2012-2013 Course Descriptions-Effective fall 2012
Compiled March 28, 2012
ACADEMICALLY RELATED

ACA 085 Improving Study Skills
Prerequisites: None
Corequisites: None

This course is designed to improve academic study skills and introduce resources that will complement developmental courses and engender success in college-level courses. Topics include basic study skills, memory techniques, note-taking strategies, test-taking techniques, library skills, personal improvement strategies, goal setting, and learning resources. Upon completion, students should be able to apply the techniques learned to improve performance in college-level classes. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

ACA 111 College Student Success
Prerequisite: None
Corequisite: None

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

ACA 122 College Transfer Success
Prerequisites: None
Corequisites: None

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

ACCOUNTING

ACC 115 College Accounting
Prerequisites: MAT 070, ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces basic accounting principles for a business. 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. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ACC 120 Principles of Financial Accounting
Prerequisites ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces business decision-making accounting information systems. Emphasis is 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 for transferability as a pre-major and/or elective course requirement.*
Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ACC 121 Principles of Managerial Accounting
Prerequisite: ACC 120
Corequisite: None

This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is 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 for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ACC 131 Federal Income Taxes
Prerequisites: ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
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.
Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ACC 140 Payroll Accounting
Prerequisites: ACC 120 and CIS 110
Corequisite: None

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is 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. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

ACC 150 Accounting Software Applications
Prerequisites: ACC 120 and CIS 110
Corequisite: None
This course introduces microcomputer applications related to the major 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. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

ACC-215 Ethics in Accounting
Prerequisites: ACC 121
Corequisite: None

This course introduces students to professional codes of conduct and ethics adopted by professional associations and state licensing boards for accountants, auditors, and fraud examiners. Topics include research and discussion of selected historical and contemporary ethical cases and issues as they relate to accounting and business. Upon completion, students should be able to apply codes, interpret facts and circumstances, as they relate to accounting firms and business activities. Course Hours Per Week: Class, 3. Lab, 0. Semester Hours Credit, 3.

ACC 220 Intermediate Accounting I
Prerequisites: ACC 121 and CTS130
Corequisite: 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. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ACC 221 Intermediate Accounting II
Prerequisite: ACC 220
Corequisite: None

This course is a continuation of ACC 220. Emphasis is on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Accounting computer problems involving preparation and completion of spreadsheets are integrated throughout the course. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ACC 226 Advanced Managerial Accounting
Prerequisites: ACC 121 and CTS 130
Corequisite: 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 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 Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ACC 227 Practices in Accounting
Prerequisites: ACC 131, ACC 220
Corequisite: None

This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations. As part of this course, students may be required to prepare a sample joint income tax return for a married couple, establish and use an accounting system, and use a microcomputer to record accounting information. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ACC 240 Government and Not-for-Profit Accounting
Prerequisite: ACC 121
Corequisite: None

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ACC 250 Advanced Accounting
Prerequisite: ACC 221
Corequisite: None

This course is designed to analyze special accounting issues, which may include business combinations, partnerships, international accounting, estates, and trusts. Emphasis is on analyzing transactions and preparing working papers and financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ACC 269 Audit and Assurance Services
Prerequisite: ACC 220
Corequisite: None

This course introduces selected topics pertaining to the objectives, theory, and practices in engagements providing auditing and other assurance services. Topics include planning, conducting, and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and the engagement methodology.
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

AIR CONDITIONING, HEATING, AND REFRIGERATION

AHR 110 Intro to Refrigeration
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test
Corequisite: 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 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. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 5.

AHR 112 Heating Technology
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test
Corequisite: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system. Course Hours Per Week: Class, 2; Lab, 4; Semester Hours Credit, 4.

ALT ALTERNATIVE ENERGY TECHNOLOGY

ALT 120 Renewable Energy Technologies
Prerequisite: None
Corequisite: None
This course provides an introduction to multiple technologies that allow for the production and conservation of energy from renewable sources. Topics include hydo-electric, wind power, passive and active solar energy, tidal energy, appropriate building techniques, and energy conservation methods. Upon completion, students should be able to demonstrate an understanding of renewable energy production and its impact on humans and their environment. Course Hours per week: Class, 2; Lab, 2; Semester Hours Credit, 3.

ALT 220 Photovoltaic System Technology
Prerequisite: None
Corequisite: None
This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (pv) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications. Course hours per week: Class, 2; Lab, 3; Semester Hours Credit, 3.

ALT 221 Advanced Photovoltaic System Designs
Prerequisite: ALT 220
Corequisite: None
This course introduces specific elements in photovoltaic (pv) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems. Course hours per week: Class, 2; Lab, 3; Semester Hours Credit, 2.

ALT 250 Thermal Systems
Prerequisite: None
Corequisite: None

This course introduces concepts, tools, techniques, and materials used to convert thermal energy into a viable, renewable energy resource. Topics include forced convection, heat flow and exchange, radiation, the various elements of thermal system design, regulations, and system installation and maintenance. Upon completion, students should be able to demonstrate an understanding of geothermal and solar thermal systems and corresponding regulations. Course hours per week: Class, 2; Lab, 2; Semester Hours Credit, 3.

ANTHROPOLOGY

ANT 210 General Anthropology
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ANT 220 Cultural Anthropology
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the nature of human culture. Emphasis is on cultural theory, methods of fieldwork, and cross-cultural comparisons in the area of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral science*s. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ARABIC

ARA 111 **Elementary Arabic I**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: ARA 181

This course introduces the fundamental elements of the modern standard Arabic language within the cultural context of Arabic-speaking people. 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 Arabic and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ARA 112 **Elementary Arabic II**
Prerequisites: ENG 090 and RED 090 or satisfactory score on placement test; ARA 111
Corequisites: ARA 182

This course includes the basic fundamental elements of the modern standard Arabic language within the cultural context of Arabic-speaking people. 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 Arabic and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ARA 181 **Arabic Lab I**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: ARA 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the modern standard Arabic language. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Arabic and to demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ARA 182 **Arabic Lab II**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, ARA 181
Corequisites: ARA 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the modern standard Arabic language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Arabic and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for*

transferability as a premajor and/or elective course requirement. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ARA 211 **Intermediate Arabic I**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, and ARA 112
Corequisites: None

This course includes communicative competencies in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should be able to demonstrate simple conversations and read works written in modern standard Arabic. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Class, 3. Semester Hours Credit, 3.

ARA 212 **Intermediate Arabic II**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, and ARA 211
Corequisites: None

This course provides continuation of communicative competence in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should be able to demonstrate an ability to conduct conversations and to read literary and non-fiction texts in modern standard Arabic. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Class, 3. Semester Hours Credit, 3.

ARCHITECTURE

ARC 111 **Introduction to Architectural Technology**
Prerequisite: None
Corequisite: None

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, isometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

ARC 112 **Construction Materials and Methods**
Prerequisite: None
Corequisite: None

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ARC 113 Residential Architectural Technology
Prerequisite: ARC 111 and ARC 112
Corequisite:

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

ARC 114 Architectural CAD
Prerequisite: None
Corequisite: None

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

ARC 119 Structural Drafting
Prerequisites: ARC 113 and MAT 121
Corequisite: None

This course introduces basic concepts associated with sizing and detailing structural assemblies. Topics include vocabulary, span-to-depth ratios, code requirements, shop drawings, and other related topics. Upon completion, students should be able to perform simple calculations and prepare shop drawings and preliminary structural plans. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ARC 131 Building Codes
Prerequisites: ARC 112
Corequisite: None

This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ARC 132 Specifications and Contracts
Prerequisite: ARC 112
Corequisite: None

This course covers the development of written specifications and the implications of different contractual arrangements. Topics include specification development, contracts, bidding material research, and agency responsibilities. Upon completion, students should be able to write a specification section and demonstrate the
ability to interpret contractual responsibilities. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

ARC 210 Intro to Sustain Design
Prerequisites: ARC 111 and ARC 240
Corequisites:

This course introduces concepts and principles related to sustainable site development and architectural design. Topics include low impact and sustainable site development, water efficiency, energy efficiency, material and resource management, indoor environmental quality, and return on investment. Upon completion, students should be able to articulate and integrate sustainable design principles into site and architectural design. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

ARC 211 Light Construction Technology
Prerequisite: ARC 111 and ARC 112
Corequisite: None

This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings that are within accepted architectural standards. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

ARC 212 Commercial Construction Technology
Prerequisite: ARC 113, ARC 114, and ARC 131
Corequisite:
This course introduces regional construction techniques for commercial plans, elevations, sections, and details. Topics include production of a set of commercial contract documents and other related topics. Upon completion, students should be able to prepare a set of working drawings in accordance with building codes. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

ARC 213 Design Project
Prerequisites: ARC 113, ARC 114, ARC 131
Corequisite: None

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents. Course Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

ARC 220 Advanced Architectural CAD
Prerequisite: ARC 114
Corequisite: None

This course provides file management, productivity, and CAD customization skills. Emphasis is on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

ARC 221 Architectural 3-D CAD
Prerequisite: ARC 114
Corequisite: None

This course introduces architectural three-dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings. Course Hours Per Week: Class, 1. Lab 4, Semester Hours Credit, 3.

ARC 230 Environmental Systems
Prerequisites: ARC 111 and MAT 121
Corequisite: ARC 236
This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ARC 235 Architectural Portfolio
Prerequisite: ARC 113, ARC 114
Corequisite: None

This course covers the methodology for creating an architectural portfolio. Topics include preparation of marketing materials and a presentation strategy using conventional and/or digital design media. Upon completion, students should be able to produce an architectural portfolio of selected projects. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

ARC 236 Architectural Mechanical/Electrical Technology
Prerequisite: ARC 111 AND MAT 121
Corequisite: ARC 230

This course covers the production of working drawings for plumbing, mechanical, and electrical (PME) systems for buildings. Topics include PME working drawing development. Upon completion, students should be able to produce PME working drawings and schedules. Course Hours Per Week: Lab, 4. Semester Hours Credit, 2.

ARC 240 Site Planning
Prerequisite: ARC 111
Corequisite: None

This course introduces the principles of site planning, grading plans, and earthwork calculations. Topics include site analysis, site work, site utilities, cut and fill, soil erosion control, and other related topics. Upon completion, students should be able to prepare site development plans and details as well as perform cut and fill calculations. Students should also be able to demonstrate techniques and procedures to minimize the impact of development on the environment. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ARC 263 Introduction to ADA Title III
Prerequisite: ARC 211
Corequisite: None

This course introduces the American Disabilities Act Title III requirements. Emphasis is on Title III requirements as they apply to building construction. Upon completion, students should be able to interpret and apply Title III requirements to buildings. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

ART

ART 111 Art Appreciation
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the origins and historical development of art. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ART 114 Art History Survey I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is 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 includes but is not limited to the art of Ancient Egypt, Greece and Rome, the Byzantine era, and the "Gothic" time period. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ART 115 Art History Survey II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is 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 includes but is not limited to the art of the Renaissance and Baroque periods, Romanticism, Impressionism, and various movements of the 20th century. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ART 117 Non-Western Art History
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces non-Western cultural perspectives. Emphasis is on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ART 131 Drawing I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the language of drawing and the use of various drawing materials. Emphasis is 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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 6. Semester Hours Credit, 3.

ART 132 Drawing II
Prerequisites: ART 131
Corequisite: None

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Lab, 6. Semester Hours Credit, 3.

ASTRONOMY

AST 151 General Astronomy I
Prerequisites: ENG 090, RED 090, and MAT 070, or satisfactory score on placement test
Corequisites: AST 151A

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3; Lab, 0; Semester Hours Credit, 3.

AST 151A General Astronomy I Lab
Prerequisites: ENG 090, RED 090, and MAT 070, or satisfactory score on placement test
Corequisites: AST 151

The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 0; Lab, 2; Semester Hours Credit, 1.

AST 152 General Astronomy II
Prerequisites: AST 151
Corequisites: AST 152A

This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3; Lab, 0; Semester Hours Credit, 3.

AST 152A General Astronomy II Lab
Prerequisites: AST 151
Corequisites: AST 152

The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*
Course Hours Per Week: Class, 0; Lab, 2; Semester Hours Credit, 1.

AUTOMOTIVE SYSTEMS

AUT 110 Intro to Auto Technology
Prerequisites: None
Corequisites: None

This course covers workplace safety, hazardous material and environmental regulations, use of hand tools, service information resources, basic concepts, systems, and terms of automotive technology. Topics include familiarization with vehicle systems along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe safety and environmental procedures, terms associated with automobiles, identify and use basic tools and shop equipment. Course Hours Per Week: Class, 2; Lab, 2; Semester Hours Credit, 3.

AUT 114 Safety and Emissions
Prerequisites: None
Corequisites: None

This course covers the laws, procedures, and specifications needed to perform a North Carolina State Safety and Emissions inspection. Topics include brake, steering and suspension, lighting, horn, windshield wiper, tire, mirrors, and emission control devices inspection. Upon completion, students should be able to perform complete and thorough North Carolina State Safety and Emissions inspections. Course Hours Per Week: Class, 1; Lab, 2; Semester Hours Credit, 2.

AUT 116 Engine Repair
Prerequisites: None
Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information. Course Hours Per Week: Class, 2; Lab, 3; Semester Hours Credit, 3.

AUT 141 Suspension & Steering Sys
Prerequisites: None
Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels. Course Hours Per Week: Class, 2; Lab, 3; Semester Hours Credit, 3.

AUT 151 Brake Systems
Prerequisites: None
Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

AUT 161 Basic Auto Electricity
Prerequisites: None
Corequisites: None

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion,

students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns. Course Hours Per Week: Class, 4; Lab, 3; Semester Hours Credit, 5.

AUT 163 Adv Auto Electricity
Prerequisites: AUT 161
Corequisites: None

This course covers electronic theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of electronics, lighting, gauges, horn, wiper, accessories, and body modules. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, and troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns. Course Hours Per Week: Class, 2; Lab, 3; Semester Hours Credit, 3.

AUT 171 Auto Climate Control
Prerequisites: None
Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information. Course Hours Per Week: Class, 2; Lab, 4; Semester Hours Credit, 4.

AUT 181 Engine Performance 1
Prerequisites: None
Corequisites: None

This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information. Course Hours Per Week: Class, 2; Lab, 3; Semester Hours Credit, 3.

AUT 183 Engine Performance 2
Prerequisites: AUT 161, AUT 181
Corequisites: None

This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 4.

AUT 211 Automotive Machining
Prerequisites: AUT 161
Corequisites: None

This course covers engine machining processes for remanufacturing automotive engines. Emphasis is on cylinder head service, machining block surfaces, reconditioning connecting rod assemblies, camshafts, flywheels, and precision measurement. Upon completion, students should be able to explain the operation and proper use of automotive machining equipment. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 4.

AUT 221 Auto Transm/Transaxles
Prerequisites: AUT 161
Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains. Course Hours Per Week: Class, 2; Lab, 3; Semester Hours Credit, 3.

AUT 231 Man Trans/Axles/Drtrains
Prerequisites: AUT 161
Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train servicing and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains. Course Hours Per Week: Class, 2; Lab, 3 Semester Hours Credit, 3

AUT 281 Adv Engine Performance
Prerequisites: AUT 183
Corequisites: None

This course utilizes service information and specialized test equipment to diagnose and repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform diagnosis and repair. Course Hours Per Week: Class, 2; Lab, 2; Semester Hours Credit, 3.

AUT 283 Adv Auto Electronics
Prerequisites: AUT 161
Corequisites: None

This course covers advanced electronic systems on automobiles. Topics include microcontrollers, on-board communications, telematics, hybrid systems, navigation, collision avoidance, and electronic accessories. Upon completion, students should be able to diagnose electronic systems using appropriate service information, procedures, and equipment and

remove/replace/reprogram controllers, sensors, and actuators. Course Hours Per Week: Class, 2; Lab, 2; Semester Hours Credit, 3.

AUT 285 Intro to Alternative Fuels
Prerequisites: AUT 161
Corequisites: None

This course is an overview of alternative fuels and alternative fueled vehicles. Topics include composition and use of alternative fuels, including compressed natural gas, propane, biodiesel, ethanol, electric, hydrogen, synthetic fuels, and vehicles that use alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel delivery system works, and make minor repairs. Course Hours Per Week: Class, 2; Lab, 2; Semester Hours Credit, 3.

BIOLOGY

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

BIO 092 Basics of Cell Biology
Prerequisites: MAT 060 and RED 080, or satisfactory score on placement test
Corequisite: RED 090 or satisfactory score on placement test

This course covers basic cell biology. Emphasis is on biological chemistry, cell structure and function, cellular metabolism, genetics, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level biology courses. Laboratory exercises focus on basic biological principles and microscope techniques. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

BIO 111 General Biology I
Prerequisites ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the principles and concepts of biology. Emphasis is 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. Laboratory exercises reinforce lecture topics and include microscope techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIO 112 General Biology II
Prerequisite: BIO 111
Corequisite: None

This course is a continuation of BIO 111. Emphasis is 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. Laboratory exercises include microscope observations and dissections to reinforce topics discussed in lecture. *This*

course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics. Course Hours Per Week: Class, 3; Lab, 3; Semester Hours Credit, 4.

BIO 120 Introductory Botany
Prerequisite: BIO 111
Corequisite: 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 non-seed plants. The laboratory exercises are coordinated with lecture topics and may include field exercises. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIO 130 Introductory Zoology
Prerequisite: BIO 111
Corequisite: None

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is 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. Laboratory exercises include microscope observations and dissections to reinforce topics discussed in lecture. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIO 140 Environmental Biology
Prerequisites: Completion of General education core
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.* Course Hours Per Week: Class, 3; Lab, 0; Semester Hours Credit, 3

BIO 163 Basic Anatomy and Physiology
Prerequisite: RED 090 or satisfactory score on placement test
Corequisite: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. Laboratory exercises include specific organ dissections and observations

of physiology. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 4. Lab, 2. Semester Hours Credit, 5.

BIO 168 Anatomy and Physiology I
Prerequisites: ENG 090, MAT 070, and RED 090 or satisfactory score on placement test. In addition, students who have not had high school biology and chemistry within the past ten years or college level biology and chemistry with no time limit, will need to take either BIO 092 and CHM 094 or CHM 130 and CHM 130A as prerequisites to BIO 168.

Corequisite: 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, nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIO 169 Anatomy and Physiology II
Prerequisite: BIO 168
Corequisite: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIO 175 General Microbiology
Prerequisite: BIO 111 or BIO 163
Corequisite: None

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

BIO 250 Genetics
Prerequisite: BIO 112
Corequisite: None

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3; Lab, 3; Semester Hours Credit, 4.

BIO 271 Pathophysiology
Prerequisite: BIO 169
Corequisite: None

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. Course topics include the etiology, physical signs and symptoms, prognosis, and complications of commonly occurring diseases and their management. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BIO 275 Microbiology
Prerequisite: BIO 111 or BIO 168
Corequisite: 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 for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BIOMEDICAL EQUIPMENT-NEW

BMT 211 Biomedical Measurements
Prerequisites: None
Corequisites: None

This course introduces the human-instrument system and problems encountered in attempting to obtain measurements from a living body. Topics include electrodes, transducers, instrumentation, amplifiers, electrocardiographs, monitors, recorders, defibrillators, ESU units, and related equipment. Upon completion, students should be able to analyze, troubleshoot, repair, and calibrate diagnostic and therapeutic equipment. Course Hours Per Week: Class,2. Lab,2. Semester Hours Credit, 3.

BMT 212 BMET Instrumentation I
Prerequisites: None
Corequisites: None

This course covers theory of operation, circuit analysis, troubleshooting techniques, and medical applications for a variety of instruments and devices. Topics include electrodes, transducers, instrumentation amplifiers, electrocardiographs, monitors, recorders, defibrillators, ESU units, and related equipment used in clinical laboratories, intensive care units, and research facilities. Upon completion, students should be able to calibrate, troubleshoot, repair, and certify that instrumentation meets manufacturer's original specifications. Course Hours Per Week: Class, 3. Lab, 6. Semester Hours Credit, 5.

BLUEPRINT READING

BPR 111 Blueprint Reading
Prerequisite: None
Corequisite: 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. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

BPR 121 Blueprint Reading: Mechanical
Prerequisite: BPR 111
Corequisite: 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. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

BIOTECHNOLOGY

BTC 181 Basic Lab Techniques
Prerequisites: ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the basic skills and knowledge necessary in a biological or chemical laboratory. Emphasis is on good manufacturing practices, safety, solution preparation, and equipment operation and maintenance following standard operating procedures. Upon completion, students should be able to prepare and perform basic laboratory procedures using labware, solutions, and equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

BUSINESS

BUS 110 Introduction to Business
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite:
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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 115 Business Law I
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite:
This course introduces the ethics and legal framework of business. Emphasis is 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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 116 Business Law II
Prerequisite: BUS 115
Corequisite: None

This course continues the study of ethics and business law. Emphasis is 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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 137 Principles of Management
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course is designed to be an overview of the major functions of management. Emphasis is 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. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 139 Entrepreneurship I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites:

This course provides an introduction to the principles of entrepreneurship. Topics include self-analysis of entrepreneurship readiness, the role of entrepreneur in economic development, legal problems, organizational structure, sources of financing, budgeting, and cash flow. Upon completion, students should have an understanding of the entrepreneurial process and issues faced by entrepreneurs. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 153 Human Resource Management
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 225 Business Finance
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test; ACC 120; MAT 115 or MAT 140.
Corequisite: None

This course provides an overview of business financial management. Emphasis is on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

BUS 234 Training and Development
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 235 Performance Management
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course includes the legal background for performance management and the basic methodology used in developing and validating a performance management system. Emphasis is on job analysis, job descriptions, appraisal instruments, and action plans. Upon completion, students should be able to develop, implement, and maintain a comprehensive performance management system. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 239 Business Applications Seminar
Prerequisites: ACC 120, BUS 115, BUS 137, MKT 120, and either ECO 251 or ECO 252
Corequisite: None

This course is designed as a capstone course for Business Administration majors. Emphasis is on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

BUS 240 Business Ethics
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces contemporary and controversial ethical issues facing 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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 245 Entrepreneurship II
Prerequisites: BUS 139
Corequisites: None

This course is designed to allow the student to develop a business plan. Topics include the need for a business plan, sections of the plan, writing the plan, and how to find assistance in preparing the plan. Upon completion, students should be able to design and implement a business plan based on sound entrepreneurship principles. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

BUS 255 Organizational Behavior in Business
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite:
This course covers the impact of different management practices and leadership styles on worker satisfaction and morale, organizational effectiveness, productivity, and profitability. Topics include a discussion of formal and informal organizations, group dynamics, motivation, and managing conflict and change. Upon completion, students should be able to analyze different types of interpersonal situations and determine an appropriate course of action. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

COMPUTER ENGINEERING TECHNOLOGY

CET 111 Computer Upgrade/Repair I
Prerequisites: CIS 110
Corequisites: None

This course covers repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include CPU/memory/bus identification, disk subsystems, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CET 211 Computer Upgrade/Repair II
Prerequisites: CET 111
Corequisites: None

This course covers concepts of repair service, and upgrade of computers and peripherals in preparation for industry certification. Topics may include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CHEMISTRY

CHM 094 Basic Biological Chemistry
Prerequisites: MAT 060 and RED 080, or satisfactory score on placement test
Corequisite: MAT 070 or satisfactory score on placement test

This course introduces the chemistry important to biological processes. Emphasis is on the aspects of general, organic, and biological chemistry that apply to biological systems and processes. Upon completion, students should be able to demonstrate an understanding of the basic biological chemistry necessary for success in college-level biology courses. Laboratory work reinforces the principles discussed in lecture. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

CHM 130 Gen, Org, & Biochemistry
Prerequisites: MAT 070 and RED 080, or satisfactory score on placement test
Corequisites: None

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CHM 130A Gen, Org, & Biochemistry Lab
Prerequisites: MAT 070 and RED 080, or satisfactory score on placement test
Corequisites: CHM 130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*
Course Hours Per Week: Lab, 2;. Semester Hours Credit, 1.

CHM 151 General Chemistry I (Change made 4/6/11 for fall 2011)
Prerequisites: RED 090 and MAT 080, or satisfactory score on placement test
Corequisite: 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. Laboratory experiments and computer-based exercises augment and reinforce the basic principles discussed in lecture as well as provide practical examples. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

CHM 152 General Chemistry II
Prerequisite: CHM 151
Corequisite: None

This course continues 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. Laboratory experiments and computer-based exercises augment and reinforce the basic principles discussed in lecture as well as provide practical examples. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

CHM 251 Organic Chemistry I
Prerequisite: CHM 152
Corequisite: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. Laboratory experiments, including spectroscopy and chromatography, and computer-based exercises augment and reinforce the basic principles discussed in lecture as well as provide practical examples. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

CHM 252 Organic Chemistry II
Prerequisite: CHM 251
Corequisite: None

This course continues the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of

aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines, and heterocyclics. Multi-step synthesis is emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. Laboratory experiments, including spectroscopy and chromatography, and computer-based exercises augment and reinforce the basic principles discussed in lecture as well as provide practical examples. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

CHM 263 Analytical Chemistry
Prerequisites: CHM 132 or CHM 152
Corequisites: None

This course covers the knowledge and laboratory skills needed to perform chemical analysis. Emphasis is placed on developing laboratory techniques used in the separation, identification, and quantification of selected substances. Upon completion, students should be able to perform laboratory techniques employed in substance identification and volumetric analysis and interpret the results. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3. Lab, 4. Semester Hours, Credit, 5.

INFORMATION SYSTEMS

CIS 070 Fundamentals of Computing
Prerequisite: None
Corequisite: None

This course covers fundamental functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to operate computers, access files, print documents, and perform basic applications operations. Course Hours per Week: Lab, 2. Semester Hours Credit, 1.

CIS 110 Introduction to Computers
Prerequisite: None
Corequisite: None

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.* Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

CIS 113 Computer Basics
Prerequisite: None
Corequisite: None

This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

CIS 115 Introduction to Prog & Logic
Prerequisite: MAT 070
Corequisite:

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language.
This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option).. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CIS 165 Desktop Publishing I
Prerequisite: CIS 110
Corequisite: None

This course provides an introduction to desktop publishing software capabilities. Emphasis is 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. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

CRIMINAL JUSTICE

CJC 100 Basic Law Enforcement Training
Prerequisites: Acceptance in the BLET program
Corequisites: None

This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigation, practical application and sheriff-specific. Upon successful completion, the student should be able to demonstrate competence in topics and areas required for the state comprehensive certification examination. This is a certificate-level course. Course Hours Per Week: **Class, 9**. Lab, 30. **Semester Hours Credit, 19.**

CJC 111 Introduction to Criminal Justice
Prerequisites: ENG 090 and RED 090 or satisfactory score on placement test
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 as well as evaluate career options. Special emphasis is on the courts of North Carolina and on the constitutional issues arising under the Fourth, Fifth, and Sixth Amendments. *This course has been approved to satisfy*

the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 112 Criminology
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 113 Juvenile Justice
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 and discuss juvenile court structure and procedures, function and jurisdiction of juvenile agencies, processing and detention of juveniles, and case disposition. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 114 Investigative Photography
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, CJC 111 and CJC 112
Corequisites: None
This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film and prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure as well as development techniques. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

CJC 121 Law Enforcement Operations
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. Through an application setting, students utilize current methods and practices of local agencies in order to acquire a more comprehensive understanding of operational needs and logistics. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 131 Criminal Law
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 and elements. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 132 Court Procedure and Evidence
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers judicial structure, process, and 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 and search, proper judicial procedures, and the admissibility of evidence. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 141 Corrections
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 211 Counseling
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 212 Ethics and Community Relations
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 213 Substance Abuse
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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. Current area drug trends and North Carolina statutes regarding controlled substances are reviewed. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 214 Victimology
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces the study of victims. Emphasis is on roles and characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs. In addition, this course assesses mastery of critical competencies within the Criminal Justice program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 215 Organization and Administration
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 and 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 Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 221 Investigative Principles
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, CJC 111, CJC 112, CJC 114, CJC 222
Corequisites: None
This course introduces the theories and fundamentals of the investigative process. Topics include crime scene and incident processing, information gathering techniques, collection and 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. Identified critical competencies will be covered and evaluated. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

CJC 222 Criminalistics
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, CJC 111 and CJC 112
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. Practical applications of course materials are utilized at the instructor's discretion. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 225 Crisis Intervention
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is on the victim/offender situation as well as on job-related high stress and dangerous or problem-solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 231 Constitutional Law
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify and discuss the basic structure of the United States Constitution as well as the rights and procedures as interpreted by the courts. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 232 Civil Liability
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CJC 241 Community-Based Corrections
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house

arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify and discuss the various programs from the perspective of the criminal justice professional, the offender, and the community. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CMT-CONSTRUCTION MANAGEMENT

CMT 210 Professional Construction Supervision
Prerequisite: None
Corequisite: None

This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contracts, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting objectives, and training. Upon completion, the student should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry. Course hours per week:
Class, 3; Lab, 0; Semester Hours Credit, 3.

COOPERATIVE EDUCATION

COE 110 World of Work
Prerequisites: Permission of program director
Corequisites: None

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to make a successful transition from school to work. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

COE 111 Co-Op Work Experience I
Prerequisites: Permission of program director
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 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 Hours Per Week: Work Experience, 10. Semester Hours Credit, 1.

COE 112 Co-Op Work Experience I
Prerequisites: Permission of program director
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 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 Hours Per Week: Work Experience, 20. Semester Hours Credit, 2.

COE 121 Co-Op Work Experience II
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 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 Hours Per Week: Work Experience, 10. Semester Hours Credit, 1.

COMMUNICATION

COM 120 Intro to Interpersonal Communication
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisite: None

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is on the communication process; issues addressed include perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute).* Course Hours Per Week: Class, 3; Semester Hours Credit, 3.

COM 231 Public Speaking
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides instruction and experience in preparing and delivering speeches within a public setting and group discussion. Emphasis is on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. Students should also demonstrate the speaking, listening, and interpersonal skills necessary to be effective communicators in academic settings, in the workplace, and in the community. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts (Substitute.). Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CMT-CONSTRUCTION MANAGEMENT

CMT 210 Professional Construction Supervision
Prerequisite: None
Corequisite: None
This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contracts, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting

objectives, and training. Upon completion, the student should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry. Course hours per week: Class, 3; Lab, 0; Semester Hours Credit, 3.

COMPUTER SCIENCE

CSC 120 Computing Fundamentals I
Prerequisite: MAT 080 or MAT 090 or satisfactory score on placement test and CIS 110
Corequisites: None

This course provides the essential foundation for the discipline of computing and a program of study in computer science, including the role of the professional. Topics include algorithm design, data abstraction, searching and sorting algorithms, and procedural programming techniques. Upon completion, students should be able to solve problems, develop algorithms, specify data types, perform sorts and searches, and use an operating system. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

CSC 130 Computing Fundamentals II
Prerequisites: CSC 120
Corequisites: None

This course provides in-depth coverage of the discipline of computing and the role of the professional. Topics include software design methodologies, analysis of algorithm and data structures, searching and sorting algorithms, and file organization methods. Upon completion, students should be able to use software design methodologies and choice of data structures as well as understand the social and ethical responsibilities of the computing professional. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Lab 2, Semester Hours Credit, 4.

CSC 134 C++ Programming
Prerequisites: CIS 115
Corequisites: None

This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* . Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 139 Visual BASIC Prog
Prerequisites: CIS 115
Corequisites: None

This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools

such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 151 JAVA Programming
Prerequisites: CIS 115
Corequisites: None

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement*. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 152 SAS
Prerequisite: None
Corequisite: None

This course introduces the fundamentals of SAS programming. Emphasis is on learning basic SAS commands and statements for solving a variety of data processing applications. Upon completion, students should be able to use SAS data and procedure steps to create SAS data sets, do statistical analysis, and create general customized reports. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 153 C# Programming
Prerequisites: CIS 115
Corequisites: None

This course introduces computer programming using the C# programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment at the beginning level. Course Hours Per Week: 2. Lab, 3.
Semester Hours Credit, 3

CSC 239 Adv Visual Basic Prog
Prerequisite: CSC 139
Corequisite: None

This course is a continuation of CSC 139 using the Visual BASIC programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 251 Adv JAVA Programming
Prerequisite: CSC 151
Corequisite: None
This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.
Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 253 Adv C# Programming
Prerequisite: CSC 153
Corequisite: None
This course is a continuation of CSC 153 using the C# programming language with object-oriented programming principles. Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CSC 289 Programming Capstone Proj
Prerequisites: CTS 285
Corequisites: None

This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation. Course Hours Per Week. Class, 1. Lab, 4. Semester Hours Credit, 3.

CLINICAL TRIALS RESEARCH ASSOCIATE

CTR 110 Introduction to Clinical Research
Prerequisite: Enrollment in the Clinical Trials Research Associate program or permission of program director
Corequisite: None

This course provides a comprehensive introduction to the clinical research process and its history and evolution. Topics include phase of clinical trials, protection of human subjects, roles of the clinical research teams, and responsibilities of clinical research organizations. Upon completion, students should be able to prepare an organizational chart depicting a typical research team, defining the roles or responsibilities of each member. . The student should also be able to describe the product approval process and discuss the general conduct of a typical clinical trial. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 112 Clinical Research Terminology
Prerequisite: CTR 110
Corequisite: None

This course is designed to enhance and augment the student's knowledge of basic medical terminology. Emphasis is on acronyms, abbreviations, and initials commonly used in clinical research and the terminology associated with pharmaceutical and pharmacological research. Upon completion, students will be able to utilize and apply standard research terminology in effective written and verbal communication. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 115 Clinical Research Regulations
Prerequisites: CTR 110
Corequisites: None

This course covers the range of national and international regulations governing the development of drugs, diagnostics, medical devices, and biologics. Topics include a review of the regulatory agencies, guidelines for regulatory application, required documentation, and preparation for compliance audits. Upon completion, students should be able to demonstrate a basic understanding of regulatory processes associated with clinical research and describe effective means of compliance. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 120 Research Protocol Design
Prerequisites: CTR 130
Corequisites: None

This course introduces the student to the scientific development of research protocols and their key elements. Topics include the differentiation between research design types, rules for writing protocols, ethical considerations relative to research protocols, and the correct preparation of data collection forms. Upon completion, students should be able to identify the primary components of protocols and effectively develop a protocol draft. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 130 Clinical Research Management
Prerequisites: CTR 115
Corequisites: None

This course introduces the student to the elements involved in implementing and managing a clinical study. Topics include overall project planning, development of study goals, preparation of budget and contracts, implementation of monitoring visits, and effective management of research sites. Upon completion, students should be able to design and prepare a plan for the implementation and management of a sample clinical research project. Course Hours Per Week: Class, 4. Semester Hours Credit, 4.

CTR 150 Research Fieldwork I
Prerequisites: CTR 130, CTR 220
Corequisites: None

This course provides supervised work experience and observation in a clinical research setting. Emphasis is on the enhancement of professional skills and the practical application of curriculum concepts research setting. Upon completion, students should be able to apply research theory effectively to clinical research practices. Course Hours Per Week: Lab, 15. Semester Hours Credit, 5.

CTR 210 Introduction to Clinical Data
Prerequisites: None
Corequisites: None

This course covers the collection, organization, and management of study data. Topics include database structures, data management systems, quality assurance, data collection and capture, and data confidentiality and security. Upon completion, students should be able to describe the data management team and effectively organize, enter, and review data. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 215 Data Management Concepts
Prerequisite: CTR 210
Corequisite: None

This course is designed to discuss the elements involved in implementing and managing a clinical study from the perspective of the Data Manager. Topics include development of the data management plan, coordination of data collection and capture, plan the closure and archival of study materials and participate in project management activities. Upon completion, students should be able to design, prepare and execute a complete data management plan for the implementation and management of a sample clinical research project. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

CTR 220 Research Site Management
Prerequisites: CTR 115 and CTR 112
Corequisites: None

This course covers the guidelines and methodology of research site management and the recruitment of research sites, investigators, and subjects. Topics include the identification and evaluation of sites and investigators, on-site budget management, and the coordination of subject participation. Upon completion, students should be able to demonstrate the principles and practices of effective research site management. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

CTR 225 Data Collection
Prerequisites: CTR 210, CTR 215
Corequisite: None

This course is designed to instruct the student on the data collection, validation and quality assurance processes of a clinical research study as conducted by the data management staff. Topics include the development and implementation of data review and data collection, the development of the validation program and the function, conduct and followup of a quality assurance audit of data. Upon completion, students should be able to develop and implement a plan for data collection, validation and quality assurance for a clinical research study. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

CTR 230 Data Trends and Reporting
Prerequisites: CTR 210, CTR 215, CTR 225
Corequisites: None

This course covers the reporting of clinical trial data including identification of safety and efficacy trends in the data. Topics include generation of tables, listing and graphs, the identification and reporting of data trends, and the generation of various types of study reports. Upon completion, students should be able to demonstrate an understanding of the process for review and reporting of clinical trial data results. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

CTR 250 Research Fieldwork II
Prerequisites: CTR 130 and CTR 220,
Corequisites: None

This course provides more advanced work experience in a clinical research setting. Emphasis is on the refinement of professional skills and the practice of curriculum concepts in diverse clinical research areas. Upon completion, students should be able to apply research theory to clinical practices. Course Hours Per Week: Lab, 24. Semester Hours Credit, 8.

