics include common diagnostic procedures and therapeutic modalities used in respiratory care. Upon completion, students should be able to set up and maintain oxygen, perform peak flow diagnostic tests and collect sputum specimens.

222 COURSE DESCRIPTIONS

HISTORY

		Class	Lab	Credit
HIS 111	World Civilizations I	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 112	World Civilizations II	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 121	Western Civilization I	3	0	3
Prerequisites: None				
Corequisites: None				

This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in Western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

COURSE DESCRIPTIONS 223

		Class	Lab	Credit
HIS 122	Western Civilization II	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in ~~modern western civilization~~. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 131	American History I	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 132	American History II	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

224 COURSE DESCRIPTIONS

		Class	Lab	Credit
HIS 221	African-American History	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

HIS 226	The Civil War	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course examines the social, political, economic, and ideological forces that led to the Civil War and the Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

HIS 228	History of the South	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and its basis in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

COURSE DESCRIPTIONS 225

		Class	Lab	Credit
HIS 236	North Carolina History	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

HORTICULTURE

HOR 112	Landscape Design I	2	3	3
Prerequisites:	None			
Corequisites:	None			

This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design.

HOR 124	Nursery Operations	2	3	3
Prerequisites:	None			
Corequisites:	None			

This course covers nursery site and crop selection, cultural practices, and production and marketing methods. Topics include site considerations, water availability, equipment, irrigation, fertilization, containers, media, and pest control. Upon completion, students should be able to design and implement a nursery operation and grow and harvest nursery crops.

226 COURSE DESCRIPTIONS

		Class	Lab	Credit
HOR 130	Greenhouse Design	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers greenhouse facilities planning and equipment selection. Topics include types of greenhouses, location factors, materials, glazing selection, calculation of heating/cooling requirements, lighting, benches, and energy conservation. Upon completion, students should be able to demonstrate knowledge of material selection, facilities planning, equipment need selection, and appropriate calculations.

HOR 134	Greenhouse Operations	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to produce greenhouse crops.

HOR 152	Horticultural Practices	0	3	1
Prerequisites:	None			
Corequisites:	None			

This course covers the maintenance of ornamental plantings and production areas. Topics include maintenance of flower beds, vegetable gardens, greenhouses, and container and field nursery stock using sound horticultural practices. Upon completion, students should be able to apply the principles and practices of maintaining ornamental landscape plantings.

HOR 160	Plant Materials I	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

COURSE DESCRIPTIONS 227

	Class	Lab	Credit
HOR 162 Applied Plant Science	2	2	3
Prerequisites: None			
Corequisites: None			

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR 164 Hort Pest Management	2	2	3
Prerequisites: None			
Corequisites: None			

This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators license.

HOR 166 Soils & Fertilizers	2	2	3
Prerequisites: None			
Corequisites: None			

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media.

HOR 168 Plant Propagation	2	2	3
Prerequisites: None			
Corequisites: None			

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

228 COURSE DESCRIPTIONS

	Class	Lab	Credit
HOR 170 Hort Computer Apps	1	3	2

Prerequisites: None
Corequisites: None

This course introduces computer programs as they apply to the horticulture industry. Emphasis is placed on applications of software for plant identification, design, and irrigation. Upon completion, students should be able to use computer programs in horticultural situations.

HOR 215 Landscape Irrigation	2	2	3
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Prerequisites: None
Corequisites: None

This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems.

HOR 225 Nursery Production	2	3	3
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Prerequisites: None
Corequisites: None

This course covers all aspects of nursery crop production from plant selection to crop production. Emphasis is placed on field preparation, container selection, preparation and usage of appropriate nursery media, potting procedures, herbicide and fertilizer application, and pest control. Upon completion, students should be able to produce a marketable nursery crop.

HOR 235 Greenhouse Production	2	2	3
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Prerequisites: None
Corequisites: None

This course covers the production of greenhouse crops. Emphasis is placed on product selection and production based on market needs and facility availability, including record keeping. Upon completion, students should be able to select and make production schedules to successfully produce greenhouse crops.

COURSE DESCRIPTIONS 229

		Class	Lab	Credit
HOR 253	Horticulture Turfgrass	2	2	3
Prerequisites:	HOR 162 or HOR 166			
Corequisites:	None			

This course covers information and skill development necessary to establish and manage landscape turfgrasses. Topics include grass identification, establishment, cultural requirements, application of control products, fertilization, and overseeding techniques. Upon completion, students should be able to analyze a landscape site and determine those cultural and physical activities needed to establish or manage a quality turf.