CTR 281 Professional Practice
Prerequisites: CTR 120, CTR 130, and CTR 210
Corequisites: None

This course includes communication skills and professional skills essential to the practice of clinical research. Topics include professional ethics and deportment, continuing education and certification, career options, communication skills, and portfolio development. Upon completion, students should be able to demonstrate the communication and professional skills to enter the clinical research workforce and to establish a career plan. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

Computer Information Technology

CTS 120 **Hardware/Software Support**
Prerequisites: CIS 110
Corequisites: None

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CTS 125 **Presentation Graphics**
Prerequisites: CIS 110
Corequisites: None

This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating hardware components, and enhancing presentations with text, graphics, audio and video. Upon completion, students should be able to design and demonstrate an effective presentation. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

CTS 130 **Spreadsheet**
Prerequisites: CIS 110
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. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

New Course
CTS 155 **Tech Support Functions**
Prerequisites: None
Corequisite:: None

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems. Course Hours Per Week: Class, 2. Lab, 2. Semesters Hours Credit, 3.

CTS 220 Adv Hard/Software Support
Prerequisites: CTS 120
Corequisites: None

This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is on configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

CTS 230 Advanced Spreadsheet
Prerequisites: CTS 130
Corequisites: None
This course covers advanced spreadsheet design and development. Topics include advanced functions and statistics, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

New Course
CTS 255 Advanced Technical Support Functions
Prerequisite: CTS 155
Corequisite: None

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Topics include technical support management techniques, evaluation, and methods of deployment for technical support technologies. Upon completion, students should be able to determine the best technologies to support and solve more complex technical support problems. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

CTS 285 Systems Analysis & Design
Prerequisites: CIS 115
Corequisites: None

This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques. Course Hours Per Week: Class, 3. Lab, 0. Semester Hours Credit, 3.

CTS 286 Network Support
Prerequisites: NOS 230 or NOS 231
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 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. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

CTS 289 System Support Project
Prerequisites: CTS 285
Corequisites: None

This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation. Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3.

Database Management Technology

DBA 110 Database Concepts
Prerequisites: CIS 110
Corequisites: None

This course introduces database design and creation using a DBMS product. Emphasis is on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

DBA 115 Database Applications
Prerequisites: DBA 110
Corequisites: None

This course applies concepts learned in DBA 110 to a specific DBMS. 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. Course Hours Per Week: Class, 2. Lab, 2, Semester Hours Credit, 3.

DBA 120 Database Programming I
Prerequisites: CIS 110 OR CIS 115
Corequisites: None

This course is designed to develop SQL programming proficiency. Emphasis is on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

DBA 220 Oracle DB Programming II
Prerequisites: DBA 120
Corequisites: None

This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop an Oracle DBMS application which includes a GUI front-end and report generation. Class, 2. Lab, 2. Semester Hours Credit, 3.

DRAFTING

DFT 115 Architectural Drafting
Prerequisites: None
Corequisites: None

This course introduces basic drafting practices used in residential and light commercial design. Topics include floor plans, foundations, details, electrical components, elevations, and dimensioning practice. Upon completion, students should be able to complete a set of working drawings for a simple structure. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

DFT 119 Basic CAD
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 Hours per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

DFT 170 Engineering Graphics
Prerequisites: None
Corequisites: None

This course introduces basic engineering graphics skills, equipment, and applications (manual and computer-aided). Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorial drawings, and sectional and auxiliary views. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

DENTAL LABORATORY TECHNOLOGY

DLT 111 Dental Anatomy/Physiology
Prerequisites: Enrollment in the Dental Laboratory Technology program
Corequisites: None

This course introduces the anatomy of the individual tooth and the basic anatomy/physiology of the head, oral cavity, and supporting structures. Topics include anatomy, contour, occlusion, malocclusion, the temporomandibular joint, and the anatomical structures of the head and oral cavity. Upon completion, students should be able to carve teeth with proper occlusion, anatomy, and contour and understand the anatomy of the head and oral cavity. Course Hours Per Week: Class, 3. Lab, 6. Semester Hours Credit, 5.

DLT 114 Dental Materials
Prerequisites: Enrollment in the Dental Laboratory Technology program
Corequisites: ENG 090, RED 090, MAT 070, or satisfactory score on placement test

This course provides a study of the composition, properties, and uses of non-metal materials as well as the physical and mechanical properties of metal alloys. Topics include gypsums, waxes, acrylics, metals, and policies related to health, safety, and infection control. Upon completion, students should be able to identify gypsums, waxes, acrylics, and metal materials and know the proper procedures for health, safety, and infection control. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

DLT 116 Complete Dentures
Prerequisites: Enrollment in the Dental Laboratory Technology program
Corequisites: None

This course introduces basic and intermediate techniques in complete denture construction and also covers mandibular movement, occlusion, and infection control. Topics include baseplates, occlusion rims, articulator mountings, custom trays, setting of teeth, waxing denture bases, investing, processing, selective grinding, finishing, and polishing of complete dentures. Upon completion, students should be able to construct complete denture prostheses utilizing proper laboratory technique. Course Hours Per Week: Class, 1. Lab, 9. Semester Hours Credit, 4.

DLT 118 Cast Partial Dentures
Prerequisites: None
Corequisites: DLT 114

This course covers techniques used in fabricating cast removable partial denture frameworks utilizing a chrome-cobalt alloy. Topics include surveying, designing, block-out procedures, pouring refractory casts, waxing, casting, finishing, polishing frameworks, tooth selection, setup, processing, and finishing of acrylic. Upon completion, students should be able to fabricate cast removable partial dentures following the dental prescription. Course Hours Per Week: Class, 3. Lab, 9. Semester Hours Credit, 6.

DLT 119 Wrought-Orthodontic Appliances
Prerequisites: DLT 114
Corequisites: None

This course introduces techniques for fabricating removable wrought and orthodontic/pedodontic appliances. Topics include wrought clasps, archwires, orthodontic clasps, orthodontic acrylic, soldering, fabrication, and repair of orthodontic restorations. Upon completion, students should be able to fabricate removable wrought-orthodontic appliances following the dental prescription. Course Hours Per Week: Class, 1. Lab, 9. Semester Hours Credit, 4.

DLT 123 Crown and Bridge
Prerequisites: DLT 111 and DLT 114
Corequisites: None

This course introduces techniques for fabricating cast gold restorations. Topics include infection control, pouring impressions with removable dies, trimming margins, articulating, waxing of single and multiple units, soldering, and principles of occlusion. Upon completion, students should be able to fabricate single and multiple unit cast gold fixed restorations. Course Hours Per Week: Class, 2. Lab, 12. Semester Hours Credit, 6.

DLT 126 Advanced Crown and Bridge
Prerequisites: DLT 123
Corequisites: None

This course introduces techniques for fabricating advanced fixed restorations. Topics include resin veneers, temporary crowns, post-core crowns, overdenture copings, non-parallel bridges, and semi-precision attachments. Upon completion, students should be able to fabricate advanced fixed restorations. Course Hours Per Week: Class, 1. Lab, 9. Semester Hours Credit, 4.

DLT 211 Advanced Complete Dentures
Prerequisites: DLT 114 and DLT 116
Corequisites: None

This course includes instruction in advanced complete denture construction. Topics include overdentures, immediate dentures, cast metal bases, relines, rebases, repairs, and various occlusal relationships. Upon completion, students should be able to construct advanced complete denture prostheses following the dental prescription. Course Hours Per Week: Class, 2. Lab, 12. Semester Hours Credit, 6.

DLT 215 Advanced Partial Dentures
Prerequisites: DLT 118
Corequisites: None

This course examines the biomechanics of removable partial denture design as well as fabrication and concepts, including gnathalogical principles as applied in the construction of restorations. Emphasis is on fabricating advanced cast metal restorations, including bite raisers, flat back facings, tube teeth, and concepts relating to precision partial construction, such as implants.

Upon completion, students should be able to demonstrate an understanding of gnathalogical concepts and the fabrication of special types of removable restorations. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

DLT 217 Ceramic Techniques
Prerequisites: DLT 126
Corequisites: None

This course includes the physical properties of metals and ceramics as well as the fabrication of porcelain fused to metal crowns, including porcelain shoulder margins. Emphasis is on infection control, model and die fabrication, metal substructure fabrication, build up, firing, and finishing of ceramic crowns. Upon completion, students should be able to complete single unit ceramic crowns. Course Hours Per Week: Class, 2. Lab, 9. Semester Hours Credit, 5.

DLT 219 Jurisprudence and Ethics
Prerequisites: Enrollment in the Dental Laboratory Technology program
Corequisites: None

This course covers the history as well as the legal and ethical aspects of the laboratory profession and in-depth studies of the certification program. Topics include dental laboratory history, dentist-laboratory relationships, certification preparation, and legal and ethical requirements of dental laboratories and technicians. Upon completion, students should be able to demonstrate an understanding of the legal and ethical requirements of the dental laboratory profession and dental history. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

DLT 222 Advanced Ceramic Techniques
Prerequisites: DLT 217
Corequisites: None

This course covers the fabrication of metal-ceramic bridges; all-ceramic crowns; and shading, staining, and personalizing ceramic restorations. Emphasis is on bonding dental porcelain on base metal alloys, margination, contouring, shading, and soldering. Upon completion, students should be able to fabricate ceramic-to-metal bridgework. Course Hours Per Week: Class, 2. Lab, 9. Semester Hours Credit, 5.

DLT 224 Dental Lab Practice
Prerequisites: DLT 211, DLT 126, DLT 217, AND DLT 118 and all required General Education courses for the degree
Corequisites: DLT 215 and DLT 222

This course provides practical experience in the commercial laboratory setting. Emphasis is on all laboratory techniques pertaining to the specialty area. Upon completion, students should be able to function effectively in the commercial dental laboratory environment. Course Hours Per Week: Work Experience, 20. Semester Hours Credit, 2.

DRAMA

DRA 111 Theatre Appreciation
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3; Semester Hours Credit, 3.

DRA 122 Oral Interpretation
Prerequisites: ENG 080, RED 080 or satisfactory score on placement test
Corequisites: None

This course introduces the dramatic study of literature through performance. Emphasis is on analysis and performance of poetry, drama, and prose fiction. Upon completion, students should be able to appreciate and to participate in the critical analysis of various literary voices. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3; Semester Hours Credit, 3.

DRA 170 Play Production I
Prerequisites: ENG 090, RED 090, or satisfactory score on placement test
Corequisites: None

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 0. Lab, 9. Semester Hours Credit, 3.

ECONOMICS

ECO 251 Principles of Microeconomics
Prerequisites: ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces economic analysis of individual, business, 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 achieve economic objectives efficiently. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the*

general education core requirement in social/behavioral sciences. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ECO 252 Principles of Macroeconomics
Prerequisites: ENG 090, MAT 070, and RED 090, or satisfactory score on placement test
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 for the general education core requirement in social/behavioral sciences.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDUCATION

EDU 114 Intro to Family Childcare
Prerequisites: ENG 080, RED 080, and MAT 060
Corequisites: None

This course introduces the student to family child care home environments with emphasis on standards and developmentally effective approaches for supporting diverse children and families. Topics include standards for quality, curriculum for multiple age groups, authentic assessment methods, business practices, building positive family and community partnerships, and professionalism. Upon completion, students should be able to design a family child care handbook that reflects a healthy, respectful, supportive, and stimulating learning environment.

EDU 118 Princ & Prac of Inst Asst
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course covers the instructional assistant'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 role of the instructional assistant, demonstrate positive communication skills, and discuss educational philosophy. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 119 Intro to Early Child Educ
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 all children. Topics include historical foundations, program types, career options, professionalism and creating inclusive environments and curriculum responsive to the needs of all children and families. Upon completion, students should be able to design career plans and develop schedules, environments and activity plans appropriate for all children. Course Hours Per Week: Class, 4. Semester Hours Credit, 4.

EDU 125 **Sign Lang. for Educators**
Prerequisites: ENG 080 and RED 080
Corequisites: None

This course introduces students to the sign language systems commonly used in educational environments. Topics include fingerspelling, receptive and expressive sign language usage, a comparison of sign language systems, and forms of relevant technology. Upon completion, students should be able to communicate at an introductory level using various English-based sign language systems including Manually Coded English. . Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 131 **Child, Family, & Commun**
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships between families, educators, and professionals that enhance development and educational experiences of all children. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 144 **Child Development I**
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 145 **Child Development II**
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test, EDU 144
Corequisites: None

This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 146 **Child Guidance**
Prerequisites: Take one set
ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self control and the role of communication and guidance. Upon completion, students should be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 151 **Creative Activities**
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: EDU 151 A

This course covers planning, creation and adaptation 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 dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 151A **Creative Activities Lab**
Prerequisites: ENG 080 AND RED 080, or satisfactory score on placement test
Corequisites: EDU 151

This course provides a laboratory component to complement EDU 151. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate creative activities. Course Hours Per Week: Class, 0. Lab, 2. Semester Hours Credit, 1.

EDU 152 **Music, Movement, and Language**
Prerequisite: ENG 080 AND RED 080, or satisfactory score on placement test
Corequisite: None

This course introduces historical perspectives of music and movement and integrates the whole language concept with emphasis on diversity. Emphasis is on designing an environment that focuses on language development through developmentally and culturally appropriate music and movement. Upon completion, students should be able to design an environment that develops language through a music and movement curriculum that emphasizes diversity. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 153 **Health, Safety & Nutrition**

Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course covers 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, safe learning environments, and adhere to state regulations**.** Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 154 Social/Emotion/Behavioral Development
Prerequisites: ENG 080, RED 080, or satisfactory score on placement test ;EDU 144 and EDU 145
Corequisites: None

This course covers the emotional/social development of children and the causes, expressions, prevention and management of challenging behaviors in all children. Emphasis is placed on caregiver/family/child relationships, positive emotional/social environments, developmental concerns, risk factors, and intervention strategies. Upon completion, students should be able to identify factors influencing emotional/social development, utilizing screening measures, and designing positive behavioral supports. Course Hours Per Week:
Class, 3. Semester Hours Credit, 3.

EDU-158 Healthy Lifestyles-Youth
Prerequisites: ENG-080 and RED-080
Corequisites:
This course introduces the topics of health, safety, nutrition, physical activities and environments for the school-age child/youth that promote development, fitness and healthy lifestyles. Topics include the use of physical and nutritional/cooking activities (indoor/outdoor, teacher-directed/youth-directed) appropriate for youth developing typically/atypically; safe/healthy menu planning; safe/healthy environmental design, assessment and supervision. Upon completion, students should be able to plan/facilitate safe/healthy physical and nutritional/cooking activities, discuss safety policies/regulations and identify health/safety/nutritional needs of youth. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 161 Intro to Exceptional Child
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course covers children with exceptionalities as life long learners within the context of the community, school and family. Emphasis is placed on inclusion, legal, social/political, environmental, and cultural issues relating to the teaching of children with exceptionalities. Upon completion, students should be able to demonstrate knowledge of identification processes, inclusive techniques, and professional practices and attitudes. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 163 Classroom Mgt & Instruct

Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None

This course covers management and instructional techniques with school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and instructional strategies that enhance the teaching/learning process and promote students' academic success. Course Hours Per Week: Class, 3. Lab, 0 Semester Hours Credit, 3

EDU-184 **Early Child Intro Pract**

Prerequisites: Take One Set: None
Set 1: Take ENG-080, RED-080, and EDU-119
Set 2: Take ENG-085 and EDU-119

Corequisites:

This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits. Course Hours Per Week: Class, 1; Lab, 3; Semester Hours Credit, 2.

EDU 216 **Foundations of Education**
Prerequisites: Take one set
Set 1: ENG 090 and RED 090
Set 2: ENG 095
Set 3: Satisfactory score on placement test
Corequisites: None

This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, and experiences in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement at select institutions only.* Class, 4. Lab, 0 Semester Hours Credit, 4.

EDU 220 **Prog Poli in Early Interv**
Prerequisites: ENG 090, RED 090 and EDU 144
Corequisites: None

This course covers program policies, issues, legislation, and service delivery models included in early intervention. Emphasis is placed on trends and policies in early intervention relating to programs for infants and young children with disabilities, family roles, and research outcomes. Upon completion, students should be able to identify roles and responsibilities, describe the referral and placement options and explain the different service delivery models. Class, 3. Lab, 0 Semester Hours Credit, 3

EDU 221 **Children with Exceptionalities**
Prerequisites: Take one set
Set 1: ENG 090, RED 090, or satisfactory score on placement test ;EDU 144 and EDU 145
Set 2: ENG 095, or satisfactory score on placement test; EDU 144 and EDU 145
Corequisites: None

This course introduces children with exceptionalities, their families, support services, inclusive/diverse settings, and educational/family plans based on the foundations of child development. Emphasis is placed on the characteristics of exceptionalities, observation and assessment of children, strategies for adapting the learning environment, and identification of community resources. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement at select institutions only* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 234 **Infants, Toddlers, & Twos**
Prerequisites: Take one set
Set 1: ENG 090, RED 090, or satisfactory score on placement test; and EDU 119
Set 2: ENG 095, or satisfactory score on placement test; and EDU 119
Corequisites: None

This course covers the unique needs and rapid changes that occur in the first three years of life and the inter-related factors that influence development. Emphasis is placed on recognizing and supporting developmental milestones through purposeful strategies, responsive care routines and identifying elements of quality, inclusive early care and education. Upon completion, students should be able to demonstrate respectful relationships that provide a foundation for healthy infant/toddler/twos development, plan/select activities/materials, and partner with diverse families. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU-235 **School-Age Dev & Program**
Prerequisites: Take one set
Set 1: ENG 090, RED 090, or satisfactory score on placement test; and EDU 119
Set 2: ENG 095, or satisfactory score on placement test; and EDU 119
Corequisites: None
This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for all children ages five to twelve and plan and implement developmentally-appropriate activities.
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 241 Adult-Child Relations
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
Corequisites: None

This course covers self-concept and effective, active listening skills in positive one-to-one interactions with individuals and groups of children. Emphasis is on self-concept development and effective communication techniques used with children. Upon completion, students should be able to identify principles underlying self-concept and demonstrate effective listening and communication skills adults use with children. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

EDU 250 PRAXIS I Preparation
Prerequisite: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test , and final semester of Early Childhood Associate or School Age Education program
Corequisite: None

This course is designed to prepare potential teachers for the PRAXIS I exam that is necessary to enter the field of education. Emphasis is on content specifications of the PRAXIS I exam, study skills, and simulated examinations. Upon completion, students should be able demonstrate an understanding of the content necessary for successful completion of the PRAXIS I exam. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

EDU 257 Inst Strat/Math
Prerequisites: Take one set
Set 1: ENG 090, RED 090 and MAT 060, or satisfactory score on placement test
Set 2: ENG 095 and MAT 060, or satisfactory score on placement test
Corequisites: None

This course covers concepts, activities, methods, and materials for teaching mathematics in elementary through middle school grades. Topics include individual instruction, developmental skill building, manipulatives, problem solving, critical thinking and numerical concepts. Upon completion, students should be able to assess, plan, implement and evaluate developmentally appropriate math experiences relating to the NC Standard Course of Study. Course Hours Per Week: Class, 2. Laboratory, 2. Semester Hours Credit, 3.

EDU 261 Early Childhood Administration I
Prerequisites: Take one set
Set 1: ENG 090 and RED 090
Set 2: ENG 095
Set 3: Satisfactory score on placement test
Corequisites: EDU 119

This course introduces principles of basic programming and staffing, budgeting/financial management and marketing, and rules and regulations of diverse early childhood programs. Topics include program structure and philosophy, standards of NC child care programs, finance, funding resources, and staff and organizational management. Upon completion, students should be able to develop components of program/personnel handbooks, a program budget, and

demonstrate knowledge of fundamental marketing strategies and NC standards. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 262 Early Childhood Admin II
Prerequisites: Take one set
Set 1: ENG 090, RED 090, or satisfactory score on placement test, and EDU 261
Set 2: ENG 095, or satisfactory score on placement test, and EDU 261
Corequisites: EDU 119

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs**.** Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU-263 **School-Age Program Admin**
Prerequisites: Take one set
Set 1: ENG 090, RED 090, or satisfactory score on placement test
Set 2: ENG 095, or satisfactory score on placement test

This course introduces the methods and procedures for development and administration of school-age programs in the public or proprietary setting. Emphasis is placed on the construction and organization of the physical environment. Upon completion, students should be able to plan, develop and administer a quality school-age program. Course Hours Per Week: Class, 2. Semester Hours Credit, 2

EDU 271 Educational Technology
Prerequisite: CIS 113 or CIS 110; ENG 090 and RED 090, or ENG 095. or satisfactory score on placement test
Corequisite: 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 educational environments. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

EDU 275 Effective Teacher Training
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
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. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

EDU 280 **Language & Literacy Experience**
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EDU 284 **Early Child Capstone Prac**
Prerequisites: ENG 090, RED 090, MAT 070, or satisfactory score on placement test; EDU 119; EDU 131, EDU 144, EDU 145, EDU 146, EDU 151, EDU 151A, EDU 153, EDU 161, EDU 221, EDU 234, EDU 261, EDU 262, EDU 271, EDU 280 (A criminal background check is also required prior to enrollment in this course; all program general education courses must also be completed)
Corequisites: None

This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits. Course Hours Per Week: Class, 1 Lab, 9 Semester Hours Credit, 4

EDU 285 **Internship Exp-School Age**
Prerequisites: Take one set
Set 1: ENG 090, RED 090, EDU 144, EDU 145, EDU 118 and EDU 163
Set 2: ENG 095, EDU 144, EDU 145, EDU 118 and EDU 163
Corequisites: None

This course is designed to allow students to apply skills in a quality public or private school environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate lesson plans/assessments, appropriate guidance techniques, ethical/professional behaviors as indicated by assignments and onsite faculty visits. Class, 1. Lab, 9. Semester Hours Credit, 4.

EDU 288 Advanced Issues/Early Childhood Education
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
Corequisites: None

This course covers advanced topics and issues in early childhood. Emphasis is on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

EDU 289 Adv Issues/School Age
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
Corequisites: None

This course covers advanced topics and issues that relate to school-age programs. Emphasis is placed on current advocacy issues, emerging technology, professional growth, ethics, and organizations for providers/teachers working with school-age populations. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues surrounding school-aged populations.
Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

ENGLISH AS A FOREIGN LANGUAGE

EFL 050 English for Academic Purposes
Prerequisite: None
Corequisite: None

This course will provide instruction in academic and professional language skills for non-native speakers of English. Emphasis is placed on development of integrated language skills for use in studying a particular content area. Upon completion, students will demonstrate improved academic language, content-specific vocabulary and skills, and cultural knowledge in the topic area. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

EFL 055 English for Special Purposes
Prerequisites: None
Corequisites: None

This course will provide instruction in academic and professional language for non-native speakers of English. Emphasis is placed on development of integrated language use for carrying out a specific academic task. Upon completion, students should be able to demonstrate improved language skills for participation and success within the particular topic area. Course Hours Per Week: Class, 3 Semester Hours Credit, 3.

EFL 181 EFL Lab 1
Prerequisites: ENG 070 and RED 070, or permission of EFL Coordinator

Corequisites: None

This course is designed to enhance the preparation of advanced non-native speakers of English for successful communication as required in college-level courses. Emphasis in placed on the writing and editing of compositions for grammatical accuracy and clarity through the use of supplementary learning media and materials. Upon completion, students should be able to converse and write in various organizational formats.
Course Hours Per Week: Class, 0. Lab, 2. Semester Hours Credit, 1.

EFL 182 EFL Lab 2
Prerequisites: ENG 070 and RED 070, or permission of EFL Coordinator
Corequisites: None

This course is designed to enhance reading and comprehension skills for advanced non-native speakers of English. Emphasis in placed on understanding academic texts and developing effective note taking skills through the use of supplementary learning media and materials. Upon completion, students should be able to differentiate between main points, supporting and extraneous information, and take organized notes on lectures and texts. Course Hours Per Week: Class, 0. Lab, 2. Semester Hours Credit, 1.

ENGINEERING

EGR 131 Introduction to Electronics Technology
Prerequisites: None
Corequisites: None

This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving, and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem-solving techniques, and use a scientific calculator. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

EGR 150 Intro to Engineering
Prerequisites: MAT 080, RED 080, ENG 080.
Corequisites: None

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

New course

EGR 220 Engineering Statics
Prerequisite: PHY 251
Corequisite MAT 272

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium. Course Hours Per Week: Class, 3. Lab, 0.. Semester Hours Credit, 3.

ENVIRONMENTAL HEALTH AND SAFETY

EHS 111 Occupational Safety/Engineering
Prerequisites: None
Corequisites: None

This course covers recognition, control, and regulation of safety hazards in the workplace. Topics include accident investigation, Workers Compensation, record keeping, training, machine guarding, facilities, personal protection, and fire protection. Upon completion, students should be able to recognize safety hazards and recommend strategies for remediation and compliance. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

EHS 112 Industrial Hygiene
Prerequisites: None
Corequisites: None

This course emphasizes the recognition, evaluation, and control of occupational health hazards. Topics include hazard recognition, health standards, air sampling, ventilation, noise exposure, and temperature stress. Upon completion, students should be able to identify and quantify common occupational health hazards. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

EHS 113 OSHA Electrical Safety
Prerequisites: None
Corequisites: None

This course covers OSHA electrical safety regulations that apply to general industry. Emphasis is on controlling electrical hazards in the workplace, understanding ground paths, recognizing electrical hazards, and interpreting electrical standards. Upon completion, students should be able to demonstrate an understanding of OSHA electrical safety regulations within general industry. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

EHS 114 OSHA Regulations
Prerequisites: None
Corequisites: None

This course emphasizes application of OSHA performance-oriented standards for workplace safety and health. Topics include hazard communication, bloodborne pathogens, and the laboratory standard. Upon completion, students should be able to implement written plans required for compliance.
Course Hours Per Week: Class, 4. Semester Hours Credit, 4.

EHS 116 Environmental Management
Prerequisites: None
Corequisites: None

This course covers management of hazardous materials and hazardous waste in industrial and institutional settings. Emphasis is on compliance with the applicable regulations of the U.S. Environmental Protection Agency and the U.S. Department of Transportation, as enforced by North Carolina agencies. Upon completion, students should be able to implement appropriate compliance strategies. Course Hours Per Week: Class, 4. Semester Hours Credit, 4.

EHS 211 Environmental Health and Toxicology
Prerequisites: None
Corequisites: None

This course covers the many effects of environmental agents (chemical, physical and biological) on human health. Particular emphasis is on principles of toxicology and federal regulations relevant to environmental health. Upon completion, students should be able to recommend rational strategies for the control of chemical hazards in the occupational and general environment. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

EHS 212 Industrial Hygiene Sampling
Prerequisites: None
Corequisites: None

This course covers industrial hygiene and sampling. Topics include the calibration and operation of sampling equipment and instruments. Upon completion, students should be able to perform basic industrial hygiene sampling procedures and interpret the results. In addition, the course covers applications and use of personal protective equipment. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

EHS 215 Incident Management
Prerequisites: None
Corequisites: None

This course introduces management of hazardous materials and incidents. Topics include analysis and application of the Incident Command System from the discovery of a hazardous substance release to decontamination and termination procedures. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of hazardous materials team members. This course provides OSHA HAZWOPER standard certification at the awareness, operations, and technician level. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

EHS 218 Occupational Ergonomics
Prerequisites: None
Corequisites: None

This course emphasizes recognition of musculoskeletal disorders in institutional, office, and industrial settings. Topics include anthropometry, working postures, task analysis, manual materials handling, lifting equations, and environmental factors. Upon completion, students

should be able to recognize ergonomic problems and recommend appropriate control measures. Course Hours Per Week: Class 3. Semester Hours Credit, 3.

EHS 219 Radiation Protection
Prerequisites: None
Corequisites: None

This course covers theory, detection, health effects, and regulation of ionizing radiation. Particular emphasis is on compliance with federal regulations in the occupational setting. Upon completion, students should be able to aid in implementation of a radiation protection program in an industrial or institutional setting. Course Hours Per Week: Class, 3. Semester Hours Credit, 3

ELECTRICITY

ELC 112 DC/AC Electricity
Prerequisites: None
Corequisites: None

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, troubleshoot, and repair DC/AC circuits. Course Hours Per Week: Class, 3. Lab, 6. Semester Hours Credit, 5.

ELC 113 Basic Wiring I
Prerequisites: None
Corequisites: None

This course introduces the care and use of tools and materials used in electrical installations as well as the requirements of the National Electrical Code. Topics include 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 Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

ELC 115 Industrial Wiring
Prerequisites: ELC 113
Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment. Course Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

ELC 117 Motors and Controls
Prerequisites: None
Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits. Course Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

ELC 118 National Electrical Code
Prerequisites: None
Corequisites: None

This course covers the use of the current National Electrical Code. Topics include the National Electric Code (NEC) history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

ELC 127 Software for Technicians
Prerequisite: ELC 131
Corequisite: None

This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations, applications, and controls. Upon completion, students should be able to utilize a personal computer for electrical/electronics-related applications. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

ELC 128 Introduction to PLC
Prerequisites: ELC 117
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 and installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

ELC 131 DC/AC Circuit Analysis
Prerequisites: None
Corequisites: MAT 121

This course introduces DC and AC electricity with emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment. Course Hours Per Week: Class, 4. Lab, 3. Semester Hours Credit, 5.

ELC 135 Electrical Machines I
Prerequisites: ELC 112 or ELC 131
Corequisites: None

This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals, including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ELC 136 Electrical Machines II
Prerequisites: ELC 135
Corequisites: None

This course covers DC/AC motor fundamentals, including applications and control. Topics include control devices, synchronous and induction single and polyphase AC motors, DC motors, stepper, and special purpose motors. Upon completion, students should be able to perform regulation and efficiency calculations and apply motor theory to practical control applications. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELC 213 Instrumentation
Prerequisites: ELC 112 or ELC 131
Corequisites: None

This course covers the fundamentals of instrumentation used in industry. Emphasis is on electric, electronic, and other instruments. Upon completion, students should be able to install, maintain, and calibrate instrumentation. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ELC 215 Electrical Maintenance
Prerequisites: ELC 117
Corequisites: None

This course introduces the theory of maintenance and the skills necessary to maintain electrical equipment used in industrial and commercial facilities. Topics include maintenance theory, predictive and preventive maintenance, electrical equipment operation and maintenance, and maintenance
documentation. Upon completion, students should be able to perform maintenance on electrical equipment in industrial and commercial facilities. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

ELC 228 PLC Applications
Prerequisites: ELC 128
Corequisites: None

This course continues the study of the programming and applications of programmable logic controllers. Emphasis is on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers. Course Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

ELECTRONICS

ELN 131 Semiconductor Applications
Prerequisites: ELC 131
Corequisites: MAT 122

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 132 Linear IC Applications
Prerequisites: ELN 131
Corequisites: None

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, waveform generators, active filters, IC voltage regulators, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 133 Digital Electronics
Prerequisites: ELC 112 or ELC 131
Corequisites: ELN 133A

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 133A Digital Electronics Lab
Prerequisites: ELC 112 or ELC 131
Corequisites: ELN 133

This course is a laboratory to accompany ELN 133. Emphasis is placed on laboratory experiences which enhance the materials presented in ELN 133 and which provide practical experience. Upon completion students should be able to demonstrate a general understanding of digital fundamentals. Course Hours Per Week: Class, 0. Lab, 3. Semester Hours Credit, 1.

ELN 210 Introduction to Microelectronics
Prerequisites: None
Corequisites: None

This course introduces the field of microelectronics and semiconductor processing. Topics include an overview of the industry, job requirements and opportunities, vocabulary, and types of microelectronics devices manufactured. Upon completion, students should be able to demonstrate an understanding of the basics of semiconductor materials, properties, and fabrication procedures. This course is a unique concentration requirement in the Microelectronics concentration of the Electronics Engineering Technology program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ELN 215 Semiconductor Physics
Prerequisites: ELN 131 or ELN 210
Corequisites: None

This course introduces solid state physics and emphasizes semiconductors. Topics include quantum physics, the atom, solid state devices, and semiconductor and integrated circuit fabrication techniques. Upon completion, students should be able to apply these principles of physics to basic semiconductor fabrication. This course is a unique concentration requirement in the Microelectronics concentration of the Electronics Engineering Technology program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ELN 220 Semiconductor Analysis
Prerequisites: ELN 210
Corequisites: None

This course covers the field of microelectronics and semiconductor processing. Topics include circuit layout, mask making, photolithography diffusion, and thin-film processes for wafer fabrication. Upon completion, students should be able to identify different types of measuring, testing, and inspection equipment used for microelectronics circuits and understand failure analysis. This course is a unique concentration requirement in the Microelectronics concentration of the Electronics Engineering Technology program. Course Hours Per Week: Class, 2. Lab, 4. Semester Hours Credit, 4.

ELN 225 Microprocessing Design
Prerequisites: ELN 215
Corequisites: None

This course provides an in-depth study of the field of microelectronics and microchip processing technology. Topics include oxidation, diffusion, photolithography, and metallization. Upon completion, students should be able to demonstrate an understanding of bipolar and unipolar IC processes developed by a study of design rules and other process parameters. This course is a unique concentration requirement in the Microelectronics concentration of the Electronics Engineering Technology program. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ELN 229 Industrial Electronics
Prerequisites: ELC 112, ELC 131, or ELC 140
Corequisites: None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. Upon completion, students should be able to install and/or troubleshoot these devices for

proper operation in an industrial electronic circuit. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 232 Introduction to Microprocessors
Prerequisites: ELN 133
Corequisites: None

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include low-level language programming, bus architecture, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 234 Communication Systems
Prerequisites: ELN 132 or ELN 140 and MAT 122
Corequisites: None

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

ELN 236 Fiber Optics and Lasers
Prerequisites: ELN 131
Corequisites: None

This course introduces the fundamentals of fiber optics and lasers. Topics include the transmission of light, characteristics of fiber optic and lasers and their systems, fiber optic production, types of lasers, and laser safety. Upon completion, students should be able to understand fiber optic communications and basic laser fundamentals. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ELN 247 Electronic Application Project
Prerequisites: ELN 131
Corequisites: None

This course provides a structured approach to an application electronics project. Emphasis is on selecting, planning, implementing, testing, and presenting an application-oriented project. Upon completion, students should be able to present and demonstrate an electronics application-oriented project. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

ELN 275 Troubleshooting
Prerequisites: ELN 232 and ELN 132
Corequisites: NONE

This course covers techniques for analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to diagnose and isolate faults logically and perform necessary repairs to meet manufacturers' specifications. Course Hours Per Week: Class, 1. Lab, 3 Semester Hours Credit, 2.

EMERGENCY MEDICAL SCIENCE

EMS 110 EMT-Basic
Prerequisites: None
Corequisites: None

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the skills necessary to achieve North Carolina State or National Registry EMT-Basic certification. Course Hours Per Week: Class, 5. Lab, 6. Semester Hours Credit, 7.

ENGLISH

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

ENG 070 Basic Language Skills
Prerequisites: None
Corequisites: None

This course introduces the fundamentals of standard written English. Emphasis is on effective word choice, recognition of sentences and sentence parts, and basic usage. Upon completion, students should be able to generate sentences that clearly express ideas. Students compose sentences in standard written English using all verb tenses and correct punctuation. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

ENG 080 Writing Foundations
Prerequisites: ENG 070 or satisfactory score on placement test
Corequisites: None

This course introduces the writing process and stresses effective sentences. Emphasis is on applying the conventions of written English as well as 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. Students are introduced to the standard essay form. This course does not satisfy the developmental reading and writing prerequisite for ENG 111. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

ENG 085 Reading & Writing Foundations

Prerequisites: ENG 070 and RED 070, or ENG 075
Corequisites: None

This course uses whole language to develop proficiency in reading and writing for college. Emphasis is placed on applying analytical and critical reading skills to a variety of texts and on introducing the writing process. Upon completion, students should be able to recognize and use various patterns of text organization and compose effective paragraphs. *This course integrates ENG 080 and RED 080. This course does not satisfy the developmental reading and writing prerequisites for ENG 111 or ENG 111A.* Course Hours Per Week: Class, 5 Lab, 0. Semester Hours Credit, 5.

ENG 085A Reading & Writing Foundations Lab
Prerequisites: ENG 070 and RED 070; or ENG 075
Corequisites: ENG 085

This laboratory provides the opportunity to practice the skills introduced in ENG 085. Emphasis is placed on practical skills for applying analytical and critical reading skills to a variety of texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective paragraphs. Course Hours Per Week: Class, 0 Lab, 2. Semester Hours Credit, 1

ENG 090 Composition Strategies
Prerequisites: RED 070, ENG 080, or satisfactory score on placement test
Corequisites: ENG 090A

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is 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. Students write essays responding to assigned readings and using different rhetorical modes. This course satisfies the developmental writing prerequisite for ENG 111; the developmental reading prerequisite for ENG 111 must also be met. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 090A Composition Strategies Lab
Prerequisites: ENG 080, or satisfactory score on placement test
Corequisites: ENG 090

This writing lab is designed for practicing the skills introduced in ENG 090. Emphasis is 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. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ENG 095 Reading and Composition Strategies
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: ENG 095A

This course uses whole language to strengthen proficiency in reading and writing for college. Emphasis is on applying critical reading skills to narrative and expository texts and on using the writing process. Upon completion, students should be able to comprehend, analyze, and evaluate college texts and to compose essays in preparation for college writing. Some sections may be discipline specific. This course integrates ENG 090 and RED 090. This course satisfies the

developmental reading and writing prerequisites for ENG 111. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

ENG 095A Reading and Composition Strategies Lab
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: ENG 095

This laboratory provides the opportunity to practice the skills introduced in ENG 095. Emphasis is on applying critical reading skills to narrative and expository texts and on the writing process. Upon completion, students should be able to apply those skills in producing effective essays as preparation for college writing. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ENG 111 Expository Writing
Prerequisites: ENG 090 and RED 090, or ENG 095, or satisfactory score on placement test
Corequisite: None

This is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is 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. Students should also be able to respond critically to readings and demonstrate an understanding of the fundamentals of research and documentation. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in English composition.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 112 Argument-Based Research
Prerequisite: ENG 111
Corequisite: None

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. Students should also be able to present material orally in a clear and logical format. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in English composition.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 113 Literature-Based Research
Prerequisite: ENG 111
Corequisite: 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 on critical reading and thinking as well as the analysis and interpretation of prose, poetry, and drama, including plot, characterization, theme, and cultural context. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. Students should also be able to present material orally in a clear and logical format. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in English composition*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 231 American Literature I
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 232 American Literature II
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course covers selected works in American literature from 1865 to the present. Emphasis is 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 233 Major American Writers
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides an intensive study of the works of several major American authors. Emphasis is on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 241 British Literature I
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 242 British Literature II
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 243 Major British Writers
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides an intensive study of the works of several major British authors. Emphasis is on British history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 251 Western World Literature I
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 252 Western World Literature II
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides a survey of selected European works from the Neoclassical period to the present. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 261 World Literature I
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 262 World Literature II
Prerequisites: ENG 112 or ENG 113
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 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 272 Southern Literature
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides an analytical study of the works of several Southern authors. Emphasis is on the historical and cultural contexts, themes, 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 for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 273 African-American Literature
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENG 274 Literature by Women
Prerequisites: ENG 112 or ENG 113
Corequisites: None

This course provides an analytical study of the works of several women authors. Emphasis is on the historical and cultural contexts, 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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ENV-Environmental Science

ENV 110 Environmental Science
Prerequisite: None
Corequisite: None
This course covers the environmental problems facing society today. Topics include population, natural resources, air and water pollution, and waste disposal problems. Upon completion, students should be able to demonstrate insight into the role the individual plays in shaping the environment. Course hours per week: Class, 3; Lab, 0; Semester Hours Credit, 3.

ENTREPRENEURSHIP

ETR 220 Innovation and Creativity
Prerequisites: None
Corequisites: None

This course provides a study of developing and enhancing individual and organizational creativity and innovation. Topics include that innovation needs to be applied to products, services, and processes to increase competitive advantages and add value to businesses. Upon completion, students should be able to apply innovation and creativity principles in the work place. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ETR 230 Entrepreneur Marketing

Prerequisites: None
Corequisites: None

This course covers the techniques to correctly research and define the target market to increase sales for start up businesses or to expand current businesses. Topics include how to target market and meet customers' needs with a limited budget in the early stages of the life of a start up business. Upon completion, students should be able to demonstrate an understanding of how to correctly target market for a start-up business with limited resources. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ETR 240 Funding for Entrepreneurs
Prerequisites: ACC 120
Corequisites: None

This course provides a focus on the financial issues and needs confronting entrepreneurs attempting to grow their businesses by attracting startup and growth capital. Topics include sources of funding including: angel investors, venture capital, IPO's, private placement, banks, suppliers, buyers, partners, and the government. Upon completion, students should be able to demonstrate an understanding of how to effectively finance a business venture. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EMERGENCY PREPAREDNESS

EPT 120 Sociology of Disaster
Prerequisite: None
Corequisite: None

This course provides an overview of sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long-term disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 124 EM Services Law & Ethics
Prerequisites: None
Corequisites: None

This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 130 Mitigation & Preparedness
Prerequisites: None
Corequisites: None

This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disasters. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion students should be able to develop a mitigation and preparedness plan. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 150 Incident Management
Prerequisites: None
Corequisites: None

This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 210 Response & Recovery
Prerequisites: None
Corequisites: None

This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster response and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 220 Terrorism and Emer. Mgt.
Prerequisites: None
Corequisites: None

This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, students should

be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 225 Haz Analysis/Risk Assess
Prerequisites: None
Corequisites: None

This course covers the probability and frequency of hazards, level of hazard exposure, and the effect or cost, both direct and indirect, of this exposure. Topics include identifying and characterizing hazards, evaluating hazard severity and frequency, estimating risks, and determining potential societal and economic effects. Upon completion, students should be able to identify the potential hazards and risks within a community. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 230 Emergency Planning
Prerequisites: None
Corequisites: None

This course covers the rationale for and methods related to a comprehensive approach to emergency planning. Topics include the emergency planning process, command arrangement, coordination, budgetary issues, environmental contamination issues, and public policy concerns. Upon completion, students should be able to develop an emergency plan for a community. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 260 Business Continuity
Prerequisites: None
Corequisites: None

This course covers emergency preparedness techniques necessary to maintain business continuity. Topics include critical processes, planning, risk assessment, impact analysis, mitigation strategies, response, recovery and resumption activities. Upon completion, students should be able to demonstrate a working knowledge of the partnership between business and emergency response. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 275 Emergency OPS Center Mgt
Prerequisites: None
Corequisites: None

This course provides students with the knowledge and skills to effectively manage and operate an EOC during crisis situations. Topics include properly locating and designing an EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

EPT 280 Building Resilient Comm
Prerequisites: None
Corequisites: None

This course covers concepts needed to design and implement strategies in protecting communities from disasters, including decreasing community vulnerability and increasing community resiliency. Topics include disclosure of hazards, lifeline systems, evacuation planning,

infrastructure location, analysis of building codes, public policy, natural environmental proactive systems, and educational programs. Upon completion, students should be able to develop a basic disaster-resilient community plan. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIRE PROTECTION

FIP 120 Introduction to Fire Protection
Prerequisites: None
Corequisites: None

This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 124 Fire Prevention and Public Education
Prerequisites: None
Corequisites: None

This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizen or industrial group, meeting NFPA 1021. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 128 Detection and Investigation
Prerequisites: None
Corequisites: None

This course covers procedures for determining the origin and cause of accidental and incendiary fires. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent, meeting NFPA 1021. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 132 Building Construction
Prerequisites: None
Corequisites: None

This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire-resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction as related to fire conditions. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

New Course

FIP 136 Inspection and Codes
Prerequisites: None
Corequisites: None

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report, meeting NFPA 1021. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 144 Sprinklers and Automatic Alarms
Prerequisites: None
Corequisites: None

This course introduces various types of automatic sprinklers, standpipes, and fire alarm systems. Topics include wet or dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, and other related topics. Upon completion, students should be able to demonstrate a working knowledge of various sprinkler and alarm systems as well as required inspection and maintenance. In addition, students study sprinkler systems and automatic alarms as they relate to selected NFPA standards. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

FIP 152 Fire Protection Law
Prerequisites: None
Corequisites: None

This course covers fire protection law. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 160 Fire Protection/Electrical
Prerequisites: MAT 115
Corequisites: None

This course covers the methods and means of electrical installations and their uses as related to fire. Topics include basic electrical theories, wiring methods, electrical components and circuitry, and an introduction to the National Electrical Code. Upon completion, students should be able to demonstrate a basic knowledge of electricity, including its uses, characteristics, and hazards. This course also assists students in understanding how electrical fires may develop and in conducting electrical fire examinations in the context of NFPA 921, Guide for Fire and Explosion Investigations. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

FIP 160A Fire Protection/Electrical Lab
Prerequisites: None
Corequisites: FIP 160

This course provides practical applications to support FIP 160. Topics include switching devices, basic circuits, electrical distribution, and other related topics. Upon completion, students should

be able to demonstrate knowledge of basic electrical equipment and hazards as related to fire protection. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

FIP 164 OSHA Standards

Prerequisite: None
Corequisite: None

This course covers public and private sector OSHA work site requirements. Emphasis is on accident prevention and reporting, personal safety, machine operation, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 180 Wildland Fire Behavior
Prerequisites: None
Corequisites: None

This course covers the principles of wildland fire behavior and meteorology. Emphasis is on fire calculations, fuels, and related weather effects. Upon completion, students should be able to demonstrate and apply fire behavior theories through written and performance evaluations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 188 Introduction to Wildland Fires
Prerequisites: None
Corequisites: None

This course introduces basic wildland fire suppression functions. Emphasis is on the operation of tools, equipment, aircraft, and basic fire suppression methods. Upon completion, students should be able to understand basic theories in wildland fire suppression and demonstrate them through written and performance evaluations. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

FIP 220 Fire Fighting Strategies
Prerequisites: None
Corequisites: None

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations, meeting NFPA 1021. Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 221 Advanced Fire Fighting Strategies
Prerequisites: FIP 220
Corequisites: None

This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced ICS, advanced incident analysis, command-level fire operations, and control of both manmade and natural major disasters. Upon

completion, students should be able to describe proper and accepted systems for mitigating emergencies at the level of overall scene command. In addition, students study advanced fire strategies as they relate to selected NFPA standards. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 224 Instructional Methodology
Prerequisites: None
Corequisites: None

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans; learning styles; use of media; communication; and other related topics. Upon completion, students should be able to meet all requirements of NFPA 1041 and NFPA 1021. Course Hours Per Week: Class, 4. Semester Hours Credit, 4.

FIP 228 Local Government Finance
Prerequisites: None
Corequisites: None

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the economic climate. Upon completion, students will be able to comprehend the importance of finance as it applies to the operation of a department. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 230 Chemistry of Hazardous Materials I
Prerequisites: None
Corequisites: None

This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

FIP 232 Hydraulics and Water Distribution
Prerequisites: MAT 115
Corequisites: None

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices. Emphasis is on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

FIP 236 Emergency Management
Prerequisites: None
Corequisites: None

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels.

Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system. In addition, students study areas of emergency management as they relate to selected NFPA standards. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 240 Fire Service Supervision
Prerequisites: None
Corequisites: None

This course covers fire protection systems in industrial facilities. Emphasis is on supervisory skills in the fire protection field. Upon completion, students should be able to state the responsibilities of supervisors which meet elements of NFPA 1021 for Fire Officer I and II. Class Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 244 Fire Protection Project
Prerequisites: None
Corequisites: None

This course provides an opportunity to apply knowledge covered in previous courses to employment situations that the fire protection professional will encounter. Emphasis is on the development of comprehensive and professional practices. Upon completion, students should be able to demonstrate knowledge of the fire protection service through written and performance evaluations. In addition, this course assesses critical competencies within the Fire Protection program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 248 Fire Service Personnel Administration
Prerequisites: None
Corequisites: None

This course covers the basics of setting up and administering the personnel functions of fire protection organizations. Emphasis is on human resource planning, classification and job analysis, equal opportunity employment, affirmative action, recruitment, retention, development, performance evaluation, and assessment centers. Upon completion, students should be able to demonstrate knowledge of the personnel function as it relates to managing fire protection. In addition, students study areas of personnel administration as they relate to selected NFPA standards. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 256 Municipal Public Relations
Prerequisites: None
Corequisites: None

This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization, which meet elements of NFPA 1021 for Fire Officer I and II. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 260 Fire Protection Planning
Prerequisites: None
Corequisites: None

This course covers the need for a comprehensive approach to fire protection planning. Topics include the planning process, using an advisory committee, establishing goals and objectives, and techniques used to approve and implement a plan. Upon completion, students should be able to demonstrate a working knowledge of the concepts and principles of planning as they relate to fire protection. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 264 Flame Properties and Materials Rating
Prerequisites: None
Corequisites: None

This course covers the role of interior finishes in fires, smoke obscuration and density, flame spread, pyrolysis, and other related topics. Emphasis is on testing equipment, which includes Rack Impingement, Bench Furnace, and the two-foot tunnel. Upon completion, students should be able to understand the operation of the testing equipment and compile a reference notebook. In addition, students study areas as they relate to selected NFPA standards. Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3.

FIP 268 Wildland Fire Management
Prerequisites: None
Corequisites: None

This course introduces wildland fire organization and management. Emphasis is on the Incident Command System and the National Interagency Management System. Upon completion, students should be able to understand and apply the Incident Command System and the National Interagency Management System through written evaluations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FIP 272 Wildland Fire Strategy
Prerequisites: None
Corequisites: None

This course covers wildland fire strategy and the determination of appropriate wildland fire tactics. Emphasis is on the use of ground forces, aircraft, and extinguishing agents. Upon completion, students should be able to develop strategy and tactics for responding to a wildland fire through written and performance evaluations. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

FIP 276 Managing Fire Services
Prerequisites: None
Corequisites: None

This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles, meeting NFPA 1021. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FRENCH

FRE 111 Elementary French I
Prerequisites: ENG 090 and RED 090 or satisfactory score on placement test
Corequisites: FRE 181

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French as well as demonstrate cultural awareness. This course must be taken with the accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FRE 112 Elementary French II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, and FRE 111
Corequisites: FRE 182
This course, a continuation of FRE 111, focuses on the fundamental elements of the French language within a cultural context. Emphasis is on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. This course must be taken with the accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

FRE 181 French Lab 1
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: FRE 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

FRE 182 French Lab 2
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, FRE 181
Corequisites: FRE 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

FRE 211 Intermediate French I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, and FRE 112
Corequisites: None
This course provides a review and expansion of the essential skills of the French language. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

GEOLOGY

GEL 111 Introductory Geology
Prerequisites: ENG 090, RED 090, and MAT 070 or satisfactory score on placement test
Corequisites: None

This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, sfluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. Students should also be familiar with important time periods associated with the evolution of the earth and its life forms. *This course has been approved to satisfy the Comprehensive Articulation general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

GEL 113 Historical Geology
Prerequisites: GEL 111
Corequisite: None

This course covers the geological history of the earth and its life forms. Emphasis is on the study of rock strata, fossil groups, and geological time. Upon completion, students should be able to identify major fossil groups and associated rock strata and approximate ages of geological formations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

GEOGRAPHY

GEO 111 World Regional Geography
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

GEO 112 Cultural Geography
Prerequisites: ENG 090 or RED 090, or satisfactory score on placement test
Corequisites: None

This course is designed to explore the diversity of human cultures and to describe their shared characteristics. Emphasis is on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

GERMAN

GER 111 Elementary German I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: GER 181
This course introduces the fundamental elements of the German language within a cultural context. Emphasis is 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 German and demonstrate cultural awareness. This course must be taken with the accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

GER 112 Elementary German II
Prerequisite: ENG 090 and RED 090 or satisfactory score on placement test, and GER 111
Corequisite: GER 182

This course, a continuation of GER 111, focuses on the fundamental elements of the German language within a cultural context. Emphasis is 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 German as well as demonstrate further cultural awareness. *This course must be taken with the accompanying lab. This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

GER 181 German Lab I
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test,
Corequisite: GER 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the German language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

GER 182 German Lab II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, GER 181
Corequisites: GER 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the German language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

GER 211 Intermediate German I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, GER 112,
Corequisites: None

This course provides a review and expansion of the essential skills of the German language. Emphasis is 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*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HEALTH

HEA 110 Personal Health/Wellness
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides an introduction to basic personal health and wellness. Emphasis is 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 maintain health and wellness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

Delete
HEA 112 First Aid and CPR
Prerequisites: None
Corequisites: ENG 080 and RED 080, or satisfactory score on placement test

HISTORY

HIS 111 World Civilizations I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: 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.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 112 World Civilizations II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: 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.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 121 Western Civilization I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 is designed for students who may take other upper-level history courses. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 122 Western Civilization II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: 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 is designed for students who may take other upper-level history courses. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 131 American History I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: 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. Native Americans, minorities, women, and representative biographies are also examined. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 132 American History II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: 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. Native Americans, minorities, women, and representative biographies are also examined. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIS 151 Hispanic Civilization
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course surveys the cultural history of Spain and its impact on the New World. Topics include Spanish and Latin American culture, literature, religion, and the arts. Upon completion, students should be able to analyze the cultural history of Spain and Latin America. The main emphasis is on continuity and change in Latin American culture throughout the 20th century. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HEALTH INFORMATION TECHNOLOGY

HIT 110 Fundamentals of HIM
Prerequisites: Enrollment in Health Information Technology Program
Corequisites: None
This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations and initiatives; payment and reimbursement systems, healthcare providers and disciplines; and electronic health records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions and trends. . Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIT 112 Health Law and Ethics
Prerequisites: Enrollment in Health Information Technology Program
Corequisites: None

This course covers legislative and regulatory processes, legal terminology, and professional-related and practice-related ethical issues. Topics include confidentiality; privacy and security

policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to apply policies and procedures for access and disclosure of Protected Health Information and apply and promote ethical standards. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIT 114 Health Data Sys/Standards
Prerequisites: Enrollment in Health Information Technology Program

Corequisites: None

This course covers concepts and techniques for managing and maintaining manual and electronic health records (EHR). Topics include structure and use of health information including data collection and analysis, data sources/sets, archival systems, and quality and integrity of healthcare data. Upon completion, students should be able to monitor and apply system-wide clinical documentation guidelines and comply with regulatory standards. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.
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HIT 124 Prof Practice Exp II
Prerequisites: HIT 211, HIT 212, HIT 214
Corequisites: HIT 222
This course provides supervised clinical experience in healthcare settings. Emphasis is on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices. The majority of clinical sites are offered during the day. Course Hours Per Week: Class, 0 Clinical, 3. Semester Hours Credit, 1.

HIT 210 Healthcare Statistics
Prerequisites: MAT 140 and MAT 140A
Corequisites: None

This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

HIT 211 ICD Coding
Prerequisite: BIO 168, BIO 169, MED 121, MED 122
Corequisite: None

This course covers ICD diagnostics and procedural coding conventions and guidelines for inpatient, outpatient and ambulatory care. Emphasis is placed on a comprehensive application of anatomy, physiology and interrelationships among organ systems. Upon completion, students should be able to accurately assign and sequence diagnostic and procedural codes for patient outcomes, statistical and reimbursement purposes. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 4.

HIT 214 CPT/Other Coding Systems
Prerequisites: HIT 211
Corequisites: None

This course covers application of principles and guidelines of CPT/HCPCS coding. Topics include clinical classification/nomenclature systems such as SNOMED, DSM, ICD-O and the use of encoders. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2

HIT 215 Reimbursement Methodology
Prerequisites: HIT 211
Corequisites: None

This course covers reimbursement methodologies used in all healthcare settings as they relate to national billing, compliance, and reporting requirements. Topics include prospective payment systems, billing process and procedures, chargemaster maintenance, regulatory guidelines, reimbursement monitoring, and compliance strategies and reporting. Upon completion, students should be able to perform data quality reviews to validate code assignment and comply with reimbursement and reporting requirements. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2

HIT 216 Quality Management
Prerequisites: HIT 110
Corequisites: None

This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2

HIT 218 Mgmt Principles in HIT
Prerequisites: HIT 110
Corequisites: None

This course covers organizational management concepts as applied to healthcare settings. Topics include roles/functions of teams/committees, leadership, communication and interpersonal skills, designing and implementing orientation/training programs, monitoring workflow, performance standards, revenue cycles, and organizational resources. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings. Course Hours Per Week: Class, 3. Lab, 0. Semester Hours Credit, 3

HIT 220 Health Informatics & EHRs
Prerequisites: HIT 114 and CIS 110
Corequisites: None

This course covers electronic health information systems and their design, implementation, and application. Topics include voice recognition and imaging technology, information security and integrity, data dictionaries, modeling, and warehousing to meet departmental needs. Upon

completion, students should be able to apply policies/procedures to facilitate electronic health records and other administrative applications. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

HIT 221 Lifecycle of EHR
Prerequisites: HIT 114
Corequisites: None

This course covers the system selection, design and implementation of an electronic health record (EHR) in integrated delivery networks. Topics include the system development life cycle, analysis of existing systems, required resources, and common resource constraints. Upon completion, students should be able to understand system development life cycles, analyze design and engineering, and make recommendations to improve efficiency of operations. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3

HIT 222 Prof Practice Exp III
Prerequisites: HIT 211, HIT 212, HIT 214
Corequisites: HIT 124

This course provides supervised clinical experience in healthcare settings. Emphasis is on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices. Course Hours Per Week: Clinical, 6. Semester Hours Credit, 2.

HIT 225 Healthcare Informatics
Prerequisites: None
Corequisites: None

This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement recommendations. Course Hours Per Week: Class, 3; Lab, 2; Semester Hours Credit, 4

HIT 226 Principles of Disease
Prerequisites: BIO 168 and BIO 169
Corequisites: None

This course covers disease etiology and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Topics include basic microbiology, basic pharmacology, and principles of disease. Upon completion, students should be able to relate disease processes to etiology, physical signs and symptoms, prognosis, and common complications and their management. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HIT 227 Informatics Project Mgt
Prerequisites: None

Corequisites: None

This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.
Course Hours Per Week: Class, 2; Lab, 2; Semester Hours Credit, 3

HIT 280 Professional Issues
Prerequisites: HIT 211, HIT 212, HIT 214,
Corequisites: HIT 124, HIT 222

This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is on application of professional competencies, job search tools, and preparation for the certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains and subdomains for health information technologies.
Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

HUMANITIES

HUM 110 Technology and Society
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HUM 115 Critical Thinking
Prerequisites: ENG 090 and RED 090 or satisfactory score on placement test
Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is 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. Students should be able to engage in rational discussions using reasons, arguments, exploration of consequences and motives, and crucial tests to explore the complexities of human relations. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*.
Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

New Course

HUM 120 Cultural Studies
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: None

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. *This course has been approved for transfer under the CAA as a general education course in Humanities/ Fine Arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HUM 121 The Nature of America
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides an interdisciplinary survey of the American cultural, social, and political experience. Emphasis is on the multicultural character of American society, distinctive qualities of various regions, and the American political system. Upon completion, students should be able to analyze significant cultural, social, and political aspects of American life. Students should also be able to identify the frames of reference that shape the attitudes, beliefs, and behaviors of various cultural, social, and political groups. *This course has been approved to satisfy the Comprehensive*
Articulation Agreement for the general education core requirement in humanities/fine arts. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HUM 122 Southern Culture
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HUM 150 American Women's Studies
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women's roles as reflected in American language usage, education, law, the workplace, and mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

HUM 160 Introduction to Film
Prerequisite: ENG 111

Corequisite: None

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques as well as the social values reflected in film art. Upon completion, students should be able to analyze critically the elements covered in relation to selected films. Students should also be able to effectively analyze films within their respective thematic and historical contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

HUM 180 International Cultural Explorations
Prerequisites: None
Corequisites: None

This course provides a framework for students to visit, examine, and analyze a country/region outside the United States to learn about the place and people. Emphasis is placed on the distinctive cultural characteristics of a country or region. Upon completion, students should be able to identify similarities/differences, analyze causes/effects, and clearly articulate the impact of one or more cultural elements. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

HUM 212 Humanities II
Prerequisites: All general education core courses
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 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.* Course Hours Per Week: Class, 3 Lab, 0. Semester Hours Credit, 3.

HYDRAULICS AND PNEUMATICS

HYD 110 Hydraulics/Pneumatics I
Prerequisite: MAT 060, RED 090, or satisfactory score on placement test
Corequisite: 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 Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

INTERNATIONAL BUSINESSS

INT 110 International Business
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test

Corequisites: None

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

INDUSTRIAL SCIENCE

ISC 112 Industrial Safety
Prerequisites: None
Corequisites None

This course introduces the principles of industrial safety. Emphasis is on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

ISC 115 Construction Safety
Prerequisites: None
Corequisites: None

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

ISC 131 Quality Management
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides a study and analysis of the aspects and implications of quality management that lead to customer satisfaction through continuous quality improvement. Topics include Total Quality Management, ISO 9000, organizing for quality, supplier/vendor relationships, and the role of leadership in quality management. Upon completion, students should be able to demonstrate an understanding of quality management concepts and techniques. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ISC 210 Operations and Production Planning
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Completion of curriculum mathematics requirement
Corequisites: None

This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning. This course is a unique

concentration requirement of the Operations Management concentration in the Business Administration program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ITALIAN

ITA 111 Elementary Italian I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: ITA 181

This course introduces the fundamental elements of the Italian language within a cultural context. Emphasis is 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 Italian as well as demonstrate cultural awareness. This course must be taken with the accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ITA 112 Elementary Italian II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, ITA 111
Corequisites: ITA 182
This course, a continuation of ITA 111, focuses on the fundamental elements of the Italian language within a cultural context. Emphasis is 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 Italian and demonstrate further cultural awareness. This course must be taken with accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

ITA 181 Italian Lab 1
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisite: ITA 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the Italian language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Italian and demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ITA 182 Italian Lab 2
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, ITA 181
Corequisites: ITA 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the Italian language. Emphasis is on the progressive development of basic listening, speaking,

reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Italian and demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

ITA 211 Intermediate Italian I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , ITA 112
Corequisites:
This course provides a review and expansion of the essential skills of the Italian language. Emphasis is 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. Listening comprehension is reinforced with audio tapes and/or CD Roms outside the classroom. *This course has been approved to satisfy the Comprehensive Articulation Agreement general for the education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEGAL EDUCATION

LEX 110 Introduction to Paralegal Study
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement test
Corequisites: None
This course introduces the paralegal profession and the legal system and an emphasis is on the role of professional and legal ethics. Topics include regulation, ethics, case analysis, legal reasoning, career opportunities, professional organizations, terminology and other related topics. Upon completion, students should be able to understand the role of a paralegal and identify the skills, knowledge and ethics required of paralegals. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

LEX 120 Legal Research/Writing I
Prerequisites: ENG 111
Corequisites: None

This course introduces the techniques of legal research and writing. Emphasis is on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 121 Legal Research/Writing II
Prerequisites: LEX 120 and ENG 111
Corequisites: None

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents as well as the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 130 Civil Injuries
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None
This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non-intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEX 140 Civil Litigation I
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None

This course introduces the structure of the legal system and the rules governing civil litigation. Topics include jurisdiction and state and federal rules of civil procedure and evidence. Upon completion, students should be able to assist an attorney in the pre-litigation matters and preparation of pleadings and motions. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEX 141 Civil Litigation II
Prerequisites: LEX 140
Corequisites: None
This course covers advanced topics in the civil litigation process. Topics include motions, discovery, and trial and appellate procedures Upon completion, students should be able to assist an attorney in preparing and organizing documents for trial, settlement, and post-trial practice. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 150 Commercial Law I
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None
This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents as well as selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 160 Criminal Law and Procedure
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 180 Case Analysis and Reasoning
Prerequisites: ENG 111 and LEX 120
Corequisites:

+This course covers the techniques of reading and applying legal opinions and the skills of case analysis. Emphasis is on the components of opinions and on types of legal writing. Upon completion, students should be able to read, analyze, and brief opinions as well as prepare legal memoranda, briefs, and other legal documents. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

LEX 210 Real Property I
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites:
This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEX 211 Real Property II
Prerequisites: LEX 210, ENG 090, or satisfactory score on placement test
Corequisites: None

This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description; perform complete title examination; draft closing documents, including title insurance forms; and prepare disbursement reconciliation. Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3.

LEX 220 Corporate Law
Prerequisites: ENG 080 AND RED 080, or satisfactory score on placement test
Corequisites: None
This course covers the legal aspects of forming, operating, and maintaining a business. Emphasis is on the business corporation with additional coverage of sole proprietorships and partnerships. Upon completion, students should be able to draft basic partnership and corporate documents and file these documents as required. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

LEX 240 Family Law
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None
This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEX 250 Wills, Estates, and Trusts
Prerequisites: ENG 090
Corequisites: None
This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills; prepare estate forms; understand

administration of estates, including taxation; and explain terms regarding trusts. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

LEX 260 Bankruptcy and Collections
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None
This course provides an overview of the laws of bankruptcy and the rights of creditors and debtors. Topics include bankruptcy procedures and estate management, attachment, claim and delivery, repossession, foreclosure, collection, garnishment, and post-judgment collection procedure. Upon completion, students should be able to prepare and file bankruptcy forms, collection letters, statutory liens, and collection of judgments. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

LEX 285 Workers' Compensation Law
Prerequisites: ENG 090, or satisfactory score on placement test
Corequisites: None
This course covers the process of initiating and handling workers' compensation claims. Emphasis is on reviewing and drafting relevant Industrial Commission forms. Upon completion, students should be able to interview clients, gather information, and draft documents related to workers' compensation claims. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

LEX 286 Medical Evidence Analysis
Prerequisite: ENG 090, or satisfactory score on placement test; LEX 130
Corequisites: None
This course is designed to teach reading and analyzing medical records for legal evaluation of bodily injury and disability claims. Emphasis is on terminology; identifying, obtaining, and reviewing medical records; and study of the major systems of the human body. Upon completion, students should be able to compile, analyze, and organize medical documents to support or disprove injury claims. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

LEX-287 CLA Review Seminar
Prerequisite: LEX-210, LEX 110, LEX 120, LEX 130, LEX 140, LEX 160
Corequisites: None

This course is designed to prepare students for voluntary certification sponsored by the National Association of Legal Assistants to demonstrate significant competence in paralegalism. Topics include communications, ethics, human relations, interviewing techniques, judgment and analytical analysis, legal research, legal terminology, general law and nine tested specialty areas of law. Upon completion, students should be able to demonstrate that they are prepared to take the NALA's Certified Legal Assistant Exam
Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

MACHINING

MAC 121 Introduction to CNC
Prerequisites: None

Corequisites: None

This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

MAC 122 CNC Turning
Prerequisites: MAC 121
Corequisites: None
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MAC 124 CNC Milling
Prerequisites: MAC 121
Corequisites: None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MAC 131 Blueprint Reading/Mach I
Prerequisites: MAT 060 and RED 070, or satisfactory score on placement test
Corequisites: None

This course covers the basic principles of blueprint reading and sketching. Topics include multi-view drawings; interpretation of conventional lines; and dimensions, notes, and thread notations. Upon completion, students should be able to interpret basic drawings, visualize parts, and make pictorial sketches. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

MAC 132 Blueprint Reading/Mach II
Prerequisites: MAC-131
Corequisites: None

This course introduces more complex industrial blueprints. Emphasis is placed on auxiliary views, section views, violations of true project, special views, applications of GD & T, and interpretation of complex parts. Upon completion, students should be able to read and interpret complex industrial blueprints. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

MAC-141 Machining Applications I
Prerequisites MAT 060 and RED 070, or satisfactory score on placement test
Corequisites None
This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately

measure components, and effectively use layout instruments. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 4.

MAC-142 Machining Applications II
Prerequisites MAC-141
Corequisites None

This course provides instruction in the wide variety of processes associated with machining. Topics include safety, equipment set-up, holding fixtures, tooling, cutting speeds and depths, metal properties, and proper finishes. Upon completion, students should be able to safely demonstrate advanced machining operations, accurately measure components, and produce accurate components with a proper finish. Course Hours Per Week: Class, 2; Lab, 6; Semester Hours Credit, 4.

MAC 151 Machining Calculations
Prerequisites: MAT 060 and RED 070, or satisfactory score on placement test
Corequisites: None

This course introduces basic calculations as they relate to machining occupations. Emphasis is on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

MAC 222 Advanced CNC Turning
Prerequisites: MAC 122
Corequisites: None

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MAC 224 Advanced CNC Milling
Prerequisites: MAC 124
Corequisites: None

This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.
Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MAC 226 CNC EDM Machining
Prerequisites: MAC 121
Corequisites: None

This course introduces the programming, setup, and operation of CNC electrical discharge machines. Topics include programming formats, control functions, program editing, production of parts, and inspection. Upon completion, students should be able to manufacture simple parts

using CNC electrical discharge machines. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MAC 248 Production Procedures
Prerequisites: MAC 141
Corequisites: None

This course covers product planning and control as well as scheduling and routing of operations. Topics include cost-effective production methods, dimensional and statistical quality control, and the tooling and machines required for production. Upon completion, students should be able to plan, set up, and produce cost-effective quality machined parts. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

MATHEMATICS

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

MAT 050 Basic Math Skills
Prerequisites: None
Corequisites: None

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems. A discussion of ratios, rates, proportions, and applications of these topics will be included. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 060 Essential Mathematics
Prerequisites: MAT 050, or satisfactory score on placement test
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 applications 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. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 070 Introductory Algebra
Prerequisite: MAT 060 and RED 070, or satisfactory score on placement test
Corequisite: 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 concepts learned in problem solving using appropriate technology. Solving quadratic equations by factoring is also included. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 080 Intermediate Algebra
Prerequisite: MAT 070 or satisfactory score on placement test
Corequisite: 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 concepts learned in problem solving using appropriate technology. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 090 Accelerated Algebra
Prerequisite: MAT 060 or satisfactory score on placement test and permission of the instructor or math discipline chair
Corequisite: RED 080

This course covers algebraic concepts with emphasis on applications. Topics include those covered in MAT 070 and MAT 080. Upon completion, students should be able to apply algebraic concepts in problem solving using appropriate technology. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 110 Mathematical Measurement
Prerequisites: MAT 070
Corequisites: None

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

MAT 115 Mathematical Models
Prerequisites: MAT 070 or satisfactory score on placement test
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 graphs, 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. Applications may be drawn from, but are not limited to, the fields of business, public services, and various technologies. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

MAT 121 Algebra/Trigonometry I
Prerequisites: MAT 070 or satisfactory score on placement test
Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic and radical functions; complex numbers; right triangle trigonometry; systems of equations; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems as well as analyze and communicate results. A basic introduction to statistics is also included. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

MAT 122 Algebra/Trigonometry II
Prerequisites: MAT 121 or satisfactory score on placement test
Corequisites: None

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors, and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

MAT 140 Survey of Mathematics
Prerequisites: MAT 070 or satisfactory score on placement test
Corequisites: MAT 140A

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 for the general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 140A Survey of Mathematics Lab
Prerequisites: MAT 070 or satisfactory score on placement test
Corequisites: MAT 140

This course is a laboratory for MAT 140. Emphasis is 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 for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

MAT 151 Statistics I
Prerequisites: MAT 080 or MAT 090 or MAT 140 or satisfactory score on placement test
Corequisites: None

This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is 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. Students are able to compare two population means of both large and small groups as well as compare population proportions. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics.* Students may not receive credit for both MAT 151 and MAT 155. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 161 College Algebra
Prerequisites: MAT 080 or MAT 090 or satisfactory score on placement test
Corequisites: MAT 161A

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is on applications involving equations and inequalities; polynomial, rational, 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 is designed to satisfy the needs of the Associate in Arts student and does not satisfy the prerequisite for MAT 172. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics for the Associate in Arts Degree*. Students may not receive credit for both MAT 161 and MAT 171. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 161A College Algebra Lab
Prerequisites: MAT 080 or MAT 090 or satisfactory score on placement test
Corequisites: MAT 161

This course is a laboratory for MAT 161. Emphasis is 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 is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Students may not receive credit for both MAT 161A and MAT 171A. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

MAT 171 Precalculus Algebra
Prerequisites: MAT 080 or MAT 090 or satisfactory score on placement test
Corequisites: MAT 171A

This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is on equations and inequalities; functions (linear, polynomial, and 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. Additional topics include, but are not limited to, exponential and logarithmic functions and their applications. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Students may not receive credit for both MAT 161 and MAT 171. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 171A Precalculus Algebra Lab
Prerequisites: MAT 080 or MAT 090 or satisfactory score on placement test

Corequisites: MAT 171

This course is a laboratory for MAT 171. Emphasis is 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 for transferability as a pre-major and/or elective course requirement*. Students may not receive credit for both MAT 161A and MAT 171A. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

MAT 172 Precalculus Trigonometry
Prerequisites: MAT 171 or satisfactory score on placement test
Corequisites: MAT 172A

This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, vectors, and polar coordinates. 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 for the general education core requirement in natural sciences/mathematics.* MAT 161 does not satisfy the prerequisite for MAT 172. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 172A Precalculus Trigonometry Lab
Prerequisite: MAT 171
Corequisite: MAT 172

This course is a laboratory for MAT 172. Emphasis is 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 Hours Per Week: Lab, 2. Semester Hours Credit, 1.