HOR 260	Plant Materials II	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course is a continuation of HOR 160 and covers additional plants. Emphasis is placed on reinforcement of skills and the introduction of additional plants. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 273	Hort Mgmt & Marketing	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course covers the steps involved in starting or managing a horticultural business. Topics include financing, regulations, market analysis, employer/employee relations, formulation of business plans, and operational procedures in horticultural business. Upon completion, students should be able to assume ownership or management of a horticultural business.

HUMANITIES

HUM 115	Critical Thinking	3	0	3
Prerequisites:	ENG 090 and RED 090			
Corequisites:	None			

This course introduces the use of 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 to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course may meet the SACS humanities requirement for AAS degree programs.*

230 COURSE DESCRIPTIONS

	Class	Lab	Credit
HUM 211 Humanities I	3	0	3
Prerequisites: ENG 111			
Corequisites: None			

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of completion, students should be able to identify significant figures and cultural contributions of the periods studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

HUM 212 Humanities II	3	0	3
Prerequisites: ENG 111			
Corequisites: None			

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from early modern times to the present. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

HYDRAULICS

HYD 110 Hydraulics/Pneumatics I	2	3	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.

COURSE DESCRIPTIONS 231

INDUSTRIAL SCIENCE

		Class	Lab	Credit
ISC 112	Industrial Safety	2	0	2
Prerequisites:	None			
Corequisites:	None			

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

MATHEMATICS

MAT 060	Essential Mathematics	3	2	4
Prerequisites:	MAT 050			
Corequisites:	None			

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and application of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

MAT 070	Introductory Algebra	3	2	4
Prerequisites:	MAT 060			
Corequisites:	RED 080			

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. *This course satisfies the developmental math prerequisite for MAT 115.*

MAT 080	Intermediate Algebra	3	2	4
Prerequisites:	MAT 070			
Corequisites:	RED 080			

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers ; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

232 COURSE DESCRIPTIONS

		Class	Lab	Credit
MAT 115	Mathematical Models	2	2	3
Prerequisites:	MAT 070			
Corequisites:	None			

This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

MAT 120	Geometry and Trigonometry	2	2	3
Prerequisites:	MAT 070			
Corequisites:	None			

This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

MAT 140	Survey of Mathematics	3	0	3
Prerequisites:	MAT 070			
Corequisites:	None			

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

COURSE DESCRIPTIONS 233

	Class	Lab	Credit
MAT 140A Survey of Mathematics Lab	0	2	1
Prerequisites: MAT 070			
Corequisites: MAT 140			

This course is a laboratory for MAT 140. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

MAT 151 Statistics I	3	0	3
Prerequisites: MAT 080			
Corequisites: None			

This course provides a project-based approach to the study of basic probability, descriptive, and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MAT 151A Statistics I Lab	0	2	1
Prerequisites: MAT 080			
Corequisites: MAT 151			

This course is a laboratory for MAT 151. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

234 COURSE DESCRIPTIONS

		Class	Lab	Credit
MAT 161	College Algebra	3	0	3
Prerequisites:	MAT 080			
Corequisites:	None			

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomials, rationals, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MAT 161A	College Algebra Lab	0	2	1
Prerequisites:	MAT 080			
Corequisites:	MAT 161			

This course is a laboratory of MAT 161. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

MAT 162	College Trigonometry	3	0	3
Prerequisites:	MAT 161			
Corequisites:	None			

This course provides an integrated technological approach to trigonometry and its applications. Topics include trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MAT 162A	College Trig Lab	0	2	1
Prerequisites:	MAT 161			
Corequisites:	MAT 162			

This course is a laboratory for MAT 162. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

COURSE DESCRIPTIONS 235

		Class	Lab	Credit
MAT 171	Precalculus Algebra	3	0	3
Prerequisites: MAT 080				
Corequisites: None				

This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions, (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MAT 171A	Precalculus Algebra Lab	0	2	1
Prerequisites: MAT 080				
Corequisites: MAT 171				

This course is a laboratory for MAT 171. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

MAT 172	Precalculus Trigonometry	3	0	3
Prerequisites: MAT 171				
Corequisites: None				

This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, and vectors. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

236 COURSE DESCRIPTIONS

		Class	Lab	Credit
MAT 172A	Precalculus Trig Lab	0	2	1
Prerequisites:	MAT 171			
Corequisites:	MAT 172			

This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

MAT 263	Brief Calculus	3	0	3
Prerequisites:	MAT 161			
Corequisites:	None			

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural*

MAT 263A	Brief Calculus Lab	0	2	1
Prerequisites:	MAT 161			
Corequisites:	MAT 263			

This course is a laboratory for MAT 263. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

COURSE DESCRIPTIONS 237

		Class	Lab	Credit
MAT 271	Calculus I	3	2	4
Prerequisites:	MAT 172			
Corequisites:	None			

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MECHANICAL

MEC 111	Machine Processes I	1	4	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 and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely machine simple parts to specified tolerances.