MAT 175 Precalculus-
Prerequisites: MAT 080 or MAT 090
Corequisites: MAT 175A
This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. 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.* Course Hours Per Week: Class, 4. Lab, 0. Semester Hours Credit, 4.

MAT 175A Precalculus Lab
Prerequisites: MAT 080 or MAT 090
Corequisites: MAT 175

This course is a laboratory for MAT 175. 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 for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 0. Lab, 2. Semester Hours Credit, 1.

MAT 263 Brief Calculus
Prerequisites: MAT 171 or MAT 175 or satisfactory score on placement test
Corequisites: MAT 263A

This course introduces concepts of differentiation and integration as well as 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 for the general education core requirement in natural sciences/mathematics*. Students may not receive credit for both MAT 263 and MAT 271. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAT 263A Brief Calculus Lab
Prerequisites: MAT 171 or MAT 175 or satisfactory score on placement test
Corequisites: MAT 263

This course is a laboratory for MAT 263. Emphasis is 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 for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1

MAT 271 Calculus I
Prerequisites: MAT 172 or MAT 175 or satisfactory score on placement test
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 for the general education core requirement in natural sciences/mathematics*. Students may not receive credit for both MAT 263 and MAT 271. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 272 Calculus II
Prerequisites: MAT 271
Corequisites: None

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 273 Calculus III
Prerequisites: MAT 272
Corequisites: None

This course covers the calculus of several variables and is the third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

MAT 285 Differential Equations
Prerequisites: MAT 272
Corequisites: None

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MECHANICAL

MEC 111 Machine Processes I
Prerequisite: None
Corequisite: 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. Course Hours Per Week: Class, 1; Lab, 4; Semester Hours Credit, 3.

MEDICAL ASSISTING

MED 110 Orientation to Med Assist
Prerequisites: ACA 122, CIS 110, ENG 111
Corequisites: None

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting. Course Hours Per Week: Class, 1; Lab, 0; Semester Hours Credit, 1.

MED 112 Orientation to Clinic Setting I
Prerequisites: Acceptance into Medical Assisting Diploma
Corequisites: None

This course provides an early opportunity to observe and/or perform in the medical setting. Emphasis is on medical assisting procedures including appointment scheduling, filing, greeting patients, telephone techniques, billing, collections, medical records, and related medical procedures. Upon completion, students should be able to identify administrative and clinical procedures in the medical environment. Course Hours Per Week: Class, 0; Lab, 0; Clinical, 3; Semester Hours Credit, 1.

MED 114 Prof Interac in Heal Care
Prerequisites: MED 110
Corequisites: None

This course is designed to identify various patient behaviors encountered in the medical setting. Emphasis is on stressors related to illness, cultural influences, death and dying, and needs specific to patients. Upon completion, students should be able to utilize appropriate methods of verbal and nonverbal communication with empathy and impartiality. Course Hours Per Week: Class, 1; Lab, 0; Clinical, 0; Semester Hours Credit, 1.

MED 118 Medical Law and Ethics
Prerequisites: ACA 122, CIS 110, ENG 111
Corequisites: None

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional. Course Hours Per Week: Class, 2; Lab, 0; Clinical, 0; Semester Hours Credit, 2.

MED 121 Medical Terminology I
Prerequisites: None
Corequisites: None

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological
conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MED 122 Medical Terminology II
Prerequisites: MED 121
Corequisites: None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MED 130 Admin Office Proc I
Prerequisites: ACA 122, CIS 110, ENG 111
Corequisites: None

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment. Class, 1; Lab, 2; Clinical, 0; Semester Hours Credit, 2.

MED 131 Admin Office Proc II
Prerequisites: MED 130
Corequisites: None

This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel. Class, 1; Lab, 2; Clinical, 0; Semester Hours Credit, 2.

MED 140 Exam Room Procedures I
Prerequisites: MED 110, MED 121, MAT 110, BIO 163, and MED 118 (spring semester 2009)
Corequisites: MED 122, MED 150

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures. Class, 3; Lab, 4; Clinical, 0; Semester Hours Credit, 5.

MED 150 Laboratory Procedures I
Prerequisites: MED 110, MED 118, MED 121, BIO 163
Corequisites: MED 140

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. Class, 3; Lab, 4; Clinical, 0; Semester Hours Credit, 5.

Not currently offered, but on the AAS plan of study.

MED 232 Medical Insurance Coding
Prerequisites: MED 110, MED 121
Corequisites: MED 122

This course is designed to develop coding skills. Emphasis is on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement. Class, 1; Lab, 3; Clinical, 0; Semester Hours Credit, 2.

MED 260 MED Clinical Externship
Prerequisites: All previous courses in Medical Assisting diploma
Corequisites: MED 262

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional. Class, 0; Lab, 0; Clinical, 15; Semester Hours Credit, 5.

MED 262 Clinical Perspectives
Prerequisites: None
Corequisites: MED 260

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is on problems encountered during externships and development of problem-solving skills. Upon completion, students should be able to demonstrate courteous and diplomatic behavior when solving problems in the medical facility. Class, 1; Lab, 0; Clinical, 0; Semester Hours Credit, 1.

MARKETING AND RETAILING

MKT 120 Principles of Marketing
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MKT 123 Fundamentals of Selling
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MKT 220 Advertising and Sales Promotion
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MAINTENANCE

MNT 110 Intro to Maintenance Procedures
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test
Corequisite: 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. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MNT 230 Pumps & Piping Systems
Prerequisites: MAT 060, RED 090, or satisfactory score on placement test
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. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MNT 240 Industrial Equipment Troubleshooting
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test; AHR 110 or AHR 112
Corequisite: None

This course covers the various service procedures, tools, instruments, and equipment necessary to analyze and repair typical industrial equipment. Emphasis is on electro-mechanical and fluid power equipment troubleshooting, calibration, and repair, including common techniques and procedures. Upon completion, students should be able to troubleshoot and repair industrial equipment. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

MUSIC

MUS 110 Music Appreciation
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

MUS 113 American Music
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

NETWORKING TECHNOLOGY

NET-110 Networking Concepts
Prerequisites: None
Corequisites: None

This course introduces students to the networking field. Topics include network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols. . Course Hours Per Week: Class, 2 Lab, 2. Semester Hours Credit, 3.

NET-111 Internetwk Arch & Design
Prerequisites: NET-110
Corequisites: None

This course introduces the physical and logical design of local area networks, wide area networks, and networking devices used in the design implementation and integration. Topics include LAN segmentation, VLANS, IP addressing, router, switch, and server placement with an emphasis on design. Upon completion, students should be able to understand fundamental LAN and WAN design and the physical and logical aspects needed to achieve the design goal. . Course Hours Per Week: Class, 2 Lab, 2. Semester Hours Credit, 3.

NET 125 Networking Basics
Prerequisites: None
Corequisites: None

This course introduces the networking field. Emphasis is on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP

addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols. Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3.

NET 126 Routing Basics
Prerequisites: NET 125
Corequisites: None

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs. Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3

NET 175 Wireless Technology
Prerequisites: NET 125
Corequisites: None

This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.
Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3

NET 225 Routing & Switching I
Prerequisites: NET 126
Corequisites: None

This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP. Class, 1. Lab, 4. Semester Hours Credit, 3.

NET 226 Routing & Switching II
Prerequisites: NET 225
Corequisites: None

This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol. Course Hours Per Week: Class, 1; Lab, 4; Semester Hours Credit, 3.

NET 289 Networking Project
Prerequisites: None

Corequisites: NET 226

This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation. Course Hours Per Week: Class, 1; Lab, 4; Semester Hours Credit, 3.

Network Operating Systems

NOS 110 Operating System Concepts
Prerequisites: None
Corequisites: None

This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

NOS 120 Linux/UNIX Single User
Prerequisites: NOS 110 or CET 111
Corequisites: None

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 130 Windows Single User
Prerequisites: NOS 110 or CET 211
Corequisites: None

This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.
Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 220 Linux/UNIX Admin I
Prerequisites: NOS 120
Corequisites: None

This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks

including installation, configuring and attaching a new Linux workstation to an existing network. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 221 Linux/UNIX Admin II
Prerequisites: NOS 220
Corequisites: None

This course includes skill-building in configuring common network services and security administration using Linux. Topics include server-side setup, configuration, basic administration of common networking services, and security administration using Linux. Upon completion, students should be able to setup a Linux server and configure common network services including security requirements. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 222 Linux/UNIX Admin III
Prerequisites: NOS 221
Corequisites: None

This course includes technical topics in preparing an enterprise Linux system for common uses. Topics include advanced study of hardware, installation, boot process, file system administration, software administration, user administration, system administration, kernel services, configuration, securing services, and troubleshooting. Upon completion, students should be able to administer an enterprise Linux system. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 230 Windows Admin I
Prerequisites: NOS 130
Corequisites: None

This course covers the installation and administration of a Windows Server network operating system. Topics include managing and maintaining physical and logical devices, access to resources, the server environment, managing users, computers, and groups, and Managing/Implementing Disaster Recovery. Upon completion, students should be able to manage and maintain a Windows Server environment. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 231 Windows Admin II
Prerequisites: NOS 230
Corequisites: None

This course covers implementing, managing, and maintaining a Windows Server network infrastructure. Topics include implementing, managing, and maintaining IP addressing, name resolution, network security, routing and remote access, and managing a network infrastructure. Upon completion, students should be able to manage and maintain a Windows Server environment Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NOS 232 Windows Admin III
Prerequisites: NOS 231
Corequisites: None

This course covers implementing and administering security in a Windows Server network. Topics include implementing, managing, and trouble shooting security policies, patch management infrastructure, security for network communications, authentication, authorization, and PKI. Upon completion, students should be able to implement, manage, and maintain a Windows Server network infrastructure. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

NURSING

NUR 101 Practical Nursing I
Prerequisites: BIO 163 and PSY 110; Enrollment in the Practical Nursing program
Corequisites:

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is on the nursing process; legal, ethical, and professional issues; wellness and illness patterns; and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote, maintain, and restore optimum health for diverse clients throughout the life span. Experiences in the nursing laboratory and in health care agencies provide students the opportunity to develop nursing skills by providing direct client care. This is a diploma-level course. Course Hours Per Week: Class, 7. Lab, 6. Clinical, 6. Semester Hours Credit, 11.

NUR 102 Practical Nursing II
Prerequisites: NUR 101, BIO 163, and PSY 110
Corequisites: None

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is on the nursing process; delegation; cost effectiveness; legal, ethical, and professional issues; and wellness and illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote, maintain, and restore optimum health for diverse clients throughout the life span. Correlation of theory to clinical applications is provided on medical, surgical, mother-baby units, extended care, and rehabilitation health facilities. This is a diploma-level course. Course Hours Per Week: Class, 8. Clinical, 12. Semester Hours Credit, 12.

NUR 103 Practical Nursing III
Prerequisites: NUR 102, ENG 111
Corequisites:

This course focuses on use of nursing and related concepts by practical nurses as providers of care as well as members of the nursing discipline in collaboration with health team members. Emphasis is on the nursing process, wellness and 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, and restore optimum health for diverse clients throughout the life span. The clinical experience provides opportunities for beginning transition from student to practitioner on medical/surgical units and in pediatric facilities. This is a diploma-level course. Course Hours Per Week: Class, 6. Clinical, 12. Semester Hours Credit, 10

NUR 111 Intro to Health Concepts
Prerequisites: Admission to the Associate Degree Nursing program; listing as a Nursing Assistant I on North Carolina Nurse Aide Registry
Corequisites: ACA 122 (or waiver), ENG 111, PSY 150, BIO 168

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 4.Lab, 6. Clinical, 6. Semester Hours Credit, 8

NUR 112 Health-Illness Concepts
Prerequisites: NUR 111, ACA 122, ENG 111, PSY 150, BIO 168
Corequisites: NUR 114, NUR 212A, PSY 241, BIO 169

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 3.Lab, 0. Clinical, 6. Semester Hours Credit, 5

NUR 113 Family Health Concepts
Prerequisites: NUR 112, NUR 114, NUR 212A, BIO 169, BIO 271, PSY 241
Corequisites: NUR 211, NUR 212B, ENG 112

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 3.Lab, 0. Clinical, 6. Semester Hours Credit, 5

NUR 114 Holistic Health Concepts
Prerequisites: NUR 111, ACA 122, ENG 111, PSY 150, BIO 168
Corequisites: NUR 112, NUR 212A, PSY 241, BIO 169,

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 3.Lab, 0. Clinical, 6. Semester Hours Credit, 5

NUR 211 Health Care Concepts
Prerequisites: NUR 112, NUR 114, NUR 212A, BIO 169, BIO 271, PSY 241
Corequisites: NUR 113, 212B, ENG 112

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 3. Lab, 0. Clinical, 6. Semester Hours Credit, 5.

NUR 212 Health System Concepts is divided into NUR 212 A and NUR 212B
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Course Hours Per Week: Class, 3. Lab, 0. Clinical, 6 Semester Hours Credit, 5

NUR 212 A Health System Concepts
Prerequisite: NUR 111, ACA 122, ENG 111, PSY 150, BIO 168
Corequisite: NUR 112, NUR 114, PSY 241, BIO 169

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, managing care, safety, ethics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in the course.
Course Hours Per Week: Class, 1.5 Clinical, 3. Semester Hours Credit, 2.5.

NUR 212 B Health System Concepts
Prerequisite: NUR 112, NUR 114, NUR 212 A , BIO 169. BIO 271, PSY 241 ,
Corequisite: NUR 113, NUR 211, ENG 112

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in the course.
Course Hours Per Week: Class, 1.5 Clinical, 3. Semester Hours Credit, 2.5.

NUR 213 Complex Health Concepts
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, NUR 212A, NUR 212B, , ENG 112
Corequisites: Humanities Elective
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary

to provide quality, individualized, entry level nursing care. Course Hours Per Week: Class, 4. Lab, 3 Clinical, 15 Semester Hours Credit, 10

NUR 214 Nursing Transition Concepts
Prerequisites: Admission to the Associate Degree Nursing program ; Licensed as a practical nurse in North Carolina
Corequisites: ACA 122, BIO 168, PSY 150, ENG 111

This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the LPN transitions to the ADN role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, clinical decision-making, informatics, assessment, caring, and health-wellness-illness. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 3. Lab, 0. Clinical, 3 Semester Hours Credit, 4

NUR 221 LPN to ADN Concepts I
Prerequisites: NUR 214, BIO 168, PSY 150, ENG 111, ACA 122
Corequisites: BIO 169, PSY 241

This course is designed for the LPN to ADN student to explore the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of safety, perfusion, inflammation, oxygenation, mood/affect, behavior, development, family, health-wellness-illness, sensory perception, stress/coping, cognition, self, violence, and professional behaviors. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. Course Hours Per Week: Class, 6. Lab, 0. Clinical, 9. Semester Hours Credit, 9.

NUR 223 LPN to ADN Concepts II
Prerequisites: NUR 221, BIO 169, BIO 271, PSY 241, ENG 111, ENG 112,
Corequisites: Humanities elective

This course is designed for the LPN to ADN student to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, thermoregulation, oxygenation, tissue integrity, infection, perfusion, mobility, reproduction, sexuality, health-wellness-illness, professional behaviors, accountability, advocacy, and collaboration. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry-level nursing care. Course Hours Per Week: Class, 6. Lab, 0. Clinical, 9. Semester Hours Credit, 9.

OPERATIONS MANAGEMENT

OMT 112 Materials Management
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers the basic principles of materials management. Emphasis is on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management. This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPTICIANRY

OPH 101 Math for Opticians
Prerequisites: MAT 070 or satisfactory score on placement test
Enrollment in the Optical Apprentice Certificate program
Corequisites: None

This course covers the arithmetic, algebra, geometry, and trigonometry necessary to evaluate optical formulas. Topics include signed arithmetic, evaluation and solution of equations, use of the calculator, and basic trigonometric functions. Upon completion, students should be able to evaluate formulas as used in opticianry courses. This course is intended for a certificate program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 102 Ophthalmic Lab Concepts
Prerequisites: OPH 141 and enrollment in Optical Apprentice Certificate program.
Corequisites: None

This course introduces the operations of the ophthalmic laboratory. Emphasis is on surfacing and finishing formulas; materials, procedures, and equipment used to fabricate glasses; and ANSI, EPA, and OSHA requirements. Upon completion, students should be able to perform laboratory-related calculations, describe safety and environmental regulations, and identify materials and procedures used in ophthalmic laboratories. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

OPH 111 Ophthalmic Lab I
Prerequisites: OPH 141
Enrollment in the Opticianry program
Corequisites: None

This course introduces optical laboratory practices and procedures. Emphasis is on safety, OSHA and EPA requirements, equipment and instrumentation, and lens fabrication to ANSI standards. Upon completion, students should be able to duplicate lenses, use basic formulas, and identify materials and procedures used to safely fabricate prescription lenses to specifications. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OPH 112 Ophthalmic Lab II
Prerequisites: OPH 111
Corequisites: None

This course continues the study of optical laboratory procedures introduced in OPH 111. Emphasis is on prescription interpretation, focimetry, and finishing techniques. Upon completion, students should be able to duplicate lenses, use intermediate formulas, and identify

materials and procedures used to safely fabricate prescription eyewear to specifications. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OPH 121 Anatomy and Physiology - Eye
Prerequisites: ENG 090 AND RED 090 or satisfactory score on placement test
Enrollment in the Opticianry or Optical Apprentice Certificate programs
Corequisites: None

This course covers the anatomical and physiological functions of the eye and its associated structures. Emphasis is on normal vision and common disorders of the visual system. Upon completion, students should be able to describe the visual process as well as label and describe the function of each part of the eye. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 131 Optical Dispensing I
Prerequisites: Enrollment in Opticianry or Optical Apprentice Certificate program
MAT 070 or satisfactory score on placement test
ENG 090 and RED 090 or satisfactory score on placement test
Corequisites: None

This course introduces the historical and modern dispensing practices and the laws governing opticianry. Topics include basic eyeglass choices, measurements, dispensing, adjustments, and record keeping. Upon completion, students should be able to evaluate patient needs and wearing success. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 132 Optical Dispensing II
Prerequisites: OPH 131 and OPH 141
Corequisites: None

This course continues the study of optical dispensing begun in OPH 131. Emphasis is on advanced dispensing skills. Upon completion, students should be able to design and dispense appropriate eyewear for a variety of patients. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

OPH 141 Optical Theory I
Prerequisites: Enrollment in Opticianry or Optical Apprentice Certificate programs
MAT 070 or satisfactory score on placement test, or OPH 101
Corequisites: MAT 121

This course introduces the principles of optics and ophthalmic lens design. Topics include basic theory and basic optical formulas. Upon completion, students should be able to use the metric system, define basic optical terms, and perform basic optical calculations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 142 Optical Theory II
Prerequisites: OPH 141
Corequisites: None

This course continues the study of optical theory begun in OPH 141. Topics include intermediate and advanced theory and formulas. Upon completion, students should be able to perform

intermediate and advanced optical calculations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 215 Laboratory Proficiency
Prerequisites: Final semester of program
Corequisites: OPH 243, OPH 262

This course provides preparation for the NC State Board of Opticians Examination. Emphasis is on speed and accuracy in all items on the competence list. Upon completion, students should be able to safely and accurately demonstrate proficiency in all items on the laboratory competence list. Course Hours Per Week: Lab, 6. Semester Hours Credit, 2.

OPH 222 Optical Business Management
Prerequisites: Enrollment in Opticianry program
Corequisites: None

This course covers basic optical business management and current eyecare trends and practices. Topics include professional ethics, inventory, accounting, personnel, insurance, advertising, litigation, equipment, and future trends. Upon completion, students should be able to apply basic principles of management to the optical business setting. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 233 Advanced Optical Procedures
Prerequisites: OPH 131, OPH 132, OPH 141, and OPH 142
Corequisites: None

This course introduces special optical procedures. Topics include advanced optical assessments and calculations. Upon completion, students should be able to describe appropriate patient care. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

OPH 243 Technical Proficiency
Prerequisites: Final semester of program, and OPH 142, OPH 233
Corequisites: OPH 215 and OPH 262

The course provides preparation for the NC State Board of Opticians Examination. Emphasis is on topics relevant to written portions of this examination. Upon completion, students should be able to pass each part of a capstone examination with a grade of 77 or better. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OPH 251 Optical Internship I
Prerequisites: OPH 132, OPH 141, and OPH 142
Corequisites: None

This course provides practical experience under the direct supervision of an opticianry instructor. Emphasis is on communication and dispensing skills. Upon completion, students should be able to demonstrate competence in all course objectives. Course Hours Per Week: Clinical, 3. Semester Hours Credit, 1.

OPH 260 Basic Contact Lens Concepts
Prerequisites: OPH 121 and OPH 141
Corequisites: None

This course introduces the theory of contact lens fitting. Emphasis is on rigid and soft contact design and fitting concepts. Upon completion, students should be able to describe basic contact lens fitting concepts. Course Hours Per Week: Classroom, 3. Semester Hours Credit, 3.

OPH 261 Contact Lenses I
Prerequisites: OPH 121 and OPH 142
Corequisites: None

This course introduces rigid contact lens fitting. Emphasis is on clinical applications, patient selection, design parameters, instrumentation, and corneal physiology. Upon completion, students should be able to describe basic patient evaluation and fitting procedures for rigid and soft lenses, recognize problems, and determine effective and appropriate solutions. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

OPH 262 Contact Lenses II
Prerequisites: OPH 261
Corequisites: OPH 215 and OPH 243

This course continues the study of contact lens fitting. Emphasis is on soft contact lens advanced fitting design and techniques. Upon completion, students should be able to demonstrate the competence required for the National Contact Lens Examination and the NC State Board of Opticians Examination. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

OPH 282 Optical Externship I
Prerequisites: OPH 112, OPH 142, and OPH 233
Corequisites: None

This course provides practical experience in assigned businesses, with emphasis on observation and practical application. Emphasis is on working conditions in different production settings and on time demands. Upon completion, students should be able to complete eyewear in a safe and timely manner to proper specifications and in collaboration with other employees. Course Hours Per Week: Clinical, 6. Semester Hours Credit, 2.

OFFICE SYSTEMS TECHNOLOGY

OST 130 Comprehensive Keyboarding
Prerequisites: None
Corequisites: None

This course is designed to develop keyboarding skills and introductory document formatting. Emphasis is placed on keyboarding techniques and formatting basic business documents. Upon completion, students should be able to create documents in an ever-changing workplace. Course Hours Per Week: Class, 2; Lab 2; Semester Hours Credit, 3.

OST 134 Text Entry and Formatting
Prerequisites: None
Corequisites: None

This course is designed to provide skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon

completion, students should be able to produce documents and key timed writings at speeds commensurate with. employability. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OST 136 Word Processing
Prerequisites: None
Corequisites: None
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.
Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OST 138 Advanced Software Appl
Prerequisites: CIS 110
Corequisites: None

This course is designed to improve the proficiency in the utilization of software applications used in business offices through a hands-on approach. Emphasis is placed on in-depth usage of software to create a variety of documents applicable to current business environments. Upon completion, students should be able to master the skills required to design documents that can be customized using the latest software applications. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OST 140 Internet Comm/Research
Prerequisites: None
Corequisites: None

This course provides a working knowledge of Internet usage and research for the modern office. Emphasis is placed on using search engines, email, Web sites, Web servers, communication services, and e-business to obtain information vital to the current office environment. Upon completion, students should be able to use the Internet to research any office topics required for employment. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

OST 148 Medical Coding Billing and Insurance
Prerequisites: None
Corequisites: None

This course introduces fundamentals of medical coding, billing, and insurance. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OST 149 Medical Legal Issues
Prerequisites: None
Corequisites: None

This course introduces the complex legal, moral, and ethical issues involved in providing health care services. Emphasis is on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OST 164 Text Editing Applications
Prerequisites: None
Corequisites: None

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

OST 184 Records Management
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. Course Hours Per Week: Class, 2 Lab, 2. Semester Hours Credit, 3.

OST 223 Admin Office Transcription I
Prerequisites: OST 164; and OST 134 or OST 136
Corequisites: None
This course provides experience in transcribing documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe office documents. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OST 224 Machine Transcription II
Prerequisites: OST 223
Corequisites: None

This course provides instruction and practice in advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

OST 241 Medical Office Transcription I
Prerequisites: MED 121
Corequisites: None

This course introduces machine transcription techniques as applied to medical documents. Emphasis is on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable

transcripts of voice recordings in the covered specialties. This course is a unique concentration requirement of the Medical Office Systems Technology concentration in the Office Systems Technology program. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

OST 242 Medical Office Transcription II
Prerequisites: OST 241
Corequisites: None

This course continues building transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription and text editing , efficient use of reference materials, increasing transcription speed and accuracy, and improving understanding of medical terminology. Upon completion, students should be able to display competency in accurately transcribing medical documents. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

OST 243 Medical Office Simulation
Prerequisites: OST 130 or OST 148
Corequisites: None

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OST 289 Administrative Office Management
Prerequisites: OST 164 and either OST 134 or OST 136
Corequisites: None

This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

OCCUPATIONAL THERAPY ASSISTANT

OTA 110 Fundamentals of OT
Prerequisites: Enrollment in the Occupational Therapy Assistant program
Corequisites: BIO 168, ACA 122, and demonstration of computer competency

This course introduces occupational therapy theory, practice, philosophy, and principles. Emphasis is on providing a basic understanding of the profession as well as beginning to develop interaction and observation skills. Upon completion, students should be able to demonstrate basic understanding of occupational therapy practice options, uniform terminology, activity analysis,

principles, process, philosophies, and frames of reference. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 120 OT Media I
Prerequisites: Enrollment in the Occupational Therapy Assistant program
Corequisites: OTA 110

This course provides training in recognizing the therapeutic value of and in using a wide variety of leisure, self
care, and work activities. Topics include crafts, games, personal care and work activities as well as teaching and learning methods and styles. Upon completion, students should be able to design, select, and complete/perform leisure, self
care, and work activities that would be therapeutic for designated client populations. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

OTA 130 Assessment Skills
Prerequisites: BIO 168, OTA 120, OTA 140
Corequisites: OTA 110

This course provides training in appropriate and accurate assessment and intervention skills related to sensory, movement, perceptual/cognitive, affective systems, and ADL skills. Topics include kinesiology, body mechanics, sensory, ROM, MMT, cognitive/perceptual, psychosocial, self-care, and work-related assessments; treatment approaches; and basics of group structure and dynamics. Upon completion, students should be able to administer various assessment tools and appropriate treatment approaches regarding sensation, movement, perception/cognition, affect, self-care, and work-related skills. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 140 Professional Skills I
Prerequisites: Enrollment in the Occupational Therapy Assistant program
Corequisites: OTA 110

This course introduces the roles and responsibilities of Certified Occupational Therapy Assistants and Occupational Therapists Registered in occupational therapy practice and facilitates development of observation, documentation, and therapeutic use of self skills. Topics include Code of Ethics, roles and responsibilities, credentialing and licensing, documentation, therapeutic use of self and professional identity/behavior, supervisory relationships, time management, and observation skills. Upon completion, students should be able to demonstrate ethical behavior; discriminate between role and responsibilities of Certified Occupational Therapy Assistants and Occupational Therapists Registered; and participate in acceptable supervision, documentation, and scheduling. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

OTA 150 Life Span Skills I
Prerequisites: BIO 169, OTA 130
Corequisites: PSY 241, OTA 163, OTA 170

This course is designed to use knowledge gained from PSY 241 as it applies to occupational therapy practice from birth to adolescence. Topics include review of normal growth and development, identification and discussion of common disabilities and delays, assessment, treatment planning, and intervention approaches used with these populations. Upon completion, students should be able to identify and use assessments, screenings, and interventions for infants

through adolescents for selected disabilities and developmental delays in various settings. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 161 Fieldwork I-Placement 1
Prerequisites: OTA 120, OTA 140
Corequisites: OTA 130, OTA 170

This course provides introductory-level clinical training opportunities. Emphasis is on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance and direction of fieldwork supervisors. Course Hours Per Week: Clinical, 3. Semester Hours Credit, 1.

OTA 162 Fieldwork I-Placement 2
Prerequisites: OTA 120, OTA 140
Corequisites: OTA 130, OTA 180

This course provides introductory-level clinical training opportunities. Emphasis is on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance and direction of fieldwork supervisors. Course Hours Per Week: Clinical, 1. Semester Hours Credit, 1.

OTA 163 Fieldwork I-Placement 3
Prerequisites: OTA 120, OTA 140
Corequisites: OTA 130, OTA 150

This course provides introductory-level clinical training opportunities. Emphasis is on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance and direction of fieldwork supervisors. Course Hours Per Week: Clinical, 3. Semester Hours Credit, 1.

OTA 164 Fieldwork I-Placement 4
Prerequisites: OTA 120, OTA 140
Corequisites: OTA 130, OTA 250

This course provides introductory-level clinical training opportunities. Emphasis is on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance and direction of fieldwork supervisors. Course Hours Per Week: Clinical, 3. Semester Hours Credit, 1.

OTA 170 Physical Dysfunction
Prerequisites: BIO 168, BIO 169
Corequisites: OTA 130, OTA161

This course is designed to provide the knowledge and skills needed for working with individuals experiencing varied medical and physical conditions within their socioeconomic and cultural environments. Topics include medical terminology, common diagnoses, structures, and functions that change with disease processes, assessment and treatment priorities for specific problems and

conditions, treatment planning, and intervention. Upon completion, students should be able to recognize common symptoms, prioritize problems, and provide for patient safety and infection control when planning and implementing treatment. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 180 Psychosocial Dysfunction
Prerequisites: ENG 112 or ENG 113, and PSY 281
Corequisites: OTA 130, OTA 162

This course uses theories and principles related to psychological/psychiatric health and illnesses as well as provides training in assessing and treating symptoms of dysfunction and therapeutic use of self and groups. Topics include psychiatric illnesses, symptoms of dysfunction, assessment and treatment of individuals, planning and facilitating therapeutic groups, client safety, and psychosocial aspects of practice. Upon completion, students should be able to plan effectively and conduct individual and group treatment for client conditions related to psychosocial dysfunction recognizing temporal, socioeconomic, and cultural contexts. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 220 OT Media II
Prerequisites: OTA 120, OTA 130, OTA 170
Corequisites: None

This course provides training in appropriate and accurate assessment and intervention skills related to orthotics, prosthetics, assistive devices, environmental controls, and Americans with Disabilities Act (ADA) issues. Topics include ergonomics and hand function, splint selection/fabrication, changes that improve access for persons with disabilities, use of modalities in treatment, and computers in occupational therapy intervention. Upon completion, students should be able to demonstrate proficiency in fabricating and monitoring orthotic devices, constructing and modifying assistive devices, using ADA guidelines, and using computers for therapeutic purposes. Course Hours Per Week: Class, 1. Lab, 6. Semester Hours Credit, 3.

OTA 240 Professional Skills II
Prerequisites: OTA 140
Corequisites: None

This course builds upon and expands skills developed in OTA 140 with emphasis on documentation, supervisory relationships, involvement in the profession, and clinical management skills. Topics include clarification of roles and responsibilities, detailed examination of the supervisory process, professional participation in organizations, and the mechanics of assisting in clinic operations. Upon completion, students should be able to work effectively with a supervisor, plan and implement a professional activity, and perform routine clinic management tasks. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

OTA 245 Professional Skills III
Prerequisites: OTA 240
Corequisites: None

This course provides preparation for Fieldwork II experiences using skills and knowledge gained in OTA 140 and OTA 240 to promote integration into the professional community. Topics include interview skills, résumé production, conflict resolution, professional presentations, participation in research activities, and completion of all forms required for Fieldwork II. Upon

completion, students should be able to complete independently employment-seeking activities and provide in-service training. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

OTA 250 Life Span Skills II
Prerequisites: OTA 130
Corequisites: PSY 241, OTA 164, OTA 170, OTA 180

This course uses knowledge gained from PSY 241 as it applies to occupational therapy practice from young adulthood through old age. Emphasis is on identification and discussion of common disabilities and chronic diseases, assessments, planning and interventions used with these populations, and activity programming. Upon completion, students should be able to identify and use assessments, interventions, and activities for adults with selected disabilities and losses in various settings. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

OTA 260 Fieldwork II-Placement 1
Prerequisites: Successful completion of all required OTA curriculum courses except OTA 261 and OTA 280
Corequisites: This course must be completed within 18 months of the completion of all other OTA course work

This course provides clinical experience under the direct supervision of experienced Occupational Therapist Registered or Certified Occupational Therapy Assistant personnel working in various practice settings. Emphasis is on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies established by the curriculum and the American Occupational Therapy Association guidelines for entry-level practice. Course Hours Per Week: Clinical, 18. Semester Hours Credit, 6.

OTA 261 Fieldwork II-Placement 2
Prerequisites: Successful completion of all required OTA curriculum courses except OTA 260 and OTA 280
Corequisites: This course must be completed within 18 months of the completion of all other OTA course work

This course provides clinical experience under the direct supervision of experienced Occupational Therapist Registered or Certified Occupational Therapy Assistant personnel working in various practice settings. Emphasis is on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies established by the curriculum and the American Occupational Therapy Association guidelines for entry-level practice. Course Hours Per Week: Clinical, 18. Semester Hours Credit, 6.