MEC 112	Machine Processes II	2	3	3
Prerequisites:	MEC 111			
Corequisites:	None			

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts.

MEC 130	Mechanisms	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

238 COURSE DESCRIPTIONS

MEDICAL

		Class	Lab	Credit
MED 120	Survey of Med Terminology	2	0	2
Prerequisites:	None			
Corerequisites:	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.

MARKETING AND RETAILING

MKT 120	Principles of Marketing	3	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.

MAINTENANCE

MNT 110	Intro to Maint Procedures	1	3	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.

MNT 111	Maintenance Practices	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure analysis, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

COURSE DESCRIPTIONS 239

		Class	Lab	Credit
MNT 150	Basic Building Maintenance	1	3	2
Prerequisites:	None			
Corequisites:	None			

This course introduces the basic skills of building maintenance. Topics include basic carpentry and masonry skills including forming, framing, laying block to a line, repairing, and other related topics. Upon completion, students should be able to perform basic carpentry and masonry skills in a maintenance setting.

MNT 220	Rigging & Moving	1	3	2
Prerequisites:	None			
Corequisites:	None			

This course covers the principles of safe rigging practices for handling, placing, installing, and moving heavy machinery and equipment. Topics include safety, weight and dimensional estimation, positioning of equipment slings, rollers, jacks, levers, dollies, ropes, chains, padding, and other related topics. Upon completion, students should be able to safely relocate and set up equipment using accepted rigging practices.

MNT 230	Pumps & Piping Systems I	1	3	2
Prerequisites:	None			
Corequisites:	None			

This course covers pump installation and maintenance and related valves and piping systems. Topics include various types of pump systems and their associated valves, piping requirements, and other related topics. Upon completion, students should be able to select and install pump and piping systems and demonstrate proper maintenance and troubleshooting procedures.

MUSIC

MUS 110	Music Appreciation	3	0	3
Prerequisites:	None			
Corequisites:	None			

The 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 Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

240 COURSE DESCRIPTIONS

NETWORKING TECHNOLOGY

		Class	Lab	Credit
NET 110	Data Comm/Networking	2	2	3
Prerequisites:	None			
Corequisites:	None			

This course introduces data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.

NET 112	Security Fund. & Policies	3	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 the Internet, current 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.

NET 260	Internet Dev & Support	3	0	3
Prerequisites:	NET 110 and CIS 172			
Corequisites:	None			

This course covers issues relating to the development and implementation of Internet related tools and services. Topics include Internet organization, site registration, e-mail servers, Web servers, Web page development, legal issues, firewalls, multimedia, TCP/IP, service providers, FTP, list servers, and gateways. Upon completion, students should be able to develop and support the Internet services needed within an organization.

NURSING

		Class	Lab	Clinic	Credit
NUR 101	Practical Nursing I	7	6	6	11
Prerequisites: Admission to the Practical Nursing Program					
Corequisites: BIO 168, PSY 150, ACA 111					

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.*

NUR 102	Practical Nursing II	8	0	12	12
Prerequisites: NUR 101					
Corequisites: BIO 169, ENG 111					

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.*

NUR 103	Practical Nursing III	6	0	12	10
Prerequisites: NUR 102					
Corequisites: None					

This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.*

242 COURSE DESCRIPTIONS

		Class	Lab	Clinical	Credit
NUR 110	Nursing I	5	3	6	8
Prerequisites:	Admission to the Associate Degree Nursing Program				
Corequisites:	BIO 168, PSY 150, ACA 111				

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on introducing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations in health.

NUR 120	Nursing II	5	3	6	8
Prerequisites:	NUR 110				
Corequisites:	BIO 169, PSY 241				

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on developing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to participate in the delivery of nursing care for individuals with common alterations in health.

NUR 130	Nursing III	4	3	6	7
Prerequisites:	NUR 120				
Corequisites:	ENG 111, CIS 111				

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on expanding the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to deliver nursing care to individuals with common alterations in health.

NUR 210	Nursing IV	5	3	12	10
Prerequisites:	NUR 130				
Corequisites:	ENG 114, MAT 140				

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on using collaboration as a provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to modify nursing care for individuals with common alterations in health.

COURSE DESCRIPTIONS 243

		Class	Lab	Clinical	Credit
NUR 220	Nursing V	4	3	15	10
Prerequisites:	NUR 210				
Corequisites:	COE 110, Humanities/Fine Arts Elective				

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on the nurse's role as an independent provider and manager of care for a group of individuals and member of a multidisciplinary team. Upon completion, students should be able to provide comprehensive nursing care to a group of individuals with common complex health alterations.

NURSING ASSISTANT

NAS 101	Nursing Assistant I	3	2	3	5
Prerequisites:	High School Diploma or GED				
Corequisites:	None				

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry. *This is a certificate-level course.*

NAS 102	Nursing Assistant II	3	2	6	6
Prerequisites:	High School Diploma or GED and currently listed as NA I with State of North Carolina				
Corequisites:	None				

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing. *This is a certificate-level course.*

244 COURSE DESCRIPTIONS

		Class	Lab	Clinical	Credit
NAS 103	Home Health Care	2	0	0	2
Prerequisites:	High School Diploma or GED				
Corequisites:	None				

This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client's condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home. *This is a certificate-level course.*

OFFICE SYSTEMS TECHNOLOGY

OST 080	Keyboarding Literacy	1	2	0	2
Prerequisites:	None				
Corequisites:	None				

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding. *Non-OST majors must demonstrate mastery of the numeric keypad and pass three 3-minute timed writings with at least 20 gross words per minute with no more than three errors; OST majors must pass three 3-minute timed writings with at least 30 gross words per minute with no more than three errors.*

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. *This course is designed for Nursing Assistant students; students must pass three 3-minute timed writings with at least 30 gross words per minute with no more than three errors.*

COURSE DESCRIPTIONS 245

		Class	Lab	Credit
OST 132	Keyboard Skill Building	1	2	2

Prerequisites: OST 080 or Keyboarding Competency

Corequisites: None

This course provides accuracy- and speed-building drills. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard ~~rhythmically with greater accuracy and speed.~~ *The minimum speed requirement is 35 gross words a minute on three 3-minute timed writings with no more than three errors.*

OST 133	Advanced Keyboard Skill Building	1	2	2
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Prerequisites: OST 132

Corequisites: None

This course is designed to increase speed and improve accuracy to meet employment tests and job requirements. Emphasis is placed on individualized diagnostic and prescriptive drills. Upon completion, students should be able to keyboard with greater speed and accuracy as measured by five-minute timed writings and skill-development paragraphs. *The minimum speed requirement is 45 gross words a minute on three 3-minute timed writings with no more than three errors.*

OST 134	Text Entry and Formatting	2	2	3
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Prerequisites: None

Corequisites: None

This course is designed to provide the 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 mailable documents and key timed writings at speeds commensurate with employability. *The minimum speed requirement is 50 gross words a minute on three 3-minute timed writings with no more than three errors.*

OST 135	Advanced Text Entry and Formatting	3	2	4
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Prerequisites: OST 134

Corequisites: None

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and news-letters. Upon completion, students should be able to make independent decisions regarding planning, style, and methods of presentation.

246 COURSE DESCRIPTIONS

		Class	Lab	Credit
OST 136	Word Processing	1	2	2
Prerequisites:	None			
Corequisites:	None			

This course introduces 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 137	Office Software Applications	1	2	2
Prerequisites:	None			
Corequisites:	None			

This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use software in a business environment.

OST 141	Med Terms I-Med Office	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST 142	Med Terms II-Med Office	3	0	3
Prerequisites:	OST 141			
Corequisites:	None			

This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

COURSE DESCRIPTIONS 247

		Class	Lab	Credit
OST 148	Medical Coding, Billing, and Insurance	3	0	3

Prerequisites: None

Corequisites: None

This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy.

OST 164	Text Editing Applications	3	0	3
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Prerequisites: None

Corequisites: None

This course provides a comprehensive study of editing skills needed in the workplace. 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 181	Intro to Office Systems	2	2	3
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Prerequisites: None

Corequisites: None

~~This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.~~

OST 184	Records Management	1	2	2
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Prerequisites: None

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 set up and maintain a records management system.