OTA 280 Professional Transitions
Prerequisites: OTA 260 or OTA 261
Corequisites: Enrollment in either OTA 260 or OTA 261

This course provides closure to the educational program following Fieldwork II placements. Emphasis is on portfolio development and presentation, program evaluation, Fieldwork II experience analysis and synthesis, and final preparation for the certification examination. Upon completion, students should be able to enter the occupational therapy work force with supportive documentation demonstrating progress toward meeting critical competencies set forth by the curriculum. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PHYSICAL EDUCATION

PED 111 Physical Fitness I
Prerequisites: None
Corequisites: None

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is 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 is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

PED 113 Aerobics I
Prerequisites: None
Corequisites: None

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is on developing cardiovascular efficiency, strength, and flexibility as well as learning safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

PED 114 Aerobics II
Prerequisites: PED 113
Corequisites: None

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

PED 120 Walking for Fitness
Prerequisites: None
Corequisites: None

This course introduces fitness through walking. Emphasis is on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

PED 121 Walk, Jog, Run
Prerequisites: None
Corequisites: None

This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

PED 128 Golf-Beginning
Prerequisites: None
Corequisites: None

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, and 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 the etiquette of golf. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 130 Tennis-Beginning
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 is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 139 Bowling-Beginning
Prerequisites: None
Corequisites: None

This course introduces the fundamentals of bowling. Emphasis is on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 142 Lifetime Sports
Prerequisites: None
Corequisites: None

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 143 Volleyball-Beginning
Prerequisites: None

Corequisites: None

This course covers the fundamentals of volleyball. Emphasis is on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 145 Basketball-Beginning
Prerequisites: None
Corequisites: None

This course covers the fundamentals of basketball. Emphasis is on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 148 Softball
Prerequisites: None
Corequisites: None

This course introduces the fundamental skills and rules of softball. Emphasis is on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in recreational softball. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 149 Flag Football
Prerequisites: None
Corequisites: None

This course introduces the fundamentals and rules of flag football. Emphasis is placed on proper techniques and strategies for playing in game situations. Upon completion, students should be able to participate in recreational flag football. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 162 Angling
Prerequisites: None
Corequisites: None

This course introduces the sport of angling. Emphasis is on fishing with the use of artificial lures. Upon completion, students should be able to cast and retrieve using baitcaster and spinning reels as well as identify the various types of artificial lures. Students also use fly rods and fish with live bait. A North Carolina fishing license is required. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 183 Folk Dancing
Prerequisites: None

Corequisites: None

This course teaches the fundamental folk dance movements along with cultural traditions from various countries. Emphasis is on the history and traditions of the folk dance as well as the movements and the dances themselves. Upon completion, students should be able to demonstrate folk dances as well as knowledge of their origins and cultural traditions. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PED 186 Dancing for Fitness
Prerequisites: None
Corequisites: None

This course is designed to develop movement and recreational dance skills, safety, fitness, coordination, and techniques used to teach various groups. Emphasis is placed on participation and practice with adapting dances for ages and ability levels. Upon completion, students should be able to demonstrate knowledge of fitness through social, folk, and square dance participation and instruction. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

PHILOSOPHY

PHI 215 Philosophical Issues
Prerequisites: ENG 111
Corequisites: None

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHI 240 Introduction to Ethics
Prerequisites: ENG 111
Corequisites: None

This course introduces theories about the nature and foundations of moral judgments as well as applications to contemporary moral issues. Emphasis is 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 for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHARMACY

PHM 110 Introduction to Pharmacy
Prerequisites: Enrollment in the Pharmacy Technology program or permission of the program director
Corequisites: PHM 111 and PHM 115

This course introduces pharmacy practice and the technician's role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance, and utilize pharmacy references. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHM 111 Pharmacy Practice I
Prerequisites: Enrollment in the Pharmacy Technology program
Corequisites: PHM 110 and PHM 115

This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retail settings under supervision of a registered pharmacist. Topics include drug packaging and labeling, out-patient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and non-sterile compounding. Upon completion, students should be able to perform basic supervised dispensing techniques in a variety of pharmacy settings. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

PHM 115 Pharmacy Calculations
Prerequisites: Enrollment in the Pharmacy Technology program
Corequisites: PHM 110 and PHM 111 or permission of the program director

This course provides an introduction to the metric, avoirdupois, and apothecary systems of measurement and the calculations used in pharmacy practice. Topics include ratio and proportion, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration, aliquots, specific gravity and density, and flow rates. Upon completion, students should be able to perform correctly the calculations required to prepare a medication order properly. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHM 118 Sterile Products
Prerequisites: PHM 110, PHM 111, and PHM 115
Corequisites: PHM 120 and PHM 165

This course provides an introduction to intravenous admixture preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques; facilities, equipment, and supplies utilized in admixture preparation; incompatibility and stability; laminar flow hoods; immunizations and irrigation solutions; and quality assurance. Upon completion, students should be able to describe and demonstrate the steps involved in preparing intermittent and continuous infusions, total parenteral nutrition, and chemotherapy. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

PHM 120 Pharmacology I
Prerequisites: Enrollment in the Pharmacy Technology program or permission of the program director and BIO 163 or BIO 168 and BIO 169
Corequisites: None

This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHM 125 Pharmacology II
Prerequisites: PHM 120, BIO 163 or BIO 168 and BIO 169
Corequisites: None

This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHM 132 Pharmacy Clinical
Prerequisites: Enrollment in the Pharmacy Technology program, PHM 110, PHM 111, PHM 115, and PHM 120
Corequisites: PHM 125
This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers. Course Hours Per Week: Clinical, 6. Semester Hours Credit, 2.

PHM 134 Pharmacy Clinical
Prerequisites: Enrollment in Pharmacy Technology program, PHM 125, PHM 138, PHM 140 and COM 120
Corequisites: PHM 132

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.
Course Hours Per Week: Clinical,12. Semester Hours Credit, 4.

PHM 138 Pharmacy Clinical
Prerequisites: Enrollment in the Pharmacy Technology program, ENG 111, PHM 118, PHM 120, PHM 165
Corequisites: PHM 125, PHM 140, and COM 120

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is on communicating effectively with personnel, developing proper employee attitude, and dispensing medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications,

prepare patient charges, and operate computers efficiently. Course Hours Per Week: Clinical, 24. Semester Hours Credit, 8.

PHM 140 Trends in Pharmacy
Prerequisites: PHM 118, PHM 120, PHM 165
Corequisites: Pharmacy Clinical as per plan of study, PHM 138, PHM 125, and COM 120

This course covers the major issues, trends, and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement, and the latest developments in pharmacy technician practice. Upon completion, students should be able to demonstrate a basic knowledge of the topics discussed. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

PHM 150 Hospital Pharmacy
Prerequisites: Enrollment in program, PHM 125, PHM 138, PHM 140, and COM 120, or permission of program director
Corequisites: None

This course provides an in-depth study of hospital pharmacy practice. Topics include hospital organizational structure, committee functions, utilization of reference works, purchasing and inventory control, drug delivery systems, and intravenous admixture preparation. Upon completion, students should be able to explain hospital organization/committee functions, interpret and enter patient orders, fill unit-dose cassettes, and prepare intravenous admixtures. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

PHM 155 Community Pharmacy
Prerequisites: Enrollment in program, PHM 125, PHM 138, PHM 140, and COM 120 or permission of program director
Corequisites: None

This course covers the operational procedures relating to retail pharmacy. Emphasis is placed on a general knowledge of over-the-counter products, prescription processing, business/inventory management, and specialty patient services. Upon completion, students should be able to provide technical assistance and support to the retail pharmacist. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

PHM 160 Pharm Dosage Forms
Prerequisites: Enrollment in program, PHM 125, PHM 138, PHM 140, and COM 120, or permission of program director
Corequisites: None

This course is a study of pharmaceutical dosage forms and considerations in their manufacture. Topics include bioavailability, routes of administration, tablets, capsules, solutions, syrups, suspensions, elixirs, aerosols, transdermals, topicals, ophthalmics, otics, and other dosage forms. Upon completion, students should be able to describe the characteristics of the major dosage forms and explain how these characteristics affect the action of the drug. Course Hours Per Week: Class,3. Lab,0. Semester Hours Credit, 3.

PHM 165 Pharmacy Prof Practice

Prerequisites: Enrollment in program and PHM 110, PHM 111, PHM 115
Corequisites: PHM 118 and PHM 120

This course provides a general overview of all aspects of pharmacy technician practice. Emphasis is placed on pharmacy law, calculations, compounding, pharmacology, and pharmacy operations. Upon completion, students should be able to demonstrate competence in the areas required for the Pharmacy Technician Certification Examination Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

PHYSICAL SCIENCE

PHS 121 Applied Physical Science I
Prerequisites: MAT 060 and RED 080 or satisfactory score on placement test
Corequisites: None

This course introduces the general principles of physics and chemistry. Topics include measurement, motion, Newton's laws of motion, momentum, energy, work, power, heat, thermodynamics, waves, sound, light, electricity, magnetism, and chemical principles. Upon completion, students should be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced. This course includes concepts of chemistry and physics that apply to dental materials; laboratory work reinforces the principles discussed in lecture. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

PHYSICS

PHY 110 Conceptual Physics
Prerequisites: MAT 060 and RED 090 or satisfactory score on placement test
Corequisites: None

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. Laboratory experiments and computer-based exercises enhance and consolidate the understanding of basic physical principles and applications. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PHY 110A Conceptual Physics Lab
Prerequisites: MAT 060 and RED 090 or satisfactory score on placement test
Corequisites: PHY 110

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *This course has been approved to*

satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Course Hours Per Week: Class, 0. Lab, 2. Semester Hours Credit, 1.

PHY 131 Physics-Mechanics
Prerequisites: RED 090 or satisfactory score on placement test and MAT 121
Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields. Laboratory experiments and computer-based tutorials consolidate the basic principles of physics that are used in the engineering field. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

PHY 151 College Physics I
Prerequisites: RED 090 or satisfactory score on placement test and MAT 172 or MAT 175
Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Laboratory experiments, along with some computer-based labs and tutorials, consolidate the basic principles discussed in lectures. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

PHY 152 College Physics II
Prerequisites: PHY 151
Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Laboratory experiments, along with some computer-based labs and tutorials, consolidate the basic principles discussed in lectures. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences/mathematics*. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

PHY 251 General Physics I
Prerequisites: RED 090 or satisfactory score on placement test and MAT 271
Corequisites: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear

kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Laboratory experiments, some of which are computer-based, and computer-based tutorials enhance and consolidate the basic principles discussed in the theoretical section of the course. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences-mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

PHY 252 General Physics II
Prerequisites: MAT 272 and PHY 251
Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Laboratory experiments, some of which are computer-based, and computer-based tutorials enhance and consolidate the basic principles discussed in the theoretical section of the course. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in natural sciences-mathematics*. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

PLUMBING

PLU 111 Intro to Basic Plumbing
Prerequisites: MAT 060, RED 080, or satisfactory score on placement test
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 Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

POLITICAL SCIENCE

POL 120 American Government
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement tests
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.

Basic concepts of state and local government and their relationships with the federal government are also examined. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

POL 220 International Relations
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course is a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and United Nations. 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.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PORTUGUESE

POR 111 Elementary Portuguese I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: POR 181

This course introduces the fundamental elements of the Portuguese language within a cultural context. Emphasis is 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 Portuguese and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

POR 112 Elementary Portuguese II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , POR 111
Corequisites: POR 182

This continuation of POR 111 focuses on the fundamental elements of the Portuguese language within a cultural context. Emphasis is 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 Portuguese and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Course Hours Per Week, 3. Semester Hours Credit, 3.

POR 181 Portuguese Lab I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: POR 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the Portuguese language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Portuguese and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

POR 182 **Portuguese Lab 2**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test POR 181
Corequisites: POR 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the Portuguese language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Portuguese and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

POR 211 **Intermediate Portuguese I**
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test , POR 112
Corequisites:
This course provides a review and expansion of the essential skills of the Portuguese language. Emphasis is 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.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PSYCHOLOGY

PSY 110 **Life Span Development**
Prerequisites: ENG 080 and RED 080, or satisfactory score on placement tests
Corequisites: None

This course provides an introduction to the study of human growth and development. Emphasis is on 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 and apply this knowledge to their specific field of study. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PSY 150 **General Psychology**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 science.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PSY 241 Developmental Psychology
Prerequisites: PSY 150
Corequisites: None

This course is a study of human growth and development. Emphasis is 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. Course work includes projects which emphasize research. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PSY 259 Human Sexuality
Prerequisites: PSY 150
Corequisites: None

This course provides the biological, psychological, and sociocultural aspects of human sexuality and related research. Topics include reproductive biology, sexual and psychosexual development, sexual orientation, contraception, sexually transmitted diseases, sexual disorders, theories of sexuality, and related issues. Upon completion, students should be able to demonstrate an overall knowledge and understanding of human sexuality. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

PSY 281 Abnormal Psychology
Prerequisite: PSY 150
Corequisite: 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 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. Course work includes projects. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

RESPIRATORY THERAPY

RCP 110 Introduction to Respiratory Care
Prerequisites: Enrollment in the Respiratory Care program
Corequisites: RCP 113, RCP 114, RCP 123

This course introduces the respiratory care profession. Topics include the role of the respiratory care practitioner, medical gas administration, basic patient assessment, infection control, and medical terminology. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

RCP 111 Therapeutics/Diagnostics
Prerequisites: RCP 110, RCP 113, RCP 114
Corequisites: RCP 145

This course is a continuation of RCP 110. Emphasis is on entry-level therapeutic and diagnostic procedures used in respiratory care. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Course Hours Per Week: Class, 4. Lab, 3. Semester Hours Credit, 5.

RCP 112 Patient Management
Prerequisites: RCP 111
Corequisites: RCP 153, RCP 115, RCP 224

This course provides entry-level skills in adult and pediatric mechanical ventilation as well as respiratory care procedures in traditional and alternative settings. Emphasis is on therapeutic modalities and physiological effects of cardiopulmonary rehabilitation, home care, mechanical ventilation, and monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

RCP-113 RCP Pharmacology
Prerequisites: Enrollment in Respiratory Therapy program
Corequisites: RCP 110, RCP 114, RCP 123

This course covers the drugs used in the treatment of cardiopulmonary diseases. Emphasis is placed on the uses, actions, indications, administration, and hazards of pharmacological agents. Upon completion, students should be able to demonstrate competence though written evaluations. Course Hours Per Week: Class, 2. Lab, 0 Semester Hours Credit, 2

RCP-114 C-P Anatomy & Physiology
Prerequisites: Enrollment in Respiratory Therapy Program
Corequisites: RCP 110, RCP 113, RCP 123

This course provides a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Emphasis is placed on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. Upon completion, students should be able to demonstrate competence in these concepts through written evaluation. Course Hours Per Week: Class3. Lab, 0 Semester Hours Credit, 3

RCP 115 C-P Pathophysiology
Prerequisites: RCP 111
Corequisites: RCP 112, RCP 153, RCP 223

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is on clinical signs and symptoms along with diagnoses, complications, prognoses, and management. Upon completion, students should be able to demonstrate competence in these concepts through written evaluations. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

RCP-123 Special Practice Lab
Prerequisites: Restricted to students in Respiratory Therapy program
Corequisites: RCP 110, RCP 113, RCP114

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations. Course Hours Per Week: Class, 0. Lab, 3. Semester Hours Credit, 1.

DELETE
RCP 132 RCP Clinical Practice I
Prerequisites: Enrollment in the Respiratory Care program
Corequisites: RCP 110

RCP 145 RCP Clinical Practice II
Prerequisites: RCP 110 and RCP 123
Corequisites: RCP 111

This course provides entry-level clinical experience. Emphasis is on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations. Medicated aerosol administration, pulmonary clearance mechanisms, and artificial airway maintenance are emphasized. Course Hours Per Week: Clinical, 15. Semester Hours Credit, 5.

RCP 153 RCP Clinical Practice III
Prerequisites: RCP 111 and RCP 145
Corequisites: RCP 112, RCP 115, RCP 223

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations. Equipment and techniques for intermittent, non-invasive, and invasive mechanical ventilation are introduced. Course Hours Per Week: Clinical, 9. Semester Hours Credit, 3.

RCP 210 Critical Care Concepts
Prerequisites: RCP 112, RCP 115
Corequisites: RCP 235, RCP 214

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the study of mechanical ventilation, underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

RCP 211 Advanced Monitoring/Procedures
Prerequisites: RCP 210, RCP 214
Corequisites: RCP 245, RCP 215

This course includes advanced information gathering and decision making for the respiratory care professional. Topics include advanced cardiac monitoring and special procedures. Upon completion, students should be able to evaluate, design, and recommend appropriate care plans through written and laboratory evaluations. This course also covers supervision and management skills. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

RCP-214 Neonatal /Pediatric Respiratory Care
Prerequisites: RCP 111, RCP 112, RCP 115
Corequisites: RCP 210, RCP 235

This course provides in-depth coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on neonatal and pediatric pathophysiology and on the special therapeutic needs of neonates and children. Upon completion, students should be able to demonstrate competence in these concepts through written and laboratory evaluations. Students will also develop their critical thinking skills by working through clinical case studies. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2

RCP 215 Career Prep-Advanced Level
Prerequisites: RCP 210, RCP 214
Corequisites: RCP 211, RCP 245

This course provides preparation for employment and for the advanced-level practitioner credentialing exam. Emphasis is on review of the NBRC Advanced-Level Practitioner Exam as well as supervision and management. Upon completion, students should be able to complete successfully the appropriate self-assessment examinations and meet the requirements for employment. Course Hours Per Week: Lab, 3. Semester Hours Credit, 1.

RCP-223 Special Practice Lab
Prerequisites: RCP 145
Corequisites: RCP 153, RCP112, RCP 115

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations. Course Hours Per Week: Class, 0. Lab, 3. Semester Hours Credit, 1.

RCP 235 RCP Clinical Practice IV
Prerequisites: RCP 111, RCP 112, RCP 153, RCP 223
Corequisites: RCP 210, RCP 214

This course provides advanced practitioner clinical experience. Emphasis is on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations. Advanced concepts in adult mechanical ventilation as well as equipment and techniques for pediatric and neonatal mechanical ventilation are introduced. Course Hours Per Week: Clinical, 15. Semester Hours Credit, 5.

RCP 245 RCP Clinical Practice V
Prerequisites: RCP 210, RCP 235
Corequisites: RCP 211, RCP 215

This course provides advanced practitioner clinical experience. Emphasis is on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations. Adult, pediatric, and neonatal critical care experiences are continued; and invasive and noninvasive monitoring devices are discussed. Course Hours Per Week: Clinical, 15. Semester Hours Credit, 5.

READING

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

RED 070 Essential Reading Skills
Prerequisites: None
Corequisites: None

This course is designed to strengthen reading skills. Emphasis is on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, and learning strategies. Upon completion, students should be able to demonstrate competence in the skills required for RED 080. Emphasis is also on demonstrating successful academic skills and using current materials such as a newspaper. This course does not satisfy the developmental reading prerequisite for ENG 111. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

RED 080 Introduction to College Reading
Prerequisites: RED 070, or satisfactory score on placement test
Corequisites: None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is 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. Emphasis is also on demonstrating successful academic behaviors and using diverse materials such as periodicals. This course does not satisfy the developmental reading prerequisite for ENG 111. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

RED 090 Improved College Reading
Prerequisites: RED 080, or satisfactory score on placement test

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. Some sections may specialize in discipline-specific reading and academic success skills. This course satisfies the developmental reading prerequisite for ENG 111; the developmental English prerequisite for ENG 111 must also be met. Course Hours Per Week: Class, 3. Lab, 2. Semester Hours Credit, 4.

RELIGION

REL 110 World Religions
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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. Major topics include the role of women in the various religions, the relationship between religion and science, and the involvement of religion in world peace and in preservation of the environment. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

REL 211 Introduction to Old Testament
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is 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*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

INFORMATION SYSTEMS SECURITY

SEC 110 Security Concepts
Prerequisites: None
Corequisites: None

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

implement and enforce policy. Course Hours Per Week: Class, 3. Lab, 0. Semester Hours Credit, 3.

SEC 150 Secure Communications
Prerequisites: SEC 110 and NET 110 or NET 125
Corequisites: None

This course provides an overview of current technologies used to provide secure transport of information across networks. Topics include data integrity through encryption, Virtual Private Networks, SSL, SSH, and IPSec. Upon completion, students should be able to implement secure data transmission technologies. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

SEC 160 Secure Admin I
Prerequisites: SEC 110 and NET 110 or NET 125
Corequisites: None

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

SEC 210 Intrusion Detection
Prerequisites: SEC 160
Corequisites: None

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host based systems. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

SEC 220 Defense-In-Depth
Prerequisites: None
Corequisites: SEC 160

This course introduces students to the concepts of defense in-depth, a security industry best practice. Topics include firewalls, backup systems, redundant systems, disaster recovery, and incident handling. Upon completion, students should be able to plan effective information security defenses, backup systems, and disaster recovery procedures. *This course is restricted to the Information Systems Security, the Information Systems Security/Operating Systems, and the Information Systems Security/Security Hardware curriculums.*
Course Hours Per Week: Class, 2.Lab, 2. Semester Hours Credit, 3.

SEC 240 Wireless Security
Prerequisites: SEC 110 and NET 175
Corequisites: None

This course introduces security principles and topics related to the wireless networking environment. Topics include network topologies, network protocols, security issues, and best practices for wireless environments. Upon completion, students should be able to design, setup, manage, and secure a wireless network.
Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

SEC 289 Security Capstone Project
Prerequisites: SEC 220
Corequisites: None

This course provides the student the opportunity to put into practice all the skills learned to this point. Emphasis is placed on security policy, process planning, procedure definition, business continuity, and systems security architecture. Upon completion, students should be able to design and implement comprehensive information security architecture from the planning and design phase through implementation. *This course is restricted to the Information Systems Security, the Information Systems Security/Operating Systems, and the Information Systems Security/Security Hardware curriculums.*
Course Hours Per Week: Class, 1. Lab, 4. Semester Hours Credit, 3.

Simulation and Game Development

New courses

SGD 111 Introduction to SGD
Prerequisites: None
Corequisites: None

This course provides students with an introduction to simulation and game development. Topics include setting, storytelling, narrative, character design, interface design, game play, internal economy, core mechanics, game genres, AI, the psychology of game design and professionalism. Upon completion, students should be able to demonstrate knowledge of the major aspects of simulation and game design and development. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

SGD 113 SGD Programming
Prerequisites: None
Corequisites: None

This course introduces the fundamentals of programming languages and tools employed in simulation and game development. Emphasis is placed on programming concepts used to create simulations and games. Upon completion, students should be able to program simple games and/or simulations. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

SGD 114 3D Modeling
Prerequisites: None
Corequisites: None

This course introduces the tools required to create three dimensional (3D) models. Emphasis is placed on exploring tools used to create 3D models. Upon completion, students should be able to

create and animate 3D models using 3D modeling tools. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

SOCIOLOGY

SOC 210 Introduction to Sociology
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
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 for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SOC 213 Sociology of the Family
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course covers the institution of the family and other intimate relationships. Emphasis is on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SOC 220 Social Problems
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is 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 for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SOC 225 Social Diversity
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: None

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in social/behavioral sciences*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPANISH

SPA 111 Elementary Spanish I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: SPA 181

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is 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 as well as demonstrate cultural awareness. This course must be taken with the accompanying lab. *This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 112 Elementary Spanish II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 111
Corequisites: SPA 182
This course is a continuation of SPA 111 and focuses on the fundamental elements of the Spanish language within a cultural context. Emphasis is 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 should be able to demonstrate further cultural awareness. This course must be taken with the accompanying lab.*This course must be taken with the accompanying lab. This course has been approved to satisfy the Comprehensive Articulation Agreement for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 120 Spanish for the Workplace
Prerequisites: ENG 080 and RED 080 or satisfactory score on placement test
Corequisites: ENG 090 or satisfactory score on placement test

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity. Strong emphasis will be placed on the knowledge and understanding of the Hispanic culture. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 161 Cultural Immersion
Prerequisite: SPA 111
Corequisite: None

This course explores Hispanic culture through intensive study taking place on campus and during a field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or*

elective course requirement. Course Hours Per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

SPA 181 Spanish Lab 1
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test
Corequisites: SPA 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

SPA 182 Spanish Lab 2
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 181
Corequisites: SPA 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish as well as demonstrate cultural awareness. *This course is approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement*. Course Hours Per Week: Lab, 2. Semester Hours Credit, 1.

SPA 211 Intermediate Spanish I
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 112
Corequisites: None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 212 Intermediate Spanish II
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 211
Corequisites: None

This course provides a continuation of SPA 211. Emphasis is 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 for the general education core requirement in humanities/fine arts*. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 221 **Spanish Conversation**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 212 or permission of program director
Corequisites: None
This course provides an opportunity for intensive communication in spoken Spanish. Emphasis is on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 231 **Reading and Composition**
Prerequisite: ENG 090 and RED 090, or satisfactory score on placement test ,SPA 212 or permission of the program director
Corequisite: None

This course provides an opportunity for intensive reading and composition in Spanish. Emphasis is on the use of literary and cultural materials to enhance and expand reading and writing skills. Upon completion, students should be able to demonstrate in writing an in-depth understanding of assigned readings. . *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPA 281 **Spanish Lab 3**
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test , SPA 182
Corequisites: None

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Stress is placed on the use of sophisticated grammatical structures indispensable to the art of translation and interpretation. 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 for transferability as a premajor and/or elective course requirement.* Course Hours Per Week: Class, 0; Lab, 2; Semester Hours Credit, 1.

COMMUNITY SPANISH INTERPRETER

SPI 111 **Cultural & Ethical Issues**
Prerequisites: Permission of Community Spanish Program Director
Corequisites: None

This course provides cultural sensitivity instruction, as well as in-depth focus on professional ethics for the interpreter. Emphasis is placed on researching the fundamentals of professional ethics, creating ethical guidelines for interpreters and learning about Hispanic cultural issues. Upon completion, students should be able to apply professional ethics and an understanding of the Hispanic culture in the interpreting field. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPI 113 **Introduction to Spanish Interpreting**

Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, SPI 214, or permission of the program director
Corequisites: None

This course introduces the field of interpreting, interpretation models, cognitive processes associated with interpretation, professional ethical standards, employment opportunities, and working conditions. Topics include specialized jargon, code of ethics, interpreter assessments/qualifications, and protocol associated with various settings. Upon completion, students should be able to explain the rationale for placement of interpreters and apply ethical standards to a variety of working situations. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPI 114 Analytical Skills Spanish Interpreting
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test; SPI 113, or permission of the program director
Corequisites: None

This course is designed to improve cognitive processes associated with interpreting, listening, short-term memory, semantic equivalence, visual/auditory processing, thought organization, and logic. Emphasis is placed on developing skills necessary to generate equivalent messages between Spanish and English. Upon completion, students should be able to consecutively interpret non-technical, interactive messages between Spanish and English. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPI 213 Review of Grammar
Prerequisites: SPA 212 or permission of program director
Corequisites: ENG 090 and RED 090, or satisfactory score on placement test **8/19/10 NONE**

This course is designed to review the common elements of Spanish grammar in oral and written form. Emphasis is on the fundamental grammatical concepts of the Spanish language. Upon completion, students should be able to demonstrate comprehension and correct usage of specified grammatical concepts in both oral and written form.

SPI 214 Introduction to Translation
Prerequisites: ENG 090 and RED 090, or satisfactory score on placement test, SPI 213
Corequisites: None

This course is designed to improve the quality of Spanish to English and English to Spanish translation. Emphasis is on the practice of translating Spanish to English and English to Spanish in a variety of prose styles. Upon completion, students should be able to demonstrate usage and understanding of the processes involved in translating. Additionally, students will be introduced to sight translation, the oral interpretation of a written text from one language to another. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPI 221 Consecutive Interp I
Prerequisites: ENG O90 and RED 090, or satisfactory score on placement test, and SPI 111
Corequisites: None

This course introduces skills of consecutive interpretation used by professional interpreters. Topics include memory development, note taking, sight translation and non-verbal communication. Upon completion, students should be able to apply consecutive interpretation techniques in a variety of role-playing situations and settings. This course will particularly focus on interpretation topics and techniques in medical settings. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SPI 222 Consecutive Interp II
Prerequisites: SPI 221
Corequisites: None

This course builds upon Consecutive Interpretation I by providing students with additional opportunities to enhance skills in increasingly complex situations. Emphasis is on practical role-play situations which simulate a variety of settings. Upon completion, students should be able to demonstrate a more advanced ability to consecutively interpret messages of a varied nature. This course will particularly emphasize advanced interpretation techniques and ethical standards in hospital and clinical settings. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

SST Sustainability Technologies

SST 110 Introduction to Sustainability
Prerequisite: None
Corequisite: None

This course introduces sustainability issues and individual contributions toward environmental sustainability. Topics include management processes needed to maximize renewable/non-renewable energy resources, economics of sustainability, and reduction of environmental impacts. Upon completion, students should be able to discuss sustainability practices and demonstrate an understanding of their effectiveness and impacts. Course hours per week: Class, 3; Lab,0; Semester Hours Credit, 3.

SST 120 Energy Use Analysis
Prerequisite: None
Corequisite: None

This course introduces the principles of analyzing energy use, energy auditing tools and techniques, conservation techniques, and calculating energy savings. Topics include building system control theory, calibrating digital controls, energy loss calculations, and applicable conservation techniques. Upon completion, students should be able to demonstrate an understanding of energy use, audits, and controls in the analysis of energy consumption. Course hours per week: Class, 2; Lab, 2; Semester Hours Credit, 3.

SST 130 Modeling Renewable Energy
Prerequisite: None
Corequisite: None

This course introduces software and other technologies used for modeling renewable energy systems. Topics include renewable energy modeling software applications, data analysis,

renewable energy sources, and cost of renewable energy systems. Upon completion, students should be able to use appropriate technology to model the effectiveness of renewable energy systems. Course hours per week: Class, 2; Lab, 2; Semester Hours Credit, 3.

SST 210 Issues in Sustainability
Prerequisite: SST 110
Corequisite: None
This course introduces the long-term impacts and difficulties of applying sustainability concepts in an organization, business, or society. Topics include the application of sustainable technologies and the analysis of affordability, efficiencies, recycling, and small and large-scale design. Upon completion, students should be able to recognize the possible limitations of sustainable technologies and be prepared to reconcile such conflicts. Course hours per week: Class, 3; Lab, 0; Semester Hours Credit, 3.

SURGICAL TECHNOLOGY

SUR 110 Introduction to Surgical Technology
Prerequisites: Enrollment in the Surgical Technology program
Corequisites: SUR 111

This course provides a comprehensive study of the operative environment, professional roles, moral/legal/ethical responsibilities, and medical communications used in surgical technology. Topics include: professional behaviors, medical terminology, interdepartmental/peer/relationships, operating room environment/safety, pharmacology, anesthesia, incision sites, physiology of wound healing, and biomedical sciences. Upon completion, students should be able to apply theoretical knowledge of the course topics to the operative environment. Course Hours Per Week: Class, 3; Lab, 0; Clinical, 0; Semester Hours Credit, 3.

SUR 111 Perioperative Patient Care
Prerequisites: Enrollment in the Surgical Technology program
Corequisites: SUR 110

This course provides theoretical knowledge for the application of essential operative skills during the perioperative phase. Topics include surgical asepsis, sterilization and disinfection, and perioperative patient care. Upon completion, students should be able to demonstrate the principles and practices of aseptic technique, sterile attire, basic care preparation, and other relevant skills. Course Hours Per Week: Class, 5; Lab, 6; Clinical, 0; Semester Hours Credit, 7.

SUR 122 Surgical Procedures I
Prerequisites: SUR 110 and SUR 111
Corequisites: SUR 123

This course provides an introduction to selected basic and intermediate surgical specialties that students are exposed to the first clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment. Course Hours Per Week: Class, 5; Lab, 3; Clinical, 0; Semester Hours Credit, 6.

SUR 123 Surgical Clinical Practice I
Prerequisites: SUR 110 and SUR 111
Corequisites: SUR 122

This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is on the scrub and circulating roles of the surgical technologist, including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles. Course Hours Per Week: Class, 0; Lab, 0; Clinical, 21; Semester Hours Credit, 7.

SUR 134 Surgical Procedures II
Prerequisites: SUR 123
Corequisites: SUR 135 and SUR 137

This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.
Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

SUR 135 Surgical Clinical Practice II
Prerequisites: SUR 123
Corequisites: SUR 134 and SUR 137

This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist. Course Hours Per Week: Clinical, 12. Semester Hours Credit, 4.

SUR 137 Professional Success Preparation
Prerequisites: SUR 123
Corequisites: SUR 134 and SUR 135

This course provides job-seeking skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, résumé preparation, and interviewing techniques. Upon completion, students should be able to prepare a résumé, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification. Course Hours Per Week: Class, 1. Semester Hours Credit, 1.

WEB TECHNOLOGIES

WEB 110 Internet/Web Fundamentals
Prerequisites: None
Corequisites: None

This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

New Course
WEB 111 **Introduction to Web Graphics**
Prerequisites: None
Corequisites: None

This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

WEB 115 **Web Markup and Scripting**
Prerequisites: WEB-110
Corequisites: None

This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards. Course Hours Per Week: Class, 2.Lab, 2. Semester Hours Credit, 3.

WEB 120 **Intro Internet Multimedia**
Prerequisites: None
Corequisites: None

This is the first of two courses covering the creation of Internet Multimedia. Topics include Internet multimedia file types, file type conversion, acquisition of digital audio/video, streaming audio/video and graphics animation plug-in programs and other related topics. Upon completion, students should be able to create Internet multimedia presentations utilizing a variety of methods and applications. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

New course
WEB 125 **Mobile Web Design**
Prerequisite: WEB 110
Corequisite None

This course introduces students to web design for mobile devices. Topics include planning an effective mobile Web site, industry standard Mobile Markup Language, CSS3, multimedia, m-commerce, social media, testing and publishing. Upon completion, students should be able to plan, develop, test, and publish Web content designed for mobile devices. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

WEB 140 **Web Development Tools**

Prerequisites: None
Corequisites: None

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

New Course
WEB 151 Mobile Application Development !
Prerequisites: CIS 115
Corequisites: None

This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

WEB 210 Web Design
Prerequisites: WEB-110
Corequisites: None

This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

DELETE
WEB 230 Implementing Web Serv
Prerequisites: NET 125
Corequisites: None

WEB 250 Database Driven Websites
Prerequisites: DBA 110
Corequisites: None

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

WELDING

New Course
WLD 110 Cutting Processes
Prerequisite: MAT 060 and RED 070, or satisfactory score on placement test
Corequisite: 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. Course Hours Per Week: Class, 1. Lab, 3 Semester Hours Credit, 2.

WLD 112 **Basic Welding Processes**
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test
Corequisite: None

This course introduces basic welding and cutting. Emphasis is 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. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

New Course
WLD 115 **SMAW (stick) Plate**
Prerequisite: MAT 060 and RED 070, or satisfactory score on placement test
Corequisite: 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. Course Hours Per Week: Class, 2. Lab, 9. Semester Hours Credit,5.

WLD 121 **GMAW (MIG) FCAW/Plate**
Prerequisite: MAT 060, RED 070, or satisfactory score on placement test
Corequisite: 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. Course Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

New Course
WLD 131 **GTAW (TIG) Plate**
Prerequisite: MAT 060 and RED 070, or satisfactory score on placement test
Corequisite: 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 Hours Per Week: Class, 2. Lab, 6. Semester Hours Credit, 4.

New Course

WLD 141 Symbols and Specifications

Prerequisite: MAT 060 and RED 070, or satisfactory score on placement test

Corequisite: 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. Course Hours Per Week: Class, 2. Lab, 2. Semester Hours Credit, 3

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY UNIVERSITY TRANSFER | Effective Fall Semester 2012-2013

Associate in Arts Degree (A10100)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. Students must demonstrate computer competency as part of their graduation requirements.

General Education Core (44 hours)	**Semester and Year**	**Credits**	**Grades**

English Composition (6 hours)

ENG 111			
ENG 113 (preferred) or 112			

Humanities/Fine Arts (12 hours)

Select four courses from at least three disciplines. Must include one **200-level core English literature.**
ARA 111, 112, 211; ART 111, 114, 115, 117; DRA 111; ENG 231, 232, 233, 241, 242, 243, 251, 252, 261, 262; FRE 111, 112, 211; GER 111, 112, 211; HUM 110, 120, 121, 122, 150, 160; ITA 111, 112, 211; MUS 110, 113; PHI 215, 240; POR 111, 112, 211; REL 110, 211; SPA 111, 112, 211, 212.

English Literature (200 level)			
Foreign Language (112 level or higher)			
3rd Discipline			
Other			

Social/Behavioral Sciences (12 hours)

Select four courses from at least three disciplines. Must include one history.
ANT 210, 220; ECO 251, 252; GEO 111, 112; HIS 111, 112, 121, 122, 131, 132; POL 120, 220; PSY 150, 241, 281; SOC 210, 213, 220, 225.

History			
2nd Discipline			
3rd Discipline			
Other			

Natural Sciences (8 hours)

Select from AST 151 and 151A, AST 152 and 152 A; BIO 111, 112, BIO 120, BIO 130; BIO 140 and 140A; CHM 151, 152; GEL 111, 113; PHY 110 and 110A; PHY 151 or 251; PHY 152 or 252.

Mathematics (6 hours)

Must include accompanying labs. Select from MAT 140, 151, 161, 171, 172, 175, 263, 271, 272, 273.
(Students may not receive credit for the following combinations of MAT classes: MAT 161 and MAT 171; MAT 161 and 175; MAT 171 and MAT 175; MAT 172 and MAT 175; MAT 263 and MAT 271)

Other Required Hours (20 hours)	**Semester and Year**	**Credits**	**Grades**

College Transfer Success (1 hour)

ACA 122 is required for university transfer students and should be taken in a student's first semester. Under CAA, course will transfer as an elective hour .		

Physical Education (1 hour)

Select from PED 110, 111, 113, 120, 121, 128, 130, 139, 142, 143, 145, 148, 149, 162, 183, 186.

Capstone Course (3 hours)

HUM 212 or BIO 280			

Electives (15 hours)

Select from courses above, excluding PED, and from ARA 181, 182; ACC 120, 121; ART 131, 132; BIO 163, 168, 169, 250, 271, 275; BUS 110, 115; CHM 130 and 130A, 251, 252, 263; CIS 110, 115; CJC 111, 121, 141; COM 120, 231; CSC 120, 130, 134, 151; DFT 170; DRA 122, 170; EGR 150, 220; ENG 272, 273, 274; FRE 181, 182; GER 181, 182; HEA 110; HIS 151; HUM 115, 180; ITA 181, 182; MAT 140A, 161A, 171A, 172A, 175 A, 263A, 285; POR 181, 182; PSY 259; SPA 161, 181, 182, 221, 231. **Students may not receive credit for both BIO 163 and BIO 168; and for both CHM 130/130A and CHM 151.**

If you enroll in ARA 111, 112; FRE 111, 112; GER 111, 112; ITA 111, 112; MAT 140, 161, 171, 172, 175, 263; POR 111, 112; SPA 111, 112; the accompanying lab course must be included in elective hours.

Foreign Language Lab(s)			
Math Lab(s)			

Computer Competency . All A.A. students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 115.

Computer Competency			

Note: ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Statewide Articulation Agreement*

I. Transfer Assured Admissions Policy (TAAP)

Beginning in Fall Semester 2005, a student who successfully earns the A.A. or A.S. degree and who falls under the other requirements of the Comprehensive Articulation Agreement (CAA) is assured admission to one of the 16 UNC institutions. See your advisor for further details.

II. A.A. and A.S. Graduates

If you successfully earn the A.A. or A.S. degree, following your acceptance at one of North Carolina's 16 public universities, you will transfer as a junior, receive 64 hours of credit (if no grades are "D"), and satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

III. Students Completing 44-Hour Core

If you successfully complete the 44-hour core, following your acceptance at one of North Carolina's 16 public universities or selected private institutions the 44 hours will transfer as a block (if no grades are "D")and will satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

IV. Other Students

If you transfer to one of North Carolina's 16 public universities before completing the 44-hour core, you will receive credit for core courses, and the university you attend will evaluate other courses individually. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

***Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer.**

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

UNIVERSITY TRANSFER

Associate in Arts Degree (A10100)

At THE ORANGE COUNTY CAMPUS

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. Students must demonstrate computer competency as part of their graduation requirements.

This plan of study can be accomplished by taking most classes at the Orange County Campus and others through distance learning. Students should refer to their selected pre-majors, study-tracks, and the transfer admissions recommendations of their intended transfer institutions to determine if they should take courses on Durham Tech's main campus to satisfy some of their degree requirements.

General Education Core (44 hrs)	**Course**	**Semester/Year**	**Credits**	**Grade**
English Composition (6 hours)				
ENG 111	ENG 111			
ENG 113 (preferred) or 112	ENG 113			
Humanities/Fine Arts (12 hours)				
Select four courses from at least three disciplines. Must include one **200-level core English literature.** ARA 111, 112, 211; ART 111, 114, 115, 117; DRA 111; ENG 231, 232, 233, 241, 242, 243, 251, 252, 261, 262; FRE 111, 112, 211; GER 111, 112, 211; HUM 110, 120, 121, 122, 150, 160; ITA 111, 112, 211; MUS 110, 113; PHI 215, 240; POR 111, 112, 211; REL 110, 211; SPA 111, 112, 211, 212.				
English Literature (200 level)	*ENG 231, 232,* or *261 (online)*			
Foreign Language	SPA 111/181 or FRE 111/181			
Foreign Language	SPA 112/182 or FRE 112/182			
3rd Discipline	HUM 110 or 160 or ART 117 *or REL 110, 211 or PHIL 215 (online)*			
Social/Behavioral Sciences (12 hours)				
Select four courses from at least three disciplines. Must include one **history**. ANT 210, 220; ECO 251, 252; GEO 111, 112; HIS 111, 112, 121, 122, 131, 132; POL 120, 220; PSY 150, 241, 281; SOC 210, 213, 220, 225.				
History	HIS 121 or *HIS 121, 122 or 132 (online)*			
2nd Discipline	ECO 251 or 252*			
3rd Discipline	PSY 150*			
Other	POL 120 or 220 or GEO 111 **or ANT 210; GEO 112; HIS 112, 121, 122; POL 120; SOC 210 (online)*			
Natural Sciences (8 hours)				
Select from AST 151 and 151A, AST 152 and 152 A; BIO 111, 112, 120, 130, BIO 140 and 140A; CHM 151, 152; GEL 111, 113; PHY 110 and 110A; PHY 151 or 251; PHY 152 or 252.				
1st Lab Science Course	AST 151/151A			
2nd Lab Science Course	AST 152/152A , BIO 111, or CHM 151 *or CHM 151; GEL 111 or 113 (online)*			

Mathematics (6 hours)

Must include accompanying labs. Select from MAT 140, 151, 161, 171, 172, 175, 263, 271, 272, 273.
(Students may not receive credit for the following combinations of MAT classes: MAT 161 and MAT 171; MAT 161 and 175; MAT 171 and MAT 175; MAT 172 and MAT 175; MAT 263 and MAT 271)

1st Math Course	MAT 171			
2nd Math Course	MAT 172 or MAT 151			

Other Required Hours (20 hours) **Semester/Year** **Credits** **Grade**

College Transfer Success (1 hour) **Semester/Year** **Grade**

ACA 122, required for all university transfer students, transfers as an elective hour under CAA.		

Physical Education (1 hour)

Select from PED 111, 113, 120, 121, 128, 130, 139, 142, 143, 145, 148, 149, 162, 183, 186.

Physical Education	PED 120 or 121			

Capstone Course (3 hours)

Capstone Course	*HUM 212 (online)*			

Electives (15 hours)

Select from courses above, excluding PED, and from ARA 181, 182; ACC 120, 121; ART 131, 132; BIO 163, 168, 169, 250, 271, 275; BUS 110, 115; CHM 130 and 130A, 251, 252, 263; CIS 110, 115; CJC 111, 121, 141; COM 120, 231; CSC 120, 130, 134, 151; DFT 170; DRA 122, 170; EGR 150, 220; ENG 272, 273, 274; FRE 181, 182; GER 181, 182; HEA 110, 112; HIS 151; HUM 115, 180; ITA 181, 182; MAT 140A, 161A, 171A, 172A, 175 A, 263A, 285; POR 181, 182; PSY 259; SPA 161, 181, 182, 221, 231. (Students may not receive credit for both BIO 163 and BIO 168.)

If you enroll in ARA 111, 112; FRE 111, 112; GER 111, 112; ITA 111, 112; MAT 140, 161, 171, 172, 175, 263; POR 111, 112; SPA 111, 112; the accompanying lab course must be included in elective hours.

Math Lab(s)	MAT 171A, MAT 172A			
Foreign Language Lab(s)	SPA 181, 182 or FRE 181, 182			
Elective	BUS 110, 115; BIO 168, 169, 271			
Elective				
Elective				
Elective				
Elective				
Elective				

Computer Competency. **All A.A. students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 115, which would count as elective credit.**

Computer Competency	CIS 110			

Note: ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Statewide Articulation Agreement*

I. Transfer Assured Admissions Policy (TAAP)

Beginning in Fall Semester 2005, a student who successfully earns the A.A. or A.S. degree and who falls under the other requirements of the Comprehensive Articulation Agreement (CAA) is assured admission to one of the 16 UNC institutions. See your advisor for further details.

II. A.A. and A.S. Graduates

If you successfully earn the A.A. or A.S. degree, following your acceptance at one of North Carolina's 16 public universities, you will transfer as a junior, receive 64 hours of credit (if no grades are "D"), and satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

III. Students Completing 44-Hour Core

If you successfully complete the 44-hour core, following your acceptance at one of North Carolina's 16 public universities or selected private institutions the 44 hours will transfer as a block (if no grades are "D")and will satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

IV. Other Students

If you transfer to one of North Carolina's 16 public universities before completing the 44-hour core, you will receive credit for core courses, and the university you attend will evaluate other courses individually. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

***Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer.**

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2009 | PLAN OF STUDY ACCOUNTING | Effective Fall Semester 2012-2013

Bookkeeper Entrepreneur (C25100B)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. .

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
ACC	120	Principles of Financial Accounting	3	2	4			
ACC	131	Federal Income Taxes	3	0	3			
ACC	150	Accounting Software Applications	1	2	2			
CIS	110	Introduction to Computers	2	2	3			
CTS	130	Spreadsheet	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ACCOUNTING (A25100)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
ACC	120	Principles of Financial Accounting	3	2	4			
BUS	110	Introduction to Business	3	0	3			
CIS	110	Introduction to Computers	2	2	3			
ENG	111	Expository Writing*	3	0	3			
MAT	115	Mathematical Models*	2	2	3			
SPRING SEMESTER, 2013								
ACC	121	Principles of Managerial Accounting	3	2	4			
CTS	130	Spreadsheet	2	2	3			
ECO	251	Principles of Microeconomics	3	0	3			
ENG	112	Argument-Based Research	3	0	3			
SUMMER TERM, 2013								
BUS	115	Business Law I	3	0	3			
COM	231	Public Speaking	3	0	3			
PSY	150	General Psychology	3	0	3			
		Humanities Elective			3			
FALL SEMESTER, 2013								
ACC	131	Federal Income Tax	3	0	3			
ACC	150	Accounting Software Applications	1	2	2			
ACC	220	Intermediate Accounting I	3	2	4			
ACC	226	Advanced Managerial Accounting	3	0	3			
		Major Elective			3			
SPRING SEMESTER, 2014								
ACC	221	Intermediate Accounting II	3	2	4			
ACC	227	Practices in Accounting	3	0	3			
ACC	269	Auditing and Assurance Services	3	0	3			
COE	110	World of Work	1	0	1			
COE	111	Co-op Work Experience	0	10	1			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 69

(Over)

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, PHI 215, PHI 240, REL 110, REL 211

HUMANITIES ELECTIVE: 3 hours:

_____ _____ _____ _____ _____ _____ _____

MAJOR ELECTIVES: Minimum of 3 hours
ACC 140, ACC 215, ACC 240, ACC 250, BUS 116

MAJOR ELECTIVES:
_____

_____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Spring Semester 2011 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ASSOCIATE DEGREE NURSING (A45110)

Associate Degree

Day Scheduling Option

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clin	Credit	Grade	Semester	Remarks
Note: Students on this plan of study will be chosen through the competitive admissions process outlined on the Durham Tech Associate Degree Nursing web page.									
FALL SEMESTER 2012									
ACA	122	College Student Success	1	0	0	1			
BIO	168	Anatomy & Physiology I	3	3	0	4			
ENG	111	Expository Writing* I	3	0	0	3			
PSY	150	General Psychology	3	0	0	3			
NUR	111	Introduction to Health concep	4	6	6	8			
SPRING SEMESTER 2013									
BIO	169	Anatomy & Physiology II	3	3	0	4			
PSY	241	Developmental Psychology	3	0	0	3			
NUR	112	Health-Illness Concepts	3	0	6	5			
NUR	114	Holistic Health Concepts	3	0	6	5			
NUR	212A	Health System concepts	1.5	0	3	2.5			
SUMMER TERM 2013									
BIO	271	Pathophysiology	3		0	3			
FALL SEMESTER 2013									
ENG	112	Argument-Based Research	3	0	0	3			
NUR	113	Family Health Concepts	3	0	6	5			
NUR	211	Health Care Concepts	3	0	6	5			
NUR	212B	Health System concepts	1.5	0	3	2.5			
SPRING SEMESTER 2014									
NUR	213	Complex Health Concepts	4	3	15	10			
		Humanities Elective	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 70

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results. CIS 070, CIS 113, or CIS 110 may also be required based on placement test results.

(Over)

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, FRE 211, GER 211, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, ITA 211, MUS 110, PHI 215, PHI 240, POR 211, REL 110, REL 211, SPA 211, SPA 212
HUMANITIES ELECTIVE:
_____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Spring 2011 — PLAN OF STUDY — Effective Fall Semester 2012-2013

ASSOCIATE DEGREE NURSING (A45110)

Associate Degree

Evening Scheduling Option

LPN to ADN Track

The following plan of study is the standard curriculum for the **LPN to ADN Track** for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admission office to determine if readmission is necessary.

			Hours						
Course Title			Class	Lab	Clin	Credit	Grade	Semester	Remarks
Students on this plan of study will be accepted in spring 2012 to begin in fall 2012									
FALL SEMESTER, 2012									
NUR	214	Nursing Transition Concepts	3	0	3	4			
ACA	122	College Student Success	1	0	0	1			
BIO	168	Anatomy and Physiology I	3	3	0	4			
ENG	111	Expository Writing	3	0	0	3			
PSY	150	General Psychology	3	0	0	3			
SPRING TERM, 2013									
NUR	221	LPN TO ADN Concepts I	6	0	9	9			
BIO	169	Anatomy and Physiology II	3	3	0	4			
PSY	241	Developmental Psychology	3	0	0	3			
SUMMER TERM 2013									
BIO	271	Pathophysiology	3	0	0	3			
ENG	112	Argument-Based Research	3	0	0	3			
FALL SEMESTER, 2013									
NUR	223	LPN TO ADN Concepts II	6	0	9	9			
		Humanities Elective	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 49***

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results. CIS 070, CIS 113, or CIS 110 may also be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, FRE 211, GER 211, HUM 110, HUM 115, HUM 121, HUM 122, HUM 150, HUM 160, ITA 211, MUS 110, PHI 215, PHI 240, POR 211, REL 110, REL 211, SPA 211, SPA 212 HUMANITIES ELECTIVE:

(Over)

****. This plan is formulated to show the actual courses (12) and hours (49 SHC) LPN to AND students will be taking. LPN to A D N students who successfully complete NUR 214, 221, and 223 (with a C or better) will be awarded credit for NUR 111(8 SHC), NUR 112 (5 SHC), and NUR 113 (5 SHC) NUR 114 (5 SHC) and NUR 211(5HC).*

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2007 | PLAN OF STUDY | Effective Fall Semester 2012-2013

GENERAL EDUCATION

Associate Degree
Day and Evening Program

Students in the General Education Program receive the Associate in General Education degree (AGE) upon completion of 64 credit hours. The flexible AGE program is designed for individuals wishing to broaden their education with emphasis on personal interest, growth, and development. This program is not designed as a transfer program. The two-year AGE program provides students opportunities to study English, literature, fine arts, philosophy, social science, science, and mathematics at the college level and to explore technical areas of study.

A minimum of 64 (with a maximum of 65) credit hours is required for the Associate in General Education degree; and each student must complete a minimum 18-hour group of courses in English, social sciences, humanities, and mathematics/science. The remaining hours may be selected from any courses numbered 110 and above as found in the North Carolina Community College System Combined Course Library. Credits from other colleges and universities will be evaluated on an individual basis.

Students who already have a college degree may transfer up to 36 hours of coursework into the General Education program for elective hours. Courses that are equivalent to the 18-hour group of courses will also be accepted for transfer. Students seeking a first degree may transfer more than 36 elective hours into the program, provided that at least ¼ of the total credit hours required are completed at Durham Tech including 9 of the final 18 hours.

At Durham Tech, the Program Director and academic advisors work one-on-one with AGE students to individualize their plans of study to fit their academic needs. Students may enroll in this individualized program any semester and can complete requirements through day, evening, or weekend classes.

ASSOCIATE IN GENERAL EDUCATION

ACA 122-College Transfer Success- 1 credit hour

The Associate in General Education degree is awarded upon successful completion of 64 semester credit hours including the minimum in each of the areas below. All courses must be numbered 110 or above.

English - 6 credit hours:
ENG 111 and either ENG 112 or ENG 113

Humanities - 6 credit hours selected from:
ART, DRA, ENG (excluding ENG 111, 112, 113), FRE, GER, HUM, ITA, MUS, PHI, POR, REL, SPA

Mathematics or Science - 3 credit hours selected from:
BIO, CHM, GEL, MAT, PHY

Social Sciences - 3 credit hours selected from:
ANT, ECO, GEO, HIS, POL, PSY, SOC

Computer Competency: All AGE students must demonstrate computer competency to graduate. That competency may be demonstrated by *a* satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 113.

Electives – a minimum of 46 semester credit hours selected from course prefixes above and COM; ENG (courses numbered 110 and above not used to satisfy English requirements listed above); HEA; PED; or any technical courses numbered 110 or above as found in the North Carolina Community College System Common Course Library. A maximum of 7 semester hours credit from health (HEA), and physical education (PED) (with a limit of 2 semester credit hours from PED courses) and college orientation (ACA) courses can be counted toward the Elective requirement

ASSOCIATE IN GENERAL EDUCATION (A10300)

Name_____

WORK SHEET

	Semester and Year	Credits	Grade
ACA 122 (College Transfer Success) 1 hour			

I. English (Composition) 6 hours*

ENG 111			
ENG 112 or 113			

II. Humanities (6 hours)*
Choose from ART, DRA, ENG (excluding ENG 111, 112, 113), FRE, GER, HUM, ITA, MUS, PHI, POR, REL, SPA

III. Social Sciences (3 hours)*
Choose from ANT, ECO, GEO, HIS, POL, PSY, SOC

IV. Mathematics or Sciences (3 hours)*
Choose from BIO, CHM, GEL, MAT, PHY

V. Electives (a minimum of 46 semester hours credit, consisting of general education and professional curriculum courses, numbered 110 and above)

VI. Computer Competency –AGE students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 113.			

*ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Associate in General Education with Health Career Concentration
Effective Fall Semester 2012

The Associate in General Education with a Health Career Concentration may be used for several purposes, including students with related technical certificates/degrees who are interested in a terminal degree to enhance their employment opportunities, those who wish to transfer to a Health Career major at a four-year institution, or students who are taking courses in preparation for graduate study in a Health Career field. This AGE degree framework is meant as a guide and, if students plan to transfer, they should not assume that it addresses unique requirements set by their university of choice. It is the students' responsibility to become aware of individual requirements of senior institutions.

Students who already have a college degree may transfer up to 36 hours of coursework for elective hours. Courses that are equivalent to the 25-hour group of courses required for the AGE with Health Career Concentration will also be accepted for transfer. Students seeking a first degree may transfer more than 36 elective hours into the program, provided that at least ¼ of the total credit hours required are completed at Durham Tech including 9 of the final 18 hours.

At Durham Tech, the AGE Program Director and academic advisors work one-on-one with AGE students to fit their academic needs. Students may enroll in this individualized program any semester and can complete requirements through day, evening, weekend, or online classes according to availability.

Associate in General Education with Health Career Concentration

Effective Fall Semester 2012

ASSOCIATE IN GENERAL EDUCATION WITH HEALTH CAREER CONCENTRATION
The Associate in General Education with Health Career concentration degree is awarded upon successful completion of 64 semester credit hours including the minimum in each of the areas below. All courses must be numbered 110 or above.
ACA 122- College Transfer Success – 1 credit hour
English (6 hours)
ENG 111 and either ENG 112 or ENG 113.
Humanities/Fine Arts (6 hours)
Select two from different fields – ENG (excluding ENG 111,112, 113); ART 115; MUS 110; PHI 240; REL 110, 211; SPA 111/181, 112/182.
Mathematics (3 hours minimum)
MAT 151, 171/171A, 172/172A.
Natural Sciences (4 hours)
Select from BIO 111, 112, 168, 169, 275; CHM 151, 152, 251, 252 (Students may not receive credit for both CHM 130/130A and CHM 151).
Social/Behavioral Sciences (6 hours)
Psychology 150 and select one of the following – HIS 112, 122; PSY 241, PSY 281; SOC 210, 225.
Computer Competency
All AGE students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit exam, or by completing CIS 110 or CIS 113.
Electives (a minimum of 39 hours credit, consisting of general education and professional curriculum courses, numbered 110 and above)

*Note: EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

ASSOCIATE IN GENERAL EDUCATION (A10300)

Name_____

WORK SHEET

	Semester and Year	Credits	Grade
ACA 122 (College Transfer Success) 1 hour			

I. English (Composition) 6 hours*

ENG 111			
ENG 112 or 113			

II. Humanities (6 hours)*
Choose from ART, DRA, ENG (excluding ENG 111, 112, 113), FRE, GER, HUM, ITA, MUS, PHI, POR, REL, SPA

III. Social Sciences (3 hours)*
Choose from ANT, ECO, GEO, HIS, POL, PSY, SOC

IV. Mathematics or Sciences (3 hours)*
Choose from BIO, CHM, GEL, MAT, PHY

V. Electives (a minimum of 46 semester hours credit, consisting of general education and professional curriculum courses, numbered 110 and above)

VI. Computer Competency –AGE students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 113.			

*ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2002-2003 | PLAN OF STUDY ARCHITECTURAL TECHNOLOGY | Effective Fall Semester 2012-2013

Architectural CAD Option (C40100C)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2012								
ARC	111	Intro to Architectural Technology	1	6	3			
ARC	112	Construction Materials and Methods	3	2	4			
ARC	114	Architectural CAD	1	3	2			
SPRING SEMESTER, 2013								
ARC	113	Residential Architectural Technology	1	6	3			
ARC	220	Advanced Architectural CAD	1	3	2			
ARC	221	Architectural 3-D CAD	1	4	3			

MINIMUM SEMESTER HOURS REQUIRED FOR CERTIFICATE 17

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ARCHITECTURAL TECHNOLOGY (A40100)

Associate Degree
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Class	Hours Lab	Credit	Grade	Semester	Remarks
5 Semesters						
FALL SEMESTER, 2012						
ACA 122 College Transfer Success	1	0	1			
ARC 111 Intro to Architectural Technology	1	6	3			
ARC 112 Construction Materials & Methods	3	2	4			
ENG 111 Expository Writing*	3	0	3			
MAT 121 Algebra/Trigonometry I*	2	2	3			
SPRING SEMESTER, 2013						
ARC 113 Residential Architectural Technology	1	6	3			
ARC 114 Architectural CAD	1	3	2			
ARC 131 Building Codes	2	2	3			
ENG 112 Argument-Based Research	3	0	3			
CIS 110 Introduction to Computers	2	2	3			
SUMMER TERM, 2013						
ARC 119 Structural Drafting	2	2	3			
ARC 211 Light Construction Technology	1	6	3			
ARC 220 Advanced Architectural CAD	1	3	2			
ARC 240 Site Planning	2	2	3			
PSY 150 General Psychology	3	0	3			
FALL SEMESTER, 2013						
ARC 132 Specifications & Contracts	2	0	2			
ARC 210 Intro to Sustainable Design	1	3	2			
ARC 230 Environmental Systems	3	3	4			
ARC 236 Architectural Mech/Elec Tech	0	4	2			
ARC 263 Introduction to ADA Title III	1	2	2			
PHY 110 Conceptual Physics	3	0	3			
PHY 110A Conceptual Physics Lab	0	2	1			
SPRING SEMESTER, 2014						
ARC 212 Commercial Construction Technology	1	6	3			
ARC 213 Design Project	2	6	4			
ARC 221 Architectural 3-D CAD	1	4	3			
ARC 235 Architectural Portfolio	2	3	3			
Humanities Elective			3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 74

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ ____ ____ ____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY UNIVERSITY TRANSFER | Effective Fall Semester 2012 -2013

Associate in Science Degree (A10400)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. Students must demonstrate computer competency as part of their graduation requirements.

General Education Core (44 hours) **Semester and Year** **Credits** **Grades**

English Composition (6 hours)

ENG 111			
ENG 113 (preferred) or 112			

Humanities/Fine Arts (9 hours)

Select three courses. Must include one **200-level core English literature**. ARA 112, 211; ART 111, 114, 115, 117; DRA 111; ENG 231, 232, 233, 241, 242, 243, 251, 252, 261, 262; FRE 112, 211; GER 112, 211; HUM 110, 120, 121, 122, 150, 160; ITA 112, 211; MUS 110, 113; PHI 215, 240; POR 112, 211; REL 110, 211; SPA 112, 211, 212.

English Literature (200 level)			
Foreign Language (112 level or higher)			
3rd Discipline			

Social/Behavioral Sciences (9 hours)

Select three courses from at least three disciplines. Must include one history.
ANT 210, 220; ECO 251, 252; GEO 111, 112; HIS 111, 112, 121, 122, 131, 132; POL 120, 220; PSY 150, 241, 281; SOC 210, 213, 220, 225.

History			
2nd Discipline			
3rd Discipline			

Natural Sciences/Mathematics (20 Hours) These 20 hours will include **8 hours** minimum in natural sciences**, 6 hours** minimum in math, and an additional **6 hours** chosen from either natural science or math courses.

Natural Sciences (8 hours minimum)

***A minimum two-course sequence from the following general biology, general chemistry, or general physics is required.**

Select from BIO 111, 112; CHM 151, 152; PHY 151, 152 or PHY 251, 252.

Mathematics (6 hours minimum)

Select from MAT 151, 171, 172, 175, 263, 271, 272, 273. Must include accompanying labs. (Students may not receive credit for the following combinations of MAT classes: MAT 171and MAT 175; MAT 172 and MAT 175; MAT 263 and MAT 271.)

Other Required Hours (20 hours) **Semester& Year Credits** **Grades**

College Transfer Success (1 hour)

ACA 122 is required for university transfer students and should be taken in the student's first semester. Under CAA, course transfers as an elective hour.		

Natural Sciences and Mathematics (14 hours, of which 3 hours will be BIO 280). Select from science and math courses listed above and AST 151 and 151A, AST 152 and 152 A; BIO 120, 130, 140 and 140A, 163, 168, 169, 175, 250, 271, 275; CHM 130 and 130A, 251, 252, 263; CIS 115; CSC 120, 130, 134, 151; EGR 150, 220; GEL 111, 113; MAT 285. **Students may not receive credit for both BIO 163 and BIO 168; or for both CHM 130/CHM 130 A and CHM 151.**

Math Lab(s)—171A, 172A, 175A, 263A			

Capstone Course (3 hours)

BIO 280			

Physical Education (1 hour)

Select from PED 110, 111, 113, 114, 120, 121, 128, 130, 139, 142, 143, 145, 148, 149, 162, 183, 186.

Electives (4 hours)

Please Note: Students who do not place into Foreign Language 112 will need to take Foreign Language 111 plus the accompanying lab for their four elective hours. As those students will also need an additional hour for the lab for Foreign Language 112, they will graduate with 65 hours.

Select from courses above, excluding PED, or from ACC 120, 121; ARA 111, 181, 182; ART 131, 132; BUS 110, 115; CIS 110; CJC 111, 121, 141; COM 120, 231; DFT 170; DRA 122, 170; EGR 150, 220; ENG 272, 273, 274; FRE 111, 181, 182; GER 111, 181, 182; HEA 110; HIS 151; HUM 115, 180, 212; ITA 111, 181, 182; MAT 140, 140A; POR 111, 181, 182; PHY 110 and 110A; PSY 259; SPA 111, 161, 181, 182, 221, 231

If you enroll in ARA 111, 112; FRE 111, 112; GER 111, 112; ITA 111, 112; MAT 140; POR 111, 112; SPA 111, 112; the accompanying lab course must be included in elective hours.

Foreign Language Lab(s)			

All A.S. students must demonstrate computer competency to graduate. That competency may be demonstrated by a satisfactory score on the computer competency test, by credit by exam, or by completing CIS 110 or CIS 115.

Computer Competency			

Note: ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Statewide Articulation Agreement*

I. Transfer Assured Admissions Policy (TAAP)

Beginning in Fall Semester 2005, a student who successfully earns the A.A. or A.S. degree and who falls under the other requirements of the Comprehensive Articulation Agreement (CAA) is assured admission to one of the 16 UNC institutions. See your advisor for further details.

II. A.A. and A.S. Graduates

If you successfully earn the A.A. or A.S. degree, following your acceptance at one of North Carolina's 16 public universities, you will transfer as a junior, receive 64 hours of credit (if no grades are "D"), and satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

III. Students Completing 44-Hour Core

If you successfully complete the 44-hour core, following your acceptance at one of North Carolina's 16 public universities, the 44 hours will transfer as a block (if no grades are "D")and will satisfy the institution-wide, lower-division general education requirements of that university. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

IV. Other Students

If you transfer to one of North Carolina's 16 public universities before completing the 44-hour core, you will receive credit for core courses, and other courses will be evaluated individually by the university you attend. Lists of courses required for certain majors are available in the University Transfer Office, Phillips 313.

***Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer.**

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2011 PLAN OF STUDY Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY (A60160)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
AUT	110	Intro to Auto Technology	2	2	3			
AUT	114	Safety and Emissions	1	2	2			
AUT	116	Engine Repair	2	3	3			
AUT	141	Suspension & Steering Sys	2	3	3			
AUT	151	Brake Systems	2	3	3			
SPRING SEMESTER, 2013								
CIS	110	Introduction to Microcomputers	2	2	3			
ENG	111	Expository Writing*	3	0	3			
AUT	161	Basic Automotive Electricity	4	3	5			
AUT	171	Auto Climate Control	2	4	4			
AUT	181	Engine Performance I	2	3	3			
SUMMER TERM, 2013								
MAT	115	Mathematical Models*	2	2	3			
ENG	112	Argument-Based Research	3	0	3			
		Social Science Elective	3	0	3			
		Humanities Elective	3	0	3			
FALL SEMESTER, 2013								
AUT	163	Adv Auto Electricity	2	3	3			
AUT	183	Engine Performance II	2	6	4			
AUT	211	Automotive Machining	2	6	4			
AUT	221	Auto Transm/Transaxles	2	3	3			
COE	110	World of Work±	1	0	1			
COE	111	Co-op Work Experience I±	0	10	1			
SPRING SEMESTER, 2014								
AUT	231	Man Trans/Axles/Drtrains	2	3	3			
AUT	281	Adv Engine Performance	2	2	3			
PHY	110	Conceptual Physics	3	0	3			
PHY	110A	Conceptual Physics Lab	0	2	1			
		Major Elective			3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 74

(over)

* EFL 062, EFL 063, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

± Permission of Program Director Required

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Major Elective: AUT 285 Alternative Fuels or AUT 283 Advanced Auto Electronics

_____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2011 PLAN OF STUDY Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY (D60160)

Diploma

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
3 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
AUT	110	Intro to Auto Technology	2	2	3			
AUT	141	Suspension & Steering Sys	2	3	3			
AUT	151	Brake Systems	2	3	3			
AUT	181	Engine Performance I	2	3	3			
AUT	114	Safety and Emissions	1	2	2			
SPRING SEMESTER, 2013								
AUT	161	Basic Automotive Electricity	4	3	5			
AUT	171	Auto Climate Control	2	4	4			
AUT	183	Engine Performance II	2	6	4			
AUT	231	Man Trans/Axles/Drtrains	2	3	3			
COE	110	World of Work±	1	0	1			
COE	111	Co-op Work Experience I±	0	10	1			
SUMMER TERM, 2013								
CIS	110	Introduction to Microcomputers	2	2	3			
ENG	111	Expository Writing*	3	0	3			

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TOTAL SEMESTER HOURS REQUIRED FOR Diploma 39

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

± Permission of Program Director Required

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY

Drivetrain (C60160D)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Hours Class	Lab	Credit	Grade	Semester	Remarks
AUT 110	Intro to Auto Technology	2	2	3			
AUT 116	Engine Repair	2	3	3			
AUT 231	Man Trans/Axles/Drtrains	2	3	3			
AUT 221	Auto Transm/Transaxles	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY

Automotive Electrical (C60160E)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Hours Class	Lab	Credit	Grade	Semester	Remarks
AUT 110	Intro to Auto Technology	2	2	3			
AUT 161	Basic Automotive Electricity	4	3	5			
AUT 163	Adv Auto Electricity	2	3	3			
AUT 283	Advanced Auto Electronics	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 14

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2007 | PLAN OF STUDY | Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY

Engine Performance (C60160P)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Hours Class	Lab	Credit	Grade	Semester	Remarks
AUT 110	Intro to Auto Technology	2	2	3			
AUT 181	Engine Performance I	2	3	3			
AUT 183	Engine Performance II	2	6	4			
AUT 281	Adv Engine Performance	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2008 | PLAN OF STUDY | Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY

Automotive Machining (C60160M)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Hours Class	Lab	Credit	Grade	Semester	Remarks
AUT 110	Intro to Auto Technology	2	2	3			
AUT 116	Engine Repair	2	3	3			
AUT 211	Automotive Machining	2	6	4			
WLD 112	Basic Welding Processes	1	3	2			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

AUTOMOTIVE SYSTEMS TECHNOLOGY

Under Car (C60160U)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Hours Class	Lab	Credit	Grade	Semester	Remarks
AUT 110	Intro to Auto Technology	2	2	3			
AUT 141	Suspension & Steering Sys	2	3	3			
AUT 151	Brake Systems	2	3	3			
AUT 114	Safety and Emissions	1	2	2			
AUT 116	Engine Repair	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 14

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2006 | PLAN OF STUDY | Effective Spring Semester 2012-2013

BASIC LAW ENFORCEMENT TRAINING (C55120)

Certificate

Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CJC	100	Basic Law Enforcement Training	9	30	19			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 19

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

BUSINESS ADMINISTRATION (A25120)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
4 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
ACC	120	Principles of Financial Accounting	3	2	4			
BUS	110	Introduction to Business	3	0	3			
BUS	137	Principles of Management	3	0	3			
ENG	111	Expository Writing*	3	0	3			
		Mathematics Elective **			3			
SPRING SEMESTER, 2013								
ACC	121	Principles of Managerial Accounting	3	2	4			
BUS	255	Organizational Behavior in Business	3	0	3			
BUS	115	Business Law I	3	0	3			
CIS	110	Introduction to Computers	2	2	3			
ENG	112	Argument-Based Research	3	0	3			
		or ENG 113, Literature-based Research						
FALL SEMESTER, 2013								
HUM	115	Critical Thinking	3	0	3			
MKT	120	Principles of Marketing	3	0	3			
BUS	225	Business Finance	2	2	3			
INT	110	International Business	3	0	3			
ECO	251	Principles of Microeconomics	3	0	3			
		or ECO 252 Principles of Macroeconomics						
		Major Elective			3			
SPRING SEMESTER, 2014								
BUS	153	Human Resource Management	3	0	3			
BUS	239	Business Applications Seminar	1	2	2			
CTS	130	Spreadsheet	2	2	3			
PSY	150	General Psychology	3	0	3			
		or SOC 210 Introduction to Sociology						
COM	231	Public Speaking	3	0	3			
		Major Elective			3			

Total Semester Hours Required for A.A.S. Degree **68**

(over)

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

****MATHEMATICS ELECTIVE**: Minimum of 3 Semester Hours Credit
MAT 115 Mathematical Models, or MAT 140 and MAT 140A Survey of Mathematics and Lab

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MAJOR ELECTIVES: Minimum of 6 Semester Hours Credit

Major Electives: BUS 116, BUS 139, BUS 234, BUS 235, BUS 240, BUS 245, COE 110 AND COE 111, MKT 123, MKT 220

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2007

PLAN OF STUDY

BUSINESS ADMINISTRATION

Effective Fall Semester 2012-2013

HUMAN RESOURCES Option (C25120H)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BUS	110	Introduction to Business*	3	0	3			
BUS	153	Human Resource Management	3	0	3			
BUS	234	Training and Development	3	0	3			
BUS	235	Performance Management	3	0	3			
BUS	255	Organizational Behavior in Business	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2007

PLAN OF STUDY

BUSINESS ADMINISTRATION

Effective Fall Semester 2012-2013

MARKETING Option (C25120M)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BUS	110	Introduction to Business*	3	0	3			
BUS	137	Principles of Management	3	0	3			
MKT	120	Principles of Marketing	3	0	3			
MKT	123	Fundamentals of Selling	3	0	3			
MKT	220	Advertising and Sales Promotion	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2009

PLAN OF STUDY

BUSINESS ADMINISTRATION

Effective Fall Semester 2012-2013

Operations Management Option (C2512G0)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BUS	110	Introduction to Business*	3	0	3			
OMT	112	Materials Management	3	0	3			
ISC	131	Quality Management	3	0	3			
ISC	210	Operations and Production Planning	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE
PLAN OF STUDY

New Curriculum 2011 — COMPUTER INTEGRATED MACHINING — Effective Fall Semester 2012-2013

CNC Option (C50210C)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course		Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
MAC	131	Blueprint Reading MACH I	1	2	2			
MAC	121	Introduction to CNC	2	0	2			
MAC	122	CNC Turning	1	3	2			
MAC	124	CNC Milling	1	3	2			
MAC	151	Machining Calculations*	1	2	2			
MAC	222	Advanced CNC Turning	1	3	2			
MAC	224	Advanced CNC Milling	1	3	2			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 14

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

PLAN OF STUDY

New Curriculum 2011 — **COMPUTER INTEGRATED MACHINING** — Effective Fall Semester 2012-2013

Basic Machining Option (C50210M)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours					
			Class	Lab	Credit	Grade	Semester	Remarks
DFT	119	Basic CAD	1	2	2			
MAC	141	Machining Applications	2	6	4			
MAC	121	Introduction to CNC	2	0	2			
MAC	131	Blueprint Reading MACH I	1	2	2			
CIS	110	Intro to Computers	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 — PLAN OF STUDY — Effective Fall Semester 2012-2013

CRIMINAL JUSTICE TECHNOLOGY (A55180)

Associate Degree
Day & Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters						
FALL SEMESTER, 2012						
ACA 122 College Transfer Success	1	0	1			
CJC 111 Introduction to Criminal Justice	3	0	3			
CJC 112 Criminology	3	0	3			
CJC 121 Law Enforcement Operations	3	0	3			
ENG 111 Expository Writing*	3	0	3			
Major Elective			3			
SPRING SEMESTER, 2013						
CJC 132 Court Procedure and Evidence**	3	0	3			
CJC 141 Corrections	3	0	3			
CJC 231 Constitutional Law **	3	0	3			
ENG 112 Argument Based Research	3	0	3			
SUMMER TERM, 2013						
PSY 150 General Psychology	3	0	3			
CIS 110 Introduction to Computers	2	2	3			
Humanities Elective			3			
Major Elective			3			
FALL SEMESTER, 2013						
CJC 114 Investigative Photography	1	2	2			
CJC 212 Ethics and Community Relations	3	0	3			
CJC 222 Criminalistics	3	0	3			
Major Elective			3			
SPRING SEMESTER, 2014						
CJC 113 Juvenile Justice	3	0	3			
CJC 131 Criminal Law**	3	0	3			
CJC 213 Substance Abuse	3	0	3			
CJC 221 Investigative Principles**	3	2	4			
MAT Math Elective			3 or 4			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 67 or 68 Hours

*ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

MATH ELECTIVE. Choose one set of courses from among the following sets:
MAT 115; MAT 121; MAT 140 and MAT 140 A; MAT 161and MAT 161 A; MAT 171and MAT 171 A

(over)

HUMANITIES ELECTIVE. Choose at least 3 hours from among the following:

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

_____ _____ _____ _____ _____ _____ _____

MAJOR ELECTIVES: Choose at least 9 hours from among the following:

Major Electives: CJC161, CJC 214, CJC 215, CJC 225**, COM 231, EPT 120, EPT 150, EPT 210, EPT 220

:

____ _____ _____ _____ _____ _____ _____

**Students successfully completing a Basic Law Enforcement Training course accredited by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC 131, CJC 132, CJC 221, CJC 225, and CJC 231 toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination. Students must have completed Basic Law Enforcement Training since 1985.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester PLAN OF STUDY Effective Fall Semester

2011-2012 **COMPUTER INFORMATION TECHNOLOGY (A25260)** 2012-2013

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Programming & Logic	2	3	3			
NOS	110	Operating System Concepts	2	3	3			
ENG	111	Expository Writing*	3	0	3			
MAT	140	Survey of Mathematics*	3	0	3			
MAT	140A	Survey of Mathematics Lab	0	2	1			
SPRING SEMESTER, 2013								
DBA	110	Database Concepts	2	3	3			
CTS	120	Hardware/Software Support	2	3	3			
NOS	130	Windows Single User	2	2	3			
NET	110	Networking Concepts	2	2	3			
ENG	112	Argument-Based Research	3	0	3			
SUMMER TERM, 2013								
BUS	110	Introduction to Business	3	0	3			
COM	231	Public Speaking	3	0	3			
		Social Science Elective			3			
		Humanities Elective			3			
FALL SEMESTER, 2013								
SEC	110	Security Concepts	3	0	3			
CTS	285	Systems Analysis & Design	3	0	3			
NOS	230	Windows Admin I	2	2	3			
NOS	120	Linux/UNIX Single User	2	2	3			
		Major Elective			3			
SPRING SEMESTER, 2014								
CTS	289	Systems Support Project	1	4	3			
COE	110	World of Work†	1	0	1			
COE	111	Co-op Work Experience I†	0	10	1			
		Major Elective			3			
		Major Elective			3			
Total Semester Hours Required for A.A.S. Degree					**70**			

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

† Requires prior approval by Department Head

Humanities Electives:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

Social Science Electives:
ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225.