248 COURSE DESCRIPTIONS

		Class	Lab	Credit
OST 223	Machine Transcription I	1	2	2

Prerequisites: OST 134 and OST 136 and OST 164
Corequisites: None

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

OST 233	Office Publications Design	2	2	3
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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 236	Adv Word/Information Processing	2	2	3
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Prerequisites: OST 135 or OST 136
Corequisites: None

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

OST 284	Emerging Technologies	2	0	2
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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.

		Class	Lab	Credit
OST 286	Professional Development	3	0	3
Prerequisites: None				
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 Systems Management	2	2	3
Prerequisites: OST 164 and either OST 134 or OST 136				
Corequisites: None				

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

PHYSICAL EDUCATION

PED 110	Fit and Well for Life	1	2	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 111	Physical Fitness I	0	3	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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

250 COURSE DESCRIPTIONS

		Class	Lab	Credit
PED 113	Aerobics I	0	3	1
Prerequisites:	None			
Corequisites:	None			

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

PED 115	Step Aerobics I	0	3	1
Prerequisites:	None			
Corequisites:	None			

This course introduces the fundamentals of step aerobics. Emphasis is placed on basic stepping up and down on an adjustable platform; cardiovascular fitness; and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic step aerobics. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

PED 117	Weight Training I	0	3	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 to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

PED 125	Self-Defense-Beginning	0	2	1
Prerequisites:	None			
Corequisites:	None			

This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

COURSE DESCRIPTIONS 251

		Class	Lab	Credit
PED 126	Self-Defense-Intermediate	0	2	1
Prerequisites: PED 125				
Corequisites: None				

This course is designed to aid students in building on the techniques and skills developed in PED 125. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches, and kick combinations. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

PED 128	Golf-Beginning	0	2	1
Prerequisites: None				
Corequisites: None				

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. *This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

PED 130	Tennis-Beginning	0	2	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 to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.*

252 COURSE DESCRIPTIONS

	Class	Lab	Credit
PED 132 Racquetball-Beginning	0	2	1
Prerequisites: None			
Corequisites: None			
This course introduces the fundamentals of racquetball. Emphasis is placed on rules, fundamentals, and strategies of beginning racquetball. Upon completion, students should be able to play recreational racquetball. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.</i>			
PED 152 Swimming-Beginning	0	2	1
Prerequisites: None			
Corequisites: None			
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.</i>			
PED 155 Water Aerobics	0	3	1
Prerequisites: None			
Corequisites: None			
This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually-paced exercise program. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.</i>			
PED 216 Indoor Cycling	0	3	1
Prerequisites: None			
Corequisites: None			
This course is designed to promote physical fitness through indoor stationary cycling. Emphasis is placed on pedaling techniques, safety procedures, and conditioning exercises necessary for cycling. Upon completion, students should have improved cardiovascular and muscular endurance and be able to design and participate in a cycling for fitness program. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.</i>			

PHILOSOPHY

		Class	Lab	Credit
PHI 215	Philosophical Issues	3	0	3
Prerequisites: ENG 111				
Corequisites: None				

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical **components of an issue**. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

PHI 220	Western Philosophy I	3	0	3
Prerequisites: ENG 111				
Corequisites: None				

This course covers Western intellectual and philosophic thought from the early Greeks through the medievalists. Emphasis is placed on such figures as the pre-Socratics, Plato, Aristotle, Epicurus, Epictetus, Augustine, Suarez, Anselm, and Aquinas. Upon completion, students should be able to trace the development of leading ideas regarding reality, knowledge, reason, and faith. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

PHI 221	Western Philosophy II	3	0	3
Prerequisites: ENG 111				
Corequisites: None				

This course covers Western intellectual and philosophic thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

254 COURSE DESCRIPTIONS

		Class	Lab	Credit
PHI 240	Introduction to Ethics	3	0	3
Prerequisites:	ENG 111			
Corequisites:	None			

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

PHYSICAL SCIENCE

PHS 110	Basic Physical Science	3	2	4
Prerequisites:	None			
Corequisites:	None			

This course introduces the physical environment with emphasis on the laws and physical concepts that impact the world and universe. Topics include astronomy, geology, meteorology, general chemistry, and general physics. Upon completion, students should be able to describe the forces and composition of the earth and universe. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PLUMBING

PLU 111	Intro to Basic Plumbing	1	3	2
Prerequisites:	None			
Corequisites:	None			

~~This course introduces basic plumbing tools, materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system .~~

COURSE DESCRIPTIONS 255

POLITICAL SCIENCE

		Class	Lab	Credit
POL 110	Intro Political Science	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

POL 120	American Government	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

POL 220	International Relations	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences..*

256 COURSE DESCRIPTIONS

PSYCHOLOGY

		Class	Lab	Credit
PSY 118	Interpersonal Psychology	3	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	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 basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

PSY 241	Developmental Psychology	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

COURSE DESCRIPTIONS 257

		Class	Lab	Credit
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PSY 263	Educational Psychology	3	0	3
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Prerequisites: PSY 150

Corequisites: None

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PSY 281	Abnormal Psychology	3	0	3
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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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

READING

RED 080	Intro to College Reading	3	2	4
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Prerequisites: None

Corequisites: None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. *This course does not satisfy the developmental reading prerequisite for ENG 111.*

258 COURSE DESCRIPTIONS

		Class	Lab	Credit
RED 090	Improved College Reading	3	2	4
Prerequisites:	RED 080			
Corequisites:	None			

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111.*

RELIGION

REL 110	World Religions	3	0	3
Prerequisites:	None			
Corequisites:	None			

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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 111	Eastern Religions	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

COURSE DESCRIPTIONS 259

		Class	Lab	Credit
REL 112	Western Religions	3	0	3
Prerequisites: None				
Corequisites: None				

This course introduces the major western religious traditions. Topics include Zoroastrianism, 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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 211	Intro to Old Testament	3	0	3
Prerequisites: None				
Corequisites: None				

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 212	Intro to New Testament	3	0	3
Prerequisites: None				
Corequisites: None				

This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

260 COURSE DESCRIPTIONS

		Class	Lab	Credit
REL 221	Religion in America	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SOCIOLOGY

SOC 210	Introduction to Sociology	3	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 to satisfy the Comprehensive Articulation Agreement general educational core requirement in social/behavioral sciences.*

SOC 213	Sociology of the Family	3	0	3
Prerequisites:	None			
Corequisites:	None			

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 social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

COURSE DESCRIPTIONS 261

		Class	Lab	Credit
SOC 220	Social Problems	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

SOC 244	Soc of Death and Dying	3	0	3
Prerequisites:	None			
Corequisites:	None			

This course presents sociological perspectives on death and dying. Emphasis is placed on analyzing the different death rates among various groups, races, and societies, as well as various types of death. Upon completion, students should be able to discuss the rituals of death, both cultural and religious, and examine current issues relating to death and dying. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

SPANISH

SPA 111	Elementary Spanish I	3	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 law awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

262 COURSE DESCRIPTIONS

		Class	Lab	Credit
SPA 112	Elementary Spanish II	3	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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 211	Intermediate Spanish I	3	0	3
Prerequisites:	SPA 112			
Corequisites:	None			

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 212	Intermediate Spanish II	3	0	3
Prerequisites:	SPA 211			
Corequisites:	None			

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

WELDING

		Class	Lab	Credit
WLD 110	Cutting Processes	1	3	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	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	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	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.

264 COURSE DESCRIPTIONS

		Class	Lab	Credit
WLD 121	GMAW (MIG) FCAW/Plate	2	6	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 122	GMAW (MIG) Plate/Pipe	1	6	3
Prerequisites:	WLD 121			
Corequisites:	None			

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

WLD 131	GTAW (TIG) Plate	2	6	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.

COURSE DESCRIPTIONS 265

	Class	Lab	Credit
WLD 132 GTAW (TIG) Plate/Pipe	1	6	3

Prerequisites: WLD 131
Corerequisites: None

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topic 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	3
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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 145 Thermoplastic Welding	1	3	2
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Prerequisites: None
Corequisites: None

This course introduces the thermoplastic welding processes and materials identification. Topics include filler material selection, identification, joint design, and equipment setup with emphasis on bead types and applications. Upon completion, students should be able to perform fillet and groove welds using thermoplastic materials.

WLD 151 Fabrication I	2	6	4
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Prerequisites: WLD 110 and WLD 115 and WLD 116 and WLD 131
Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout 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.

266 COURSE DESCRIPTIONS

		Class	Lab	Credit
WLD 215	SMAW (Stick) Pipe	1	9	4
Prerequisites:	WLD 115 or WLD 116			
Corequisites:	None			

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

WLD 221	GMAW (MIGP Pipe	1	6	3
Prerequisites:	WLD 122			
Corequisites:	None			

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform GMAW welds to applicable codes on pipe with prescribed electrodes in various positions.

WLD 261	Certification Practices	1	3	2
Prerequisites:	WLD 115 and WLD 121 and WLD 131			
Corequisites:	None			

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

WLD 262	Inspection & Testing	2	2	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.