Major Electives – Select 9 credit hours from one of the groups below.

Operating Systems group			Hours Class/Lab/Credit		
CTS	220	Adv Hardware/Software Support	2	3	3
CTS	155	Tech Support Functions	2	2	3
CTS	255	Adv Tech Support Functions	2	2	3
NET	111	Internetwk Arch & Design	2	2	3
NOS	220	Linux/UNIX Admin I	2	2	3
SEC	150	Secure Communications	2	2	3
SEC	160	Secure Admin I	2	2	3
SEC	210	Intrusion Detection	2	2	3

Software group			Hours Class/Lab/Credit		
OST	136	Word Processing	1	2	2
CTS	130	Spreadsheet	2	2	3
CTS	230	Advanced Spreadsheet	2	2	3
CSC	151	JAVA Programming	2	3	3
DBA	120	Database Programming I	2	2	3
WEB	110	Internet/Web Fundamentals	2	2	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	140	Web Development Tools	2	2	3

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

PLAN OF STUDY

New Curriculum 2011 — **COMPUTER INTEGRATED MACHINING** — Effective Fall Semester 2012-2013

Basic Machining Option (C50210M)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours					
			Class	Lab	Credit	Grade	Semester	Remarks
DFT	119	Basic CAD	1	2	2			
MAC	141	Machining Applications	2	6	4			
MAC	121	Introduction to CNC	2	0	2			
MAC	131	Blueprint Reading MACH I	1	2	2			
CIS	110	Intro to Computers	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Curriculum PLAN OF STUDY Effective Fall Semester
Fall 2011 **COMPUTER INTEGRATED MACHINING (D50210)** 2012-2012

Diploma
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
4 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
CIS	110	Intro to Computers	2	2	3			
DFT	119	Basic CAD	1	2	2			
MAC	121	Introduction to CNC	2	0	2			
MAC	131	Blueprint Reading MACH I	1	2	2			
MAC	141	Machining Applications	2	6	4			
SPRING SEMESTER, 2013								
MAC	122	CNC Turning	1	3	2			
MAC	124	CNC Milling	1	3	2			
MAC	142	Machining Applications II	2	6	4			
MAC	132	Blueprint Reading Machinist II	1	2	2			
MAC	151	Machining Calculations	1	2	2			
		Major Elective: MAC 248 Production Procedures 0-3-2 **OR** MAC 226 CNC EDM Maching 1-3-2						
SUMMER TERM, 2013								
ENG	111	Expository Writing*	3	0	3			
MAC	222	Advanced CNC Turning	1	3	2			
MAC	224	Advanced CNC Milling	1	3	2			
FALL SEMESTER 2013								
COE	110	World of Work	1	0	1			
COE	111	Co-op Work Experience	0	10	1			
PHY	110	Conceptual Physics	3	0	3			
PHY	110A	Conceptual Physics Lab	0	2	1			

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA 41

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Computer Programming

Database Programming Option (C25130DB)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Prog & Logic	2	3	3			
DBA	110	Database Concepts	2	3	3			
DBA	120	Database Programming I	2	2	3			
CSC	152	SAS	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2011 — PLAN OF STUDY — Effective Fall Semester 2012-2013

COMPUTER PROGRAMMING (A25130)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Programming & Logic	2	3	3			
NOS	110	Operating System Concepts	2	3	3			
ENG	111	Expository Writing*	3	0	3			
MAT	140	Survey of Mathematics*	3	0	3			
MAT	140A	Survey of Mathematics Lab	0	2	1			
SPRING SEMESTER, 2013								
DBA	110	Database Concepts	2	3	3			
		Programming Language Elective	2	3	3			
		Operating System Elective	2	2	3			
NET	110	Networking Concepts	2	2	3			
ENG	112	Argument-Based Research	3	0	3			
SUMMER TERM, 2013								
BUS	110	Introduction to Business	3	0	3			
COM	231	Public Speaking	3	0	3			
		Social Science Elective						
		Humanities Elective						
FALL SEMESTER, 2013								
SEC	110	Security Concepts	3	0	3			
CTS	285	Systems Analysis & Design	3	0	3			
		Programming Language Elective	2	3	3			
		Adv Programming Language Elective	2	3	3			
		Major Elective			3			
SPRING SEMESTER, 2013								
CSC	289	Programming Capstone Project	1	4	3			
COE	110	World of Work†	1	0	1			
COE	111	Co-op Work Experience I†	0	10	1			
		Adv Programming Language Elective	2	3	3			
		Major Elective			3			

Total Semester Hours Required for A.A.S. Degree 70

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

† Requires prior approval by Department Head

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211,

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

Programming Language Electives : CSC 139, CSC 151, CSC 153

Advanced Programming Language Electives : CSC 239, CSC 251, CSC 253

Operating System Electives : NOS 120, NOS 130

Major Electives – Select 6 credit hours from the list below.

Course		Title	Hours Class	Lab	Credit
DBA	120	Database Programming I	2	2	3
CSC	152	SAS	2	3	3
WEB	110	Internet/Web Fundamentals	2	2	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	140	Web Development Tools	2	2	3
SGD	111	Introduction to SGD	2	3	3
SGD	113	SGD Programming	2	3	3
SGD	114	3D Modeling	2	3	3

Taking additional Programming or Advanced Programming Language elective counts as a Major Elective.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Computer Programming
JAVA Option (C25130J)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Prog & Logic	2	3	3			
DBA	110	Database Concepts	2	3	3			
CSC	151	JAVA Programming	2	3	3			
CSC	251	Adv JAVA Programming	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Computer Programming
Visual BASIC Option (C25130VB)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Prog & Logic	2	3	3			
DBA	110	Database Concepts	2	3	3			
CSC	139	Visual BASIC Prog	2	3	3			
CSC	239	Adv Visual BASIC Prog	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Computer Programming
Visual C# Option (C25130CS)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Prog & Logic	2	3	3			
DBA	110	Database Concepts	2	3	3			
CSC	153	C# Programming	2	3	3			
CSC	253	Adv C# Programming	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 — PLAN OF STUDY — Effective Fall Semester 2012-2013

CRIMINAL JUSTICE TECHNOLOGY (A55180)

Associate Degree
Day & Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters						
FALL SEMESTER, 2012						
ACA 122 College Transfer Success	1	0	1			
CJC 111 Introduction to Criminal Justice	3	0	3			
CJC 112 Criminology	3	0	3			
CJC 121 Law Enforcement Operations	3	0	3			
ENG 111 Expository Writing*	3	0	3			
Major Elective			3			
SPRING SEMESTER, 2013						
CJC 132 Court Procedure and Evidence**	3	0	3			
CJC 141 Corrections	3	0	3			
CJC 231 Constitutional Law **	3	0	3			
ENG 112 Argument Based Research	3	0	3			
SUMMER TERM, 2013						
PSY 150 General Psychology	3	0	3			
CIS 110 Introduction to Computers	2	2	3			
Humanities Elective			3			
Major Elective			3			
FALL SEMESTER, 2013						
CJC 114 Investigative Photography	1	2	2			
CJC 212 Ethics and Community Relations	3	0	3			
CJC 222 Criminalistics	3	0	3			
Major Elective			3			
SPRING SEMESTER, 2014						
CJC 113 Juvenile Justice	3	0	3			
CJC 131 Criminal Law**	3	0	3			
CJC 213 Substance Abuse	3	0	3			
CJC 221 Investigative Principles**	3	2	4			
MAT Math Elective			3 or 4			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 67 or 68 Hours

*ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

MATH ELECTIVE. Choose one set of courses from among the following sets:
MAT 115; MAT 121; MAT 140 and MAT 140 A; MAT 161and MAT 161 A; MAT 171and MAT 171 A

(over)

HUMANITIES ELECTIVE. Choose at least 3 hours from among the following:

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

_____ _____ _____ _____ _____ _____ _____

MAJOR ELECTIVES: Choose at least 9 hours from among the following:

Major Electives: CJC161, CJC 214, CJC 215, CJC 225**, COM 231, EPT 120, EPT 150, EPT 210, EPT 220

:

____ _____ _____ _____ _____ _____ _____

**Students successfully completing a Basic Law Enforcement Training course accredited by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC 131, CJC 132, CJC 221, CJC 225, and CJC 231 toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination. Students must have completed Basic Law Enforcement Training since 1985.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Summer Term-2011 PLAN OF STUDY Effective Summer 2012-2013

CLINICAL TRIALS RESEARCH ASSOCIATE

Clinical Research – Data Management (C45190MC)

Certificate

Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters							
SUMMER TERM 2012							
CTR 210 Intro to Clinical Data	3	0	0	3			
DBA 110 Database Concepts	2	3	0	3			
FALL SEMESTER 2012							
CTR 215 Data Management Concepts	2	0	0	2			
DBA 120 Database Programming	2	2	0	3			
SPRING SEMESTER 2013							
CTR 225 Data Collection	1	2	0	2			
CSC 152 SAS	2	3	0	3			
SUMMER TERM 2013							
CTR 230 Data Trends and Reporting	1	2	0	2			
TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE				**18**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

NOTE: Students are eligible to enroll in the Clinical Data Management Certificate who have completed a baccalaureate or graduate degree in computer information systems, biological science, chemistry, or an allied health area.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010 PLAN OF STUDY Effective Spring Semester 2012-2013

CLINICAL TRIALS RESEARCH ASSOCIATE (A45190)

Associate Degree

Day Program (Spring Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
7 Semesters							
SPRING SEMESTER, 2012							
ACA 122 College Transfer Success	1	0	0	1			
BIO 168 Anatomy & Physiology I	3	3	0	4			
CTR 110 Introduction to Clinical Research	3	0	0	3			
ENG 111 Expository Writing*	3	0	0	3			
SUMMER TERM, 2012							
BIO 169 Anatomy & Physiology II	3	3	0	4			
CTR 112 Clinical Research Terminology	3	0	0	3			
FALL SEMESTER, 2012							
MAT 151 Statistics I*	3	0	0	3			
CTR 115 Clinical Research Regulations	3	0	0	3			
ENG 112 Argument-Based Research	3	0	0	3			
SPRING SEMESTER, 2013							
BIO 271 Pathophysiology	3	0	0	3			
Or BIO 275 Microbiology 3-3-4							
CTR 130 Clinical Research Management	4	0	0	4			
CTR 220 Research Site Management	3	0	0	3			
SUMMER TERM, 2013							
CTR 150 Research Fieldwork I	0	0	15	5			
CTR 210 Intro to Clinical Data	3	0	0	3			
SOC 225 Social Diversity	3	0	0	3			
FALL SEMESTER, 2013							
CTR 120 Research Protocol Design	3	0	0	3			
PHM 120 Pharmacology I	3	0	0	3			
PHI 240 Introduction to Ethics	3	0	0	3			

(Over)

SPRING SEMESTER, 2014

CTR	250	Research Fieldwork II	0	0	24	8			
PHM	125	Pharmacology II	3	0	0	3			
CTR	281	Professional Practice	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 71

*EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010 — PLAN OF STUDY — Effective Fall Semester 2012-2013

CLINICAL TRIALS RESEARCH ASSOCIATE (A45190)

Associate Degree

Evening/Online Program (Fall Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
7 Semesters							
FALL SEMESTER, 2012							
ACA 122 College Transfer Success	1	0	0	1			
BIO 168 Anatomy & Physiology I	3	3	0	4			
CTR 110 Introduction to Clinical Research	3	0	0	3			
ENG 111 Expository Writing*	3	0	0	3			
SPRING SEMESTER, 2013							
BIO 169 Anatomy & Physiology II	3	3	0	4			
CTR 115 Clinical Research Regulations	3	0	0	3			
MAT 151 Statistics I*	3	0	0	3			
SUMMER TERM, 2013							
CTR 112 Clinical Research Terminology	3	0	0	3			
ENG 112 Argument-Based Research	3	0	0	3			
FALL SEMESTER, 2013							
BIO 271 Pathophysiology	3	0	0	3			
Or BIO 275 Microbiology 3-3-0-4							
CTR 130 Clinical Research Management	4	0	0	4			
CTR 220 Research Site Management	3	0	0	3			
SPRING SEMESTER, 2014							
CTR 120 Research Protocol Design	3	0	0	3			
CTR 150 Research Fieldwork I	0	0	15	5			
PHM 120 Pharmacology I	3	0	0	3			
SUMMER TERM, 2014							
CTR 210 Intro to Clinical Data	3	0	0	3			
PHI 240 Introduction to Ethics	3	0	0	3			
PHM 125 Pharmacology II	3	0	0	3			

(Over)

FALL SEMESTER, 2014

CTR	250	Research Fieldwork II	0	0	24	8			
CTR	281	Professional Practice	3	0	0	3			
SOC	225	Social Diversity	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 71

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010

PLAN OF STUDY

CLINICAL TRIALS RESEARCH ASSOCIATE

Effective Fall Semester 2012-2013

Clinical Research – Level II Option (C45190II)

Certificate

Evening/Online Program (Fall Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters							
FALL SEMESTER, 2012							
CTR 130 Clinical Research Management	4	0	0	4			
SPRING SEMESTER, 2013							
CTR 120 Research Protocol Design	3	0	0	3			
SUMMER TERM, 2013							
CTR 210 Intro to Clinical Data	3	0	0	3			
FALL SEMESTER, 2013							
CTR 281 Professional Practice	3	0	0	3			
SOC 225 Social Diversity*	3	0	0	3			
TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE				**16**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

NOTE: Students are eligible to enroll in the Clinical Research Certificate – Level II who have completed Clinical Research Certificate - Level I, or who have two years work experience in the Clinical Research field.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010

PLAN OF STUDY

CLINICAL TRIALS RESEARCH ASSOCIATE

Effective Spring Semester 2012-2013

Clinical Research – Level II Option (C45190II)

Certificate

Day Program (Spring Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters							
SPRING SEMESTER, 2012							
CTR 130 Clinical Research Management	4	0	0	4			
SUMMER TERM, 2013							
CTR 210 Intro to Clinical Data	3	0	0	3			
FALL SEMESTER, 2013							
CTR 120 Research Protocol Design	3	0	0	3			
SPRING SEMESTER, 2013							
CTR 281 Professional Practice	3	0	0	3			
SOC 225 Social Diversity*	3	0	0	3			
TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE				**16**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

NOTE: Students are eligible to enroll in the Clinical Research Certificate – Level II who have completed Clinical Research Certificate - Level I, or who have two years work experience in the Clinical Research field.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010

PLAN OF STUDY

CLINICAL TRIALS RESEARCH ASSOCIATE

Effective Fall Semester 2012-2013

Clinical Research – Level II Option (C45190II)

Certificate

Evening/Online Program (Fall Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters							
FALL SEMESTER, 2012							
CTR 130 Clinical Research Management	4	0	0	4			
SPRING SEMESTER, 2013							
CTR 120 Research Protocol Design	3	0	0	3			
SUMMER TERM, 2013							
CTR 210 Intro to Clinical Data	3	0	0	3			
FALL SEMESTER, 2013							
CTR 281 Professional Practice	3	0	0	3			
SOC 225 Social Diversity*	3	0	0	3			
TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE				**16**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

NOTE: Students are eligible to enroll in the Clinical Research Certificate – Level II who have completed Clinical Research Certificate - Level I, or who have two years work experience in the Clinical Research field.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010

PLAN OF STUDY
CLINICAL TRIALS RESEARCH ASSOCIATE
Clinical Research – Level I Option (C45190I)

Effective Spring Semester 2012-2013

Certificate

Day Program (Spring Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters									
SPRING SEMESTER, 2012									
CTR	110	Introduction to Clinical Research	3	0	0	3			
SUMMER TERM, 2012									
CTR	112	Clinical Research Terminology	3	0	0	3			
MAT	151	Statistics I*	3	0	0	3			
FALL SEMESTER, 2012									
CTR	115	Clinical Research Regulations	3	0	0	3			
PHI	240	Introduction to Ethics*	3	0	0	3			
SPRING SEMESTER, 2013									
CTR	220	Research Site Management	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

NOTE: Students are eligible to enroll in the Clinical Research - Level I Certificate who have completed a baccalaureate or graduate degree in biological science, chemistry, or an allied health area, or who have completed one year of employment in the clinical research field within the last five years.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Term 2010 — PLAN OF STUDY — Effective Fall Semester 2012-2013

CLINICAL TRIALS RESEARCH ASSOCIATE

Clinical Research – Level I Option (C45190I)

Certificate

Evening/Online Program (Fall Admission)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters									
FALL SEMESTER, 2012									
CTR	110	Introduction to Clinical Research	3	0	0	3			
SPRING SEMESTER, 2013									
CTR	115	Clinical Research Regulations	3	0	0	3			
MAT	151	Statistics I*	3	0	0	3			
SUMMER TERM, 2013									
CTR	112	Clinical Research Terminology	3	0	0	3			
PHI	240	Introduction to Ethics*	3	0	0	3			
FALL SEMESTER, 2013									
CTR	220	Research Site Management	3	0	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Note: Student must demonstrate computer competency by achieving a satisfactory score on the computer competency test; credit by exam; completion of CIS 110; or by other institutional transferable credit (comparable / higher level computer course).

NOTE: Students are eligible to enroll in the Clinical Research - Level I Certificate who have completed a baccalaureate or graduate degree in biological science, chemistry, or an allied health area, or who have completed one year of employment in the clinical research field within the last five years.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

DENTAL LABORATORY TECHNOLOGY

Cast Partial Denture Techniques Option (C45280P)

Certificate

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters						
FALL SEMESTER, 2012						
DLT 114 Dental Materials*	1	6	3			
DLT 118 Cast Partial Dentures	3	9	6			
SPRING SEMESTER, 2013						
DLT 215 Advanced Partial Dentures	1	6	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

DENTAL LABORATORY TECHNOLOGY

Complete Denture Techniques Option (C45280T)

Certificate

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters						
FALL SEMESTER, 2012						
DLT 114 Dental Materials*	1	6	3			
DLT 116 Complete Dentures	1	9	4			
SPRING SEMESTER, 2013						
DLT 211 Advanced Complete Dentures	2	12	6			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2008 | PLAN OF STUDY | Effective Fall Semester 2012-2013

DENTAL LABORATORY TECHNOLOGY

Crown & Bridge Techniques Option (C45280B)

Certificate

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
3 Semesters						
FALL SEMESTER, 2012						
DLT 111 Dental Anatomy/Physiology	3	6	5			
DLT 114 Dental Materials*	1	6	3			
SPRING SEMESTER, 2013						
DLT 123 Crown and Bridge	2	12	6			
SUMMER TERM, 2013						
DLT 126 Advanced Crown and Bridge	1	9	4			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2007 PLAN OF STUDY Effective Fall Semester 2012-2013

DENTAL LABORATORY TECHNOLOGY (A45280)

Associate Degree
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters						
FALL SEMESTER, 2012						
DLT 111 Dental Anatomy/Physiology	3	6	5			
DLT 114 Dental Materials	1	6	3			
DLT 116 Complete Dentures	1	9	4			
ACA 122 College Transfer Success	1	0	1			
ENG 111 Expository Writing*	3	0	3			
PHS 121 Applied Physical Science I	3	2	4			
SPRING SEMESTER, 2013						
DLT 123 Crown & Bridge	2	12	6			
DLT 211 Advanced Complete Dentures	2	12	6			
MAT 115 Mathematical Models*	2	2	3			
Social Science Elective			3			
SUMMER TERM, 2013						
DLT 119 Wrought-Ortho Appliances	1	9	4			
DLT 126 Advanced Crown & Bridge	1	9	4			
Humanities Elective			3			
FALL SEMESTER, 2013						
CIS 113 Computer basics	0	2	1			
DLT 118 Cast Partial Dentures	3	9	6			
DLT 217 Ceramic Techniques	2	9	5			
DLT 219 Jurisprudence & Ethics	1	0	1			
ENG 112 Argument-Based Research	3	0	3			
SPRING SEMESTER, 2014						
DLT 215 Advanced Partial Dentures	1	6	3			
DLT 222 Advanced Ceramic Techniques	2	9	5			
DLT 224 Dental Lab Practice	0	20	2			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 75

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

(Over)

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

DENTAL LABORATORY TECHNOLOGY

Dental Ceramic Techniques Option (C45280C)

Certificate

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2012								
DLT	114	Dental Materials*	1	6	3			
DLT	217	Ceramic Techniques	2	9	5			
PHS	121	Applied Physical Science I	3	2	4			
SPRING SEMESTER, 2013								
DLT	222	Advanced Ceramic Techniques	2	9	5			

Note: Students must complete Crown and Bridge Certificate before enrolling in the Dental Ceramic Techniques Certificate.

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 17

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 — PLAN OF STUDY — Effective Fall Semester 2012-2013

EARLY CHILDHOOD EDUCATION

Child Care Administration and Management Option (C55220A)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BUS	110	Introduction to Business	3	0	3			
EDU	119	Introduction to Early Childhood Ed	4	0	4			
EDU	161	Introduction to Exceptional Child	3	0	3			
EDU	261	Early Childhood Administration I	3	0	3			
EDU	262	Early Childhood Administration II	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

* ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

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DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2009

PLAN OF STUDY

EARLY CHILDHOOD EDUCATION

Effective Fall Semester 2012-2013

Child Development Option (C55220C)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
EDU	119	Intro to Early Childhood Ed	4	0	4			
EDU	153	Health, Safety & Nutrition	3	0	3			
EDU	131	Child, Family, & Community	3	0	3			
EDU	161	Introduction to Exceptional Child	3	3	3			
EDU	234	Infants, Toddlers & Twos	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

* ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 — PLAN OF STUDY — Effective Fall Semester 2012-2013

EARLY CHILDHOOD EDUCATION (A55220)

Associate Degree

Afternoon/Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
EDU	119	Intro to Early Childhood Education	4	0	4			
EDU	153	Health, Safety &Nutrition	3	0	3			
EDU	144	Child Development I	3	0	3			
ENG	111	Expository Writing*	3	0	3			
MAT	115	Mathematical Models*	2	2	3			
	or	MAT 140 and MAT 140A Survey of Math						
SPRING SEMESTER, 2013								
EDU	131	Child, Family, & Community	3	0	3			
EDU	145	Child Development II	3	0	3			
EDU	146	Child Guidance	3	0	3			
EDU	234	Infants, Toddlers, and Twos	3	0	3			
EDU	280	Language and Literacy Experiences	3	0	3			
ENG	112	Argument-Based Research	3	0	3			
SUMMER TERM, 2013								
CIS	113	Computer Basics	0	2	1			
EDU	161	Introduction to Exceptional Child	3	3	3			
EDU	221	Children with Exceptionalities	3	0	3			
EDU	261	Early Childhood Administration I	3	0	3			
COM	231	Public Speaking	3	0	3			
		Humanities Elective			*3*			
FALL SEMESTER, 2013								
EDU	151	Creative Activities	3	0	3			
EDU	151A	Creative Activities Lab	0	2	1			
EDU	262	Early Childhood Administration II	3	0	3			
EDU	271	Educational Technology	3	0	3			
		Major Elective			*2*			
		Social Science Elective			*3*			

(Over)

SPRING SEMESTER, 2013

EDU	284	Early Child Capstone Prac	1	9	4			
EDU	154	Social /Emotional/Behavioral Development	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 73

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, PHI 215, PHI 240, REL 110, REL 211

HUMANITIES ELECTIVE:

_____ _____ _____

Major Electives: BUS 110, BUS 139, EDU 114, EDU 125, EDU 152, EDU184, EDU 220, EDU 241, EDU 250, EDU 275, HEA 110

MAJOR ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

**** Please note that enrollment in EDU 284 requires a criminal background check. Students may not enroll in this class or finish the degree without the criminal background check.**

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revise Fall Semester 2007 | PLAN OF STUDY | Effective Fall Semester 2012-2013

EARLY CHILDHOOD EDUCATION

Infant/Toddler Care Certificate (C55290)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
EDU	119	Intro to Early Childhood Ed	4	0	4			
EDU	144	Child Development I	3	0	3			
EDU	153	Health, Safety, and Nutrition	3	0	3			
EDU	131	Child, Family, and Community	3	0	3			
EDU	234	Infant, Toddlers, and Twos	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

* ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

Note. This certificate provides many of the core classes required for the Infant/Toddler Child Development Associate (CDA: NCCC Track) and for the Pre-School Child Development Associate (CDA: NCCC Track) The requirement for those CDA credentials are listed below:

Students who hope to obtain the Child Development Associate (CDA:NCCC Track) must

- Have at least 480 hours experience working with children within the last five years
- Be at least 18 years old
- Have a high school diploma or GED
- Complete an abbreviated Professional Resource File
- Earn a certificate in Pediatric First Aid
- Take all of the required course work at a NC Community college required to earn either the **Preschool** or **Infant/Toddler** CDA

  -Infant/Toddler CDA requires EDU 119, EDU 144, EDU 153, EDU 131, EDU 234 (courses on this certificate) , as well as EDU 184 Early Child Introduction Practicum (1-3-2)

  -Preschool CDA requires EDU 119, EDU 144, EDU 153, EDU 131 (courses on this certificate), as well as EDU 145 Child Development II (3-0-3), EDU 146 Child Guidance (3-0-3), and EDU 184 Early Childhood Introduction Practicum.

An official certificate for the CDA is not awarded by Durham Technical Community College. Students must apply for the CDA through the Child Care Services Association (919-967-3272).

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Durham Technical Community College

Revised Fall Semester 2011-2012 | Plan of Study | Effective Fall Semester 2012-2013

Environment, Health, and Safety Technology

Associate Degree (A50160)

Evening and Distance Learning Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
6 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
ENG	111	Expository Writing *	3	0	3			
FIP	230	Chemistry of Hazardous Materials I	5	0	5			
		Mathematics Elective			3 or 4			
SPRING SEMESTER, 2013								
ENG	112	Argument-Based Research	3	0	3			
		Humanities Elective			3			
		Social Science Elective			3			
FALL SEMESTER, 2013								
EHS	111	Occupational Safety and Eng.	5	0	5			
EHS	218	Occupational Ergonomics	3	0	3			
		Major Elective			3			
SPRING SEMESTER, 2014								
EHS	113	OSHA Electrical Safety	2	0	2			
EHS	114	OSHA Regulations	4	0	4			
ISC	115	Construction Safety	2	0	2			
		Major Elective			3			
FALL SEMESTER, 2014								
EHS	112	Industrial Hygiene	5	0	5			
EHS	212	Industrial Hygiene Sampling	3	2	4			
SPRING SEMESTER, 2015								
EHS	116	Environmental Management	4	0	4			
EHS	211	Environmental Health and Toxicology	5	0	5			
EHS	215	Incident Management	3	2	4			

Total Semester Hours Required for A.A.S. Degree 65

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

Major Electives: BUS 153, CIS 110, EHS 219, EPT 150, EPT 210, EPT 220, EPT 225, FIP 236, LEX 285

MAJOR ELECTIVES:

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225.

SOCIAL SCIENCE ELECTIVE:

Mathematics Electives: MAT 115, MAT 121, MAT 140/140A, MAT 171/171A

MATHEMATICS ELECTIVE:

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Notes

1. Students may elect to take CHM 130/130A as an automatic substitution for FIP 230
2. Students completing EHS 215 are eligible for OSHA HAZWOPER certification according to 29 CFR 1910.120(q)
3. Successful completion of the A.A.S. in Environment, Health, and Safety Technology may be used to fulfill the academic component of requirements for the designation as a Certified Safety Professional (CSP). See www.bcsp.org for details.

Durham Technical Community College

Revised Fall Semester 2010-2011 | Plan of Study | Effective Fall Semester 2012-2013

Environment, Health, And Safety Technology

Environmental Management Option (C50160M)

Certificate

Evening and Distance Learning Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2012								
FIP	230	Chemistry of Hazardous Materials I	5	0	5			
SPRING SEMESTER, 2013								
EHS	116	Environmental Management	4	0	4			
EHS	211	Environmental Health and Toxicology	5	0	5			
EHS	215	Incident Management	3	2	4			
Total Semester Hours Required for Certificate					**18**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Durham Technical Community College

Revised Fall Semester 2010-2011 | Plan of Study | Effective Fall Semester 2012-2013

Environment, Health, And Safety Technology

Occupational Health Option (C50160H)

Certificate

Evening and Distance Learning Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters						
FALL SEMESTER, 2012						
EHS 112 Industrial Hygiene	5	0	5			
EHS 212 Industrial Hygiene Sampling	3	2	4			
SPRING SEMESTER, 2013						
EHS 116 Environmental Management	4	0	4			
EHS 211 Environmental Health and Toxicology	5	0	5			
Total Semester Hours Required for Certificate			**18**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Durham Technical Community College

Revised Fall Semester 2011-2012 | Plan of Study | Effective Fall Semester 2013-2014

Environment, Health, And Safety Technology

Occupational Health Management Option (C50160N)

Certificate

Evening and Distance Learning Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters						
FALL SEMESTER, 2013						
EHS 111 Occupational Safety and Engineering	5	0	5			
EHS 218 Occupational Ergonomics	3	0	3			
LEX 285 Workers' Compensation Law	2	0	2			
SPRING SEMESTER, 2014						
BUS 153 Human Resources Management	3	0	3			
EHS 114 OSHA Regulations	4	0	4			
Total Semester Hours Required for Certificate			**17**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Durham Technical Community College

Revised Fall Semester 2011-2012 | Plan of Study | Effective Fall Semester 2013-2014

Environment, Health, And Safety Technology

Occupational Safety Option (C50160D)

Certificate

Evening and Distance Learning Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have advanced approval. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2013								
EHS	111	Occupational Safety and Engineering	5	0	5			
EHS	218	Occupational Ergonomics	3	0	3			
SPRING SEMESTER, 2014								
EHS	113	OSHA Electrical Safety	2	0	2			
EHS	114	OSHA Regulations	4	0	4			
ISC	115	Construction Safety	2	0	2			
Total Semester Hours Required for Certificate					**16**			

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 1997-98 | PLAN OF STUDY ELECTRICAL/ELECTRONICS TECHNOLOGY | Effective Fall Semester 2012-2013

Construction Electrician Option (C35220B)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
								Course Availability
ELC	112	DC/AC Electricity	3	6	5			Fall only-day & evening
ELC	113	Basic Wiring I	2	6	4			Fall-evening; spring-day
ELC	115	Industrial Wiring	2	6	4			Spring-evening only
ELC	118	National Electrical Code	1	2	2			Fall-day; spring-evening

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 1997-98 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ELECTRICAL/ELECTRONICS TECHNOLOGY

Control Electrician Option (C35220C)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
								Course Availability
ELC	112	DC/AC Electricity	3	6	5			Fall only-day & evening
ELC	117	Motors & Controls	2	6	4			Spring only, day & evening
ELC	128	Introduction to PLC	2	3	3			Summer only-evening
ELC	213	Instrumentation	3	2	4			Spring only-Saturday

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

V.A. Students: An approval signature from the V.A. Office is required before registering. Some course may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2010 PLAN OF STUDY Effective Fall Semester 2012-2013

ELECTRICAL/ELECTRONICS TECHNOLOGY (A35220)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								Course Availability
ACA	122	College Transfer Success	1	0	1			First-semester of program
DFT	115	Architectural Drafting	1	2	2			Fall only-day &evening
ELC	112	DC/AC Electricity	3	6	5			Fall only-day & evening
ELC	113	Basic Wiring I	2	6	4			Fall-evening; spring-day
ELC	118	National Electrical Code	1	2	2			Fall-day; spring-evening
MAT	121	Algebra/Trigonometry	2	2	3			Every semester: spring is not in a classroom, but self-paced in CAE
SPRING SEMESTER, 2013								
ELC	115	Industrial Wiring	2	6	4			Spring-evening only
ELC	117	Motors & Controls	2	6	4			Spring only, day & evening
ELC	213	Instrumentation	3	2	4			Spring only-Saturday
ENG	111	Expository Writing*	3	0	3			Every semester
SUMMER TERM, 2013								
CIS	110	Introduction to Computers	2	2	3			Every semester
		Humanities elective	3	0	3			Every semester
ELC	128	Introduction to PLC	2	3	3			Summer only-evening
		Major Elective: One Choice						
		ELC-135 Electrical Machines I 2-2-						Summer only-Saturday
ELC	215	Electrical Maintenance	2	3	3			Summer only- evening
FALL SEMESTER, 2013								
ENG	112	Argument-based Research	3	0	3			Every semester
ELC	228	PLC Applications	2	6	4			Fall only- day
ELN	133	Digital electronic	3	3	4			Fall-evening only
PHY	110	Conceptual Physics	3	0	3			Fall and spring
PHY	110A	Conceptual Physics Lab	0	2	1			Fall and spring
SPRING SEMESTER, 2014								
ELN	229	Industrial Electronics	3	3	4			Spring-evening only
		Social Science elective	3	0	3			Every semester
		Major Elective: **Another Choice**						
		COE 110 World of Work 1-0-1 plus COE 111 Co-op Work Experience 0-10-1						Spring semester

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 68 or 69 (See Major Elective)

Graduation Requirement: Students must complete a Red Cross FIRST AID /Adult CPR course.

Major Elective: Students will take a minimum of 2 or a maximum of 3 hours from one of the following options:

ELC	135	Electrical Machines I	2	2	3
		Or			
COE	110	World of Work†	1	0	1
COE	111	Co-op Work Experience I†	0	10	1

Major Elective: _____

Humanities Electives. Choose one from the following: ART 111, ART 114, ART 115, ART 117, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, POR 211, REL 110, REL 211
Humanities Elective_____

Social Science Electives. Choose one from the following: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225
Social Science Elective_____

*** ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 70, RED 070, RED 080, or RED 090 may be required based on placement test results.**

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2010 PLAN OF STUDY Effective Fall Semester 2012-2013

ELECTRICAL/ELECTRONICS TECHNOLOGY (D35220)

Diploma

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
3 Semesters								
FALL SEMESTER, 2012								Course Availability
DFT	115	Architectural Drafting	1	2	2			Fall only-day &evening
ELC	112	DC/AC Electricity	3	6	5			Fall only-day & evening
ELC	113	Basic Wiring I	2	6	4			Fall-evening; spring-day
ELC	118	National Electrical Code	1	2	2			Fall-day; spring-evening
MAT	121	Algebra/Trigonometry	2	2	3			Every semester: spring is not in a classroom, but self-paced in CAE
SPRING SEMESTER, 2013								
ELC	115	Industrial Wiring	2	6	4			Spring-evening only
ELC	117	Motors & Controls	2	6	4			Spring only, day & evening
ELC	213	Instrumentation	3	2	4			Spring only-Saturday
SUMMER TERM, 2013								
ENG	111	Expository Writing*	3	0	3			Every semester
ELC	128	Introduction to PLC	2	3	3			Summer only-evening
ELC	135	Electrical Machines I	2	2	3			Summer only-Saturday
ELC	215	Electrical Maintenance	2	3	3			Summer only- evening

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA 40

Graduation Requirement: Students must complete a Red Cross FIRST AID /Adult CPR course.

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 70, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2008 PLAN OF STUDY Effective Fall Semester 2012-2013

ELECTRICAL/ELECTRONICS TECHNOLOGY (D35220)

Diploma

Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
6 Semesters						
FALL SEMESTER, 2012						Course Availability
ELC 112 DC/AC Electricity	3	6	5			Fall only-day & evening
ELC 113 Basic Wiring I	2	6	4			Fall-evening; spring-day
MAT 121 Algebra/Trigonometry*	2	2	3			Every semester: spring is not in a classroom, but self-paced in CAE
SPRING SEMESTER, 2013						
ELC 115 Industrial Wiring	2	6	4			Spring-evening only
ELC 117 Motors & Controls	2	6	4			Spring only, day & evening
SUMMER TERM, 2013						
ELC 128 Introduction to PLC	2	3	3			Summer only-evening
ENG 111 Expository Writing*	3	0	3			Every semester
FALL SEMESTER, 2013						
DFT 115 Architectural Drafting	1	2	2			Fall only-day &evening
SPRING SEMESTER, 2014						
ELC 118 National Electrical Code	1	2	2			Fall-day; spring-evening
ELC 135 Electrical Machines I	2	2	3			Summer only-Saturday
SUMMER TERM, 2014						
ELC 213 Instrumentation	3	2	4			Spring only-Saturday
ELC 215 Electrical Maintenance	2	3	3			Summer only- evening

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA 40

Graduation Requirement: Students must complete a Red Cross FIRST AID /Adult CPR course.

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2002-2003 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ELECTRICAL/ELECTRONICS TECHNOLOGY

Maintenance Electrician Option (C35220M)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks / Course Availability
ELC 112 DC/AC Electricity	3	6	5			Fall only-day & evening
ELC 113 Basic Wiring I	2	6	4			Fall-evening; spring-day
ELC 117 Motors & Controls	2	6	4			Spring only, day & evening
ELC 215 Electrical Maintenance	2	3	3			Summer only- evening

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2012-2013 | PLAN OF STUDY | ELECTRONICS ENGINEERING TECHNOLOGY | Effective Fall Semester 2012-2013

Biomedical Equipment Repair (C40200BM)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BIO	163	Basic Anatomy and Physiology *	4	2	5			
BMT	211	Biomedical Measurements	2	2	3			
BMT	212	BMET Instrumentation	3	6	6			
COE	110	World of Work	1	0	1			
COE	111	Co-op Work Experience I	0	10	1			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2000-2001 | PLAN OF STUDY | Effective Fall Semester 2012-2013

ELECTRONICS ENGINEERING TECHNOLOGY

Computer Repair Option (C40200R)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CET	111	Computer Upgrade and Repair I	2	3	3			
CET	211	Computer Upgrade and Repair II	2	3	3			
CIS	110	Introduction to Computers	2	2	3			
NET	125	Networking Basics	1	4	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2009 PLAN OF STUDY Effective Fall Semester 2012-2013

ELECTRONICS ENGINEERING TECHNOLOGY (A40200)

Associate Degree

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
6 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Student Success	1	0	1			
CIS	110	Introduction to Computers	2	2	3			
EGR	131	Intro to Electronics Technology	1	2	2			
ELC	131	DC/AC Circuit Analysis	4	3	5			
MAT	121	Algebra/Trigonometry I*	2	2	3			
	or	MAT 171 & MAT 171A Precalculus Algebra						
SPRING SEMESTER, 2013								
ELN	131	Electronic Devices	3	3	4			
ENG	111	Expository Writing*	3	0	3			
MAT	122	Algebra/Trig I	2	2	3			
	or	MAT 172 & MAT 172A Precalculus Trigonometry						
ELC	127	Software for Technicians	1	3	2			Track I
	or							
BIO	163	Anatomy and Physiology	4	2	5			Track II
SUMMER TERM, 2013								
ELN	132	Linear IC Applications	3	3	4			
ENG	112	Argument-Based Research	3	0	3			
		Humanities Elective			3			
FALL SEMESTER, 2013								
ELN	133	Digital Electronics	3	3	4			
ELN	133A	Digital Electronics Lab	0	3	1			
ELN	234	Communications Systems	3	3	4			Track I
PHY	110	Conceptual Physics	3	0	3			Track I
PHY	110A	Conceptual Physics Lab	0	2	1			Track I
	or							
BMT	211	Biomedical Measurements	2	2	3			Track II
BMT	212	BMET Instrumentation	3	6	6			Track II
SPRING SEMESTER, 2014								
CET	111	Computer Upgrade and Repair I	2	3	3			
ELN	232	Introduction to Microprocessors	3	3	4			
ELN	236	Fiber Optics and Lasers	3	2	4			

PSY	150	General Psychology	3	0	3			

SUMMER TERM, 2014

ELN	275	Troubleshooting	1	3	2			
CET	211	Computer Upgrade and Repair II	2	3	3			Track I
		Choose one of the following:						Track I
NET	125	Networking Basics	1	4	3			Track I
	or							
ELC	128	Introduction to PLC	2	3	3			Track I
COE	110	World of Work	1	0	1			Track II
COE	111	Co-op Experience I	0	10	1			Track II

Required Courses Credit Hours 55
Track I or Track II Minimum Credit Hours 16
TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 71

Please note: Students who elect to take the MAT 171, 171A, and 172, 172 A sequence, which is transferable, will graduate with 72 hours.

A minimum of 16 hours will be taken from either Track I or Track II

Track I General Electronics		**Track II Biomedical Electronics**	
PHY 110 and PHY 110A	4	BIO 163	5
CET 211	3	BMT 211	3
ELC 127	2	BMT 212	6
ELN 234	4	COE 110	1
NET 125 or ELC 138	3	COE 111	1

HUMANITIES ELECTIVE Choose 3 hours credit from the following:

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2009

PLAN OF STUDY
ENTREPRENEURSHIP

Effective Fall Semester 2012-2013

Entrepreneurship (C25490E)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
BUS	110	Introduction to Business*	3	0	3			
MKT	120	Principles of Marketing	3	0	3			
BUS	139	Entrepreneurship I	3	0	3			
BUS	245	Entrepreneurship II	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2009 — PLAN OF STUDY — Effective Fall Semester 2012-2013

EMERGENCY PREPAREDNESS TECHNOLOGY

Business Continuity (C55420B)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Remarks	Grade	Semester	
FIP	236	Emergency Management	3	0	3				
EPT	225	Hazard Analysis and Risk Assessment	3	0	3				
EPT	230	Emergency Planning	3	0	3				
EPT	260	Business Continuity	3	0	3				

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 12

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 PLAN OF STUDY Effective Fall Semester 2012-2013

EMERGENCY PREPAREDNESS TECHNOLOGY (A55420)

Associate Degree
Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Class Hours	Lab Hours	Credit Hours	Grade	Semester	Remarks
FALL SEMESTER, 2012						
ACA 122 College Transfer Success	1	0	1			
ENG 111 Expository Writing*	3	0	3			
EPT 150 Incident Management	3	0	3			
FIP 228 Local Government Finance	3	0	3			
FIP 236 Emergency Management	3	0	3			
FIP 256 Municipal Public Relations	3	0	3			
SPRING SEMESTER, 2013						
ENG 112 Argument-Based Research	3	0	3			
or ENG 113 Literature-Based Research						
EPT 130 Mitigation and Preparedness	3	0	3			
EPT 124 EM Service Law and Ethics	3	0	3			
Major Elective			3			
SUMMER TERM, 2013						
Math Elective			4			
Humanities Elective			3			
Social Science Elective			3			POL 120 is recommended
FALL SEMESTER, 2013						
EPT 120 Sociology of Disaster	3	0	3			
EPT 220 Terrorism and Emergency Management	3	0	3			
EPT 225 Hazard Analysis and Risk Assessment	3	0	3			
EPT 230 Emergency Planning	3	0	3			
Major Elective			3			
SPRING SEMESTER, 2014						
EPT 210 Response and Recovery	3	0	3			
EPT 275 Emergency Operations Center Management	3	0	3			
EPT 260 Business Continuity	3	0	3			
EPT 280 Building Resilient Communities	3	0	3			
Major Elective			3			
TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE			**68**			

MAJOR ELECTIVES. Students will choose 9 semester hours credit from one of following two tracks to fulfill the major electives for the Emergency Preparedness Technology degree: Fire Protection Track and Criminal Justice Track.

Fire Protection Track:

FIP 124	Fire Prevention & Public Ed	3	0	3
FIP 220	Fire Fighting Strategies	3	0	3
FIP 260	Fire Protection Planning	3	0	3

Criminal Justice Track:

CJC 111	Introduction to Criminal Justice	3	0	3
CJC 132	Court Procedure and Evidence	3	0	3
CJC 231	Constitutional Law	3	0	3

MATH ELECTIVE. Choose 4 hours from among the following:
MAT 140 and MAT 140A; MAT 161 and MAT 161A; MAT 171 and MAT 171A

HUMANITIES ELECTIVE. Choose 3 hours from among the following:
Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

SOCIAL SCIENCE ELECTIVE. Choose 3 hours from among the following:
Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable

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DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 — PLAN OF STUDY — Effective Fall Semester 2012-2013

FIRE PROTECTION TECHNOLOGY (A55240)

Associate Degree
Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
ENG	111	Expository Writing*	3	0	3			
FIP	120	Introduction to Fire Protection	3	0	3			
FIP	128	Detection and Investigation	3	0	3			
FIP	132	Building Construction	3	0	3			
FIP	236	Emergency Management	3	0	3			
SPRING SEMESTER, 2013								
ENG	112	Argument-Based Research	3	0	3			
FIP	124	Fire Prevention & Public Education	3	0	3			
FIP	220	Fire Fighting Strategies	3	0	3			
		Math Elective			4			
		Major Elective			3			
SUMMER TERM, 2013								
		Humanities Elective			3			
		Social Science Elective			3			POL 120 recommended
FALL SEMESTER, 2013								
FIP	228	Local Government Finance	3	0	3			
FIP	230	Chemistry of Hazardous Materials I	5	0	5			
FIP	256	Municipal Public Relations	3	0	3			
FIP	276	Managing Fire Services	3	0	3			
SPRING SEMESTER, 2014								
FIP	152	Fire Protection Law	3	0	3			
FIP	232	Hydraulics and Water Distribution	2	2	3			
FIP	240	Fire Service Supervision	3	0	3			
FIP	248	Fire Service Personnel Administration	3	0	3			
FIP	260	Fire Protection Planning	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 67

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

HUMANITIES ELECTIVE. Choose 3 hours from among the following:
Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211

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MAJOR ELECTIVE. Choose 3 hours from among the following:
Major Electives: COE 110, COE 111, EMS 110, FIP 136, FIP 221, FIP 224, FIP 244, FIP 264, FIP 268, FIP 272

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SOCIAL SCIENCE ELECTIVE. Choose 3 hours from among the following
Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

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MATH ELECTIVE. Choose 4 hours from among the following:
MAT 140 and MAT 140 A; MAT 161 and MAT 161A; MAT 171 and MAT 171A

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.
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DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2004-2005 | PLAN OF STUDY | Effective Fall Semester 2012-2013

FIRE PROTECTION TECHNOLOGY

Fire Management Option (C55240M)

Certificate

Day or Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2012								
ENG	111	Expository Writing	3	0	3			
FIP	228	Local Government Finance	3	0	3			
FIP	256	Municipal Public Relations	3	0	3			
FIP	276	Managing Fire Services	3	0	3			
SPRING SEMESTER, 2013								
FIP	240	Fire Service Supervision	3	0	3			
FIP	248	Fire Service Personnel Administration	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2012-2013 | PLAN OF STUDY | Effective Fall Semester 2012-2013

FIRE PROTECTION TECHNOLOGY

Fire Inspection (C55240S)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
2 Semesters								
FALL SEMESTER, 2012								
FIP	120	Introduction to Fire Protection	3	0	3			
FIP	136	Inspection and Codes	3	0	3			
FIP	132	Building Construction	3	0	3			
SPRING SEMESTER, 2013								
FIP	220	Fire Fighting Strategies	3	0	3			
FIP	152	Fire Protection Law	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 PLAN OF STUDY Effective Fall Semester 2012-2013

HEALTH INFORMATION TECHNOLOGY (A45360)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

			Hours						
			Class	Lab	Clin	Credit	Grade	Semester	Remarks
5 Semesters									
FALL SEMESTER, 2012									
ACA	122	College Transfer Success	1	0	0	1			
BIO	168	Anatomy and Physiology I	3	3	0	4			
CIS	110	Introduction to Computers	2	2	0	3			
ENG	111	Expository Writing*	3	0	0	3			
HIT	110	Fundamentals of HIT	3	0	0	3			Online Delivery
MED	121	Medical Terminology I	3	0	0	3			
HIT	112	Health Law and Ethics	3	0	0	3			
SPRING SEMESTER, 2013									
BIO	169	Anatomy and Physiology II	3	3	0	4			
ENG	112	Argument-Based Research	3	0	0	3			
	or								
	113	Literature-Based Research							
HIT	114	Health Data Sys/Standards	2	3	0	3			Online Delivery
MED	122	Medical Terminology II	3	0	0	3			
MAT	140	Survey of Mathematics	3	0	0	3			
MAT	140A	Survey of Mathematics Lab	0	2	0	1			
SUMMER TERM, 2013									
HIT	220	Health Informatics & EHRs	1	2	0	2			Online Delivery
HIT	216	Quality Management	1	3	0	2			
		Social Science Elective				3			
FALL SEMESTER, 2013									
HIT	211	ICD Coding	2	6	0	4			Online Delivery and Hybrid Delivery
HIT	221	Lifecycle of EMR	2	2	0	3			Online Delivery
		Humanities Elective				3			
HIT	226	Principles of Disease	3	0	0	3			Online Delivery
HIT	210	Healthcare Statistics	2	2	0	3			Online Delivery
SPRING SEMESTER, 2014									
HIT	215	Reimbursement Methodology	1	2	0	2			Online Delivery
HIT	280	Professional Issues	2	0	0	2			Online Delivery
HIT	214	CPT/Other Coding Systems	1	3	0	2			**Online Delivery**
HIT	218	Management Principles in HIT	3	0	0	3			**Online Delivery**

HIT	124	Prof/Practice Exp II	0	0	3	1			Day Delivery
HIT	222	Prof Practice Exp III	0	0	6	2			Day Delivery

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 72

Note: Students must pass all Health Information Technologies courses (HIT) courses with a C (70% or better) to graduate from the program.

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Day Delivery Only—Professional Practice Experience courses are offered only during the day.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, FRE 211, GER 211, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, ITA 211, MUS 110, MUS 113, PHI 215, PHI 240, POR 211, REL 110, REL 211, SPA 211, SPA 212

HUMANITIES ELECTIVE:

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Social Science Electives: Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2010 PLAN OF STUDY Effective Fall Semester 2012-2013

HEALTH INFORMATION TECHNOLOGY (D45360)

Diploma

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters									
FALL SEMESTER, 2012									
BIO	168	Anatomy and Physiology I	3	3	0	4			
ENG	111	Expository Writing*	3	0	0	3			
CIS	110	Intro to Computers	2	2	0	3			
HIT	110	Fundamental of HIM	3	0	0	3			Online Delivery
MED	121	Medical Terminology I	3	0	0	3			
SPRING SEMESTER, 2013									
BIO	169	Anatomy and Physiology II	3	3	0	4			
HIT	112	Health Law & Ethics	3	0	0	3			Online Delivery
HIT	114	Health Data Sys/Standards	2	3	0	3			Online Delivery
MED	122	Medical Terminology II	3	0	0	3			
SUMMER TERM, 2013									
HIT	220	Health Informatics & EHRs	1	2	0	2			Online Delivery
HIT	226	Principles of Disease	3	0	0	3			Online Delivery
HIT	211	ICD Coding	2	6	0	4			Online Delivery
FALL SEMESTER, 2013									
HIT	124	Prof/Practice Exp II	0	0	3	1			Day Delivery
HIT	214	CPT/Other Coding Systems	1	3	0	2			Online Delivery
HIT	215	Reimbursement Methodology	1	2	0	2			Online Delivery
HIT	222	Prof Practice Exp III	0	0	6	2			Day Delivery

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA 45

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Day Delivery Only—Professional Practice Experience courses are offered only during the day.

Note: Students must pass all Health Information Technologies courses (HIT) courses with a C (70% or better) to graduate from the program.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Information Systems Security (A25270)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

			Hours				Semester Offered		
Course Title			Class	Lab	Credit	Grade	Fall 2012	Spring 13	Summer13
General Education Course					20 Hours				
ACA	122	College Transfer Success	1	0	1		x	x	x
ENG	111	Expository Writing*	3	0	3		x	x	x
ENG	112	Argument-Based Research	3	0	3		x	x	x
MAT	140	Survey of Mathematics*	3	0	3		x	x	x
MAT	140A	Survey of Mathematics Lab	0	2	1		x	x	x
COM	231	Public Speaking	3	0	3		x	x	
		Social Science Elective			3		x	x	x
		Humanities Elective			3		x	x	
Information Systems Security - Core Courses - required					50 Hours				
BUS	110	Introduction to Business	3	0	3		x	x	x
CIS	110	Introduction to Computers	2	2	3		x	x	x
CIS	115	Programming/Logic Concepts	2	3	3		x	x	x
DBA	110	Database Concepts	2	3	3		x	x	x
NET	125	Networking Basics	1	4	3		x	x	x
NET	126	Routing Basics	1	4	3		x	x	
NOS	110	Operating System Concepts	2	3	3		x	x	x
NOS	120	Linux/UNIX Single User	2	2	3		x	x	
NOS	130	Windows Single User	2	2	3		x	x	
NOS	230	Windows Admin I	2	2	3		x	x	
SEC	110	Security Concepts	3	0	3		x	x	x
SEC	150	Secure Communications	2	2	3			x	
SEC	160	Secure Admin I	2	2	3			x	
SEC	210	Intrusion Detection	2	2	3		x		
SEC	220	Defense-in-Depth	2	2	3		x		
SEC	289	Security Capstone Project	1	4	3			x	
COE	110	World of Work	1	0	1		x	x	
COE	111	Co-op Work Experience I	0	10	1		x	x	
Information Systems Security – choose TWO Major Electives					6 Hours				
CTS	120	Hardware/Software Support	2	3	3		x	x	x
CTS	220	Adv Hardware/Software Support	2	3	3		x	x	x
CTS	155	Tech Support Functions	2	2	3		x		
CTS	255	Adv Tech Support Functions	2	2	3			x	
NOS	220	Linux Admin I	2	2	3			x	
NET	225	Routing & Switching I	1	4	3		x	x	
NET	226	Routing & Switching II	1	4	3		x	x	

(Over)

Total Semester Hours Required for A.A.S. Degree 76

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281,SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Information Systems Security (C25270S)

Secure Networking Option

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
NET	125	Networking Basics	1	4	3			
SEC	110	Security Concepts	3	0	3			
SEC	150	Secure Communications	2	2	3			
SEC	160	Secure Admin I	2	2	3			
SEC	210	Intrusion Detection	2	2	3			
SEC	220	Defense-in-Depth	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 — PLAN OF STUDY — Effective Fall Semester 2012-2013

INDUSTRIAL SYSTEMS TECHNOLOGY (A50240)

Associate Degree

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
6 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
ELC	112	DC/AC Electricity	3	6	5			
ENG	111	Expository Writing	3	0	3			
HYD	110	Hydraulics/Pneumatics I	2	3	3			
MAT	121	Algebra/Trigonometry I*	2	2	3			
SPRING SEMESTER, 2013								
ELC	117	Motors and Controls	2	6	4			
ENG	112	Argument-Based Research	3	0	3			
MNT	240	Industrial Equip Troubleshooting	1	3	2			
PHY	110	Conceptual Physics	3	0	3			
PHY	110A	Conceptual Physics Lab	0	2	1			
		Humanities Elective			3			
SUMMER TERM, 2013								
CIS	110	Introduction to Computers	2	2	3			
ELC	215	Electrical Maintenance	2	3	3			
PLU	111	Intro to Basic Plumbing	1	3	2			
ISC	112	Industrial Safety	2	0	2			
		Social Science Elective			3			
FALL SEMESTER, 2013								
AHR	110	Intro to Refrigeration	2	6	5			
BPR	111	Blueprint Reading	1	2	2			
DFT	115	Architectural Drafting	1	2	2			
WLD	112	Basic Welding Processes	1	3	2			
MEC	111	Machine Processes I	1	4	3			
SPRING SEMESTER, 2014								
AHR	112	Heating Technology	2	4	4			
MNT	110	Intro to Maintenance Procedures	1	3	2			
MNT	230	Pumps and Piping Systems	1	3	2			
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4			
COE	110	World of Work	1	0	1			
COE	111	Co-op Work Experience I	0	10	1			
TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE					**72**			

over

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ ____ _____ ____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225.

SOCIAL SCIENCE ELECTIVE

_____ _____ _____ ____ _____ ____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2005-2006

PLAN OF STUDY

INDUSTRIAL SYSTEMS TECHNOLOGY

Effective Fall Semester 2012-2013

HVAC Option (C50240C)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
MNT	110	Intro to Maintenance Procedures	1	3	2			
ISC	112	Industrial Safety	2	0	2			
AHR	110	Introduction to Refrigeration	2	6	5			
AHR	112	Heating Technology	2	4	4			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2010

PLAN OF STUDY

INDUSTRIAL SYSTEMS TECHNOLOGY

Effective Fall Semester 2012-2013

MAINTENANCE (C50240M)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
MNT	110	Intro to Maintenance Procedures	1	3	2			
MNT	230	Pumps and Piping Systems	1	3	2			
ISC	112	Industrial Safety	2	0	2			
BPR	111	Blueprint Reading	1	2	2			
MEC	111	Machine Processes I	1	4	3			
PLU	111	Intro to Basic Plumbing	1	3	2			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 13

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Summer Term 2007 | PLAN OF STUDY | Effective Summer Term 2012-2013

MEDICAL ASSISTING (D45400)

Diploma

Day Program

Students admitted to the program in the summer.

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
4 Semesters									
SUMMER TERM, 2012									
ACA	122	CollegeTransfer Success	1	0	0	1			
ENG	111	Expository Writing*	3	0	0	3			
CIS	110	Introduction to Computers	2	2	0	3			
FALL SEMESTER, 2012									
BIO	163	Basic Anatomy and Physiology*	4	2	0	5			
MED	110	Orientation to Medical Assisting	1	0	0	1			
MED	114	Prof Interac in Health Care	1	0	0	1			
MED	118	Medical Law and Ethics	2	0	0	2			
MED	121	Medical Terminology I	3	0	0	3			
MED	130	Admin Office Proc I	1	2	0	2			
MAT	110	Mathematical Measurement*	2	2	0	3			
SPRING SEMESTER, 2013									
MED	122	Medical Terminology II	3	0	0	3			
MED	131	Admin Office Proc II	1	2	0	2			
MED	140	Exam Room Procedures I	3	4	0	5			
MED	150	Laboratory Procedures I	3	4	0	5			
SUMMER TERM, 2013									
MED	260	MED Clinical Externship	0	0	15	5			
MED	262	Clinical Perspectives	1	0	0	1			

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA **45**

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2010 — PLAN OF STUDY — Effective Fall Semester 2012-2013

MEDICAL OFFICE ADMINISTRATION (A25310)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
BUS	110	Introduction to Business	3	0	3			
ENG	111	Expository Writing*	3	0	3			
MAT	115	Mathematical Models*	2	2	3			
MED	121	Medical Terminology I	3	0	3			
OST	130	Comprehensive Keyboarding	2	2	3			**hybrid**
OST	184	Records Management	2	2	3			**hybrid**
SPRING SEMESTER, 2013								
ACC	115	College Accounting	3	2	4			
CIS	110	Introduction to Computers	2	2	3			
ENG	112	Argument-Based Research	3	0	3			
MED	122	Medical Terminology II	3	0	3			
OST	**149**	**Medical Legal Issues**	**3**	**0**	**3**			
SUMMER TERM, 2013								
COM	231	Public Speaking	3	0	3			
		Social Science Elective			3			
		Humanities Elective			3			
FALL SEMESTER, 2013								
OST	164	Text Editing Applications	3	0	3			**hybrid**
OST	134	Text Entry and Formatting	2	2	3			**hybrid**
OST	136	Word Processing	2	2	3			**online**
OST	241	Medical Office Transcription I	1	2	2			**online**
OST	243	Medical Office Simulation	2	2	3			**hybrid**
OST	**148**	**Medical Coding, Billing & Insurance**	**3**	**0**	**3**			**hybrid**

(Over)

SPRING SEMESTER, 2014

COE	110	World of Work	1	0	1			
COE	112	Co-op Work Experience I	0	20	2			
OST	138	Advanced Software Appl	2	2	3			**hybrid**
OST	140	Internet Comm/Research	1	2	2			**online**
OST	242	Medical Office Transcription II	1	2	2			online
OST	**289**	**Admin Office Management**	**2**	**2**	**3**			**online**

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 74

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, FRE 211, GER 211, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, ITA 211, MUS 110, PHI 215, PHI 240, POR 211, REL 110, REL 211, SPA 211, SPA 212

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Networking Technology (C25340A)

A+

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
SEC	110	Security Concepts	3	0	3			
NET	110	Networking Concepts	2	2	3			
CTS	120	Hardware/Software Support	2	3	3			
CTS	220	Adv Hard/Software Support	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Networking Technology (C25340C)

CCNA Option

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
SEC	110	Security Concepts	3	0	3			
NET	125	Networking Basics	1	4	3			
NET	126	Routing Basics	1	4	3			
NET	225	Routing and Switching I	1	4	3			
NET	226	Routing and Switching II	1	4	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Networking Technology (A25340)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title		Class	Hours Lab	Hours Credit		Grade	Semester Offered Fall 2012 Day	Fall 2012 Evening	Spring 13 Day	Spring 13 Evening	Summer13 Day	Summer13 Evening
General Education Course					20 Hours							
ACA	122	College Transfer Success	1	0	1		x	x	x	x	x	x
ENG	111	Expository Writing*	3	0	3		x	x	x	x	x	x
ENG	112	Argument-Based Research	3	0	3		x	x	x	x	x	x
MAT	140	Survey of Mathematics*	3	0	3		x	x	x	x	x	x
MAT	140A	Survey of Mathematics Lab	0	2	1		x	x	x	x	x	x
COM	231	Public Speaking	3	0	3		x	x	x	x	x	x
		Social Science Elective			3		x	x	x	x	x	x
		Humanities Elective			3		x	x	x	x	x	x
Networking Technology - Core Courses - required					50 Hours							
BUS	110	Introduction to Business	3	0	3		x	x	x	x	x	x
CIS	110	Introduction to Computers	2	2	3		x	x	x	x	x	x
CIS	115	Programming/Logic Concepts	2	3	3		x	x	x	x	x	
CTS	120	Hardware/Software Support	2	3	3		x	x	x	x	X	
DBA	110	Database Concepts	2	3	3		x	x	x	x	X	
NET	125	Networking Basics	1	4	3		x	x	x	x		x
NET	126	Routing Basics	1	4	3		x	x	x	x		
NET	225	Routing & Switching I	1	4	3		x			x		
NET	226	Routing & Switching II	1	4	3		x			x		
NET	289	Networking Project	1	4	3				x			
NOS	110	Operating System Concepts	2	3	3		x	x	x	x	X	
NOS	120	Linux/UNIX Single User	2	2	3		x			x		
NOS	220	Linux/UNIX Admin I	2	2	3		x			x		
NOS	130	Windows Single User	2	2	3		x			x		
NOS	230	Windows Admin I	2	2	3		x			x		
SEC	110	Security Concepts	3	0	3		x	x	x	x	X	
COE	110	World of Work	1	0	1		x		x			
COE	111	Co-op Work Experience I	0	10	1		x		x			
Networking Technology – choose one Major Elective					3 Hours							
SEC	150	Secure Communications	2	2	3					x		
SEC	160	Secure Admin I	2	2	3					x		
CTS	155	Tech Support Functions	2	2	3		x					
CTS	220	Adv Hardware/Software Support	2	3	3		x		x		x	
CTS	255	Adv Tech Support Functions	2	2	3				x			

Shaded Columns represent evening courses

Total Semester Hours Required for A.A.S. Degree **73**

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281,SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Networking Technology (C25340C)

CCNA Option

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
SEC	110	Security Concepts	3	0	3			
NET	125	Networking Basics	1	4	3			
NET	126	Routing Basics	1	4	3			
NET	225	Routing and Switching I	1	4	3			
NET	226	Routing and Switching II	1	4	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Networking Technology (C25340T)

Windows Troubleshooting Option

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CTS	120	Hardware/Software Support	2	3	3			
CTS	220	Adv Hardware/Software Support	2	3	3			
CTS	155	Tech Support Functions	2	2	3			
CTS	255	Adv Tech Support Functions	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2010 — PLAN OF STUDY — Effective Fall Semester 2012-2013

OFFICE ADMINISTRATION (A25370)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters						
FALL SEMESTER, 2012						
ACA 122 College Transfer Success	1	0	1			
CIS 110 Introduction to Computers	2	2	3			
ENG 111 Expository Writing*	3	0	3			
MAT 115 Mathematical Models*	2	2	3			
OST 130 Comprehensive Keyboarding	2	2	3			**hybrid**
OST 184 Records Management	2	2	3			**hybrid**
SPRING SEMESTER, 2013						
ACC 115 College Accounting	3	2	4			
BUS 110 Introduction to Business	3	0	3			
CTS 130 Spreadsheet	2	2	3			
ENG 112 Argument-Based Research	3	0	3			
Major Elective			3			
SUMMER TERM, 2013						
COM 231 Public Speaking	3	0	3			
Humanities Elective			3			
Social Science Elective			3			
FALL SEMESTER, 2013						
OST 134 Text Entry & Formatting	2	2	3			hybrid
OST 136 Word Processing	2	2	3			**online**
OST 164 Text Editing Applications	3	0	3			**hybrid**
OST 223 Administrative Office Transcription I	2	2	3			**online**
Major Elective			3			
SPRING SEMESTER, 2014						
COE 110 World of Work	1	0	1			
COE 112 Co-op Work Experience I	0	20	2			
OST 138 Advanced Software Applications	2	2	3			**hybrid**
OST 224 Administrative OfficeTranscription II	1	2	2			**online**
OST 140 Internet Comm /Research	1	2	2			online
OST 289 Admin Office Management	2	2	3			**online**

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 69

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, MAT 080, RED 070, RED 080, or RED 090 may be required based on placement test results.

(over)

MAJOR ELECTIVES: Choose 6 hours from the following courses:
DBA 110, CTS 230, OST 236, WEB 110

Humanities Electives: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, PHI 215, PHI 240, REL 110, REL 211,

HUMANITIES ELECTIVE:

_____

Social Science Electives: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, HIS 236, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer Semester 2008 | PLAN OF STUDY OFFICE ADMINISTRATION | Effective Fall Semester 2012-2013

WORD PROCESSING OPTION (C25370)

Certificate

Day and Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
OST	134	Text Entry and Formatting	2	2	3			
OST	136	Word Processing	2	2	3			
OST	164	Text Editing Applications	3	0	3			
OST	289	Admin Office Management	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2007 | PLAN OF STUDY | Effective Fall Semester 2012-2013

OPTICIANRY (A45560)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clin	Credit	Grade	Semester	Remarks
5 Semesters							
FALL SEMESTER, 2012							
ACA 122 College Transfer Success	1	0	0	1			
CIS 110 Introduction to Computers	2	2	0	3			
ENG 111 Expository Writing*	3	0	0	3			
MAT 121 Algebra and Trigonometry I*	2	2	0	3			
OPH 131 Optical Dispensing I	3	0	0	3			
OPH 141 Optical Theory I	3	0	0	3			
SPRING SEMESTER, 2013							
OPH 111 Ophthalmic Lab I	2	3	0	3			
OPH 121 Anatomy & Physiology-Eye	3	0	0	3			
OPH 132 Optical Dispensing II	3	2	0	4			
OPH 142 Optical Theory II	3	0	0	3			
Science Elective				3			
SUMMER TERM, 2013							
ACC 120 Principles of Financial Accounting	3	2	0	4			
ENG 112 Argument-Based Research	3	0	0	3			
PSY 150 General Psychology	3	0	0	3			
FALL SEMESTER, 2013							
OPH 112 Ophthalmic Lab II	2	3	0	3			
OPH 222 Optical Business Management	3	0	0	3			
OPH 233 Advanced Optical Procedures	3	2	0	4			
OPH 251 Optical Internship I	0	0	3	1			
OPH 261 Contact Lenses I	3	3	0	4			
SPRING SEMESTER, 2014							
OPH 215 Laboratory Proficiency	0	6	0	2			
OPH 243 Technical Proficiency	3	0	0	3			
OPH 262 Contact Lenses II	3	3	0	4			
OPH 282 Optical Externship I	0	6	0	2			
Humanities Elective				3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 71

(over)

*EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives. Choose 3 hours from the following:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Science Electives: BIO 111, BIO 160, BIO 161, CHM 131, CHM 131A, PHY 121, PHY 125

SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2007 | PLAN OF STUDY | Effective Fall Semester 2012-2013

OPTICIANRY (A45560N)

Associate Degree

Internet Option Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clin	Credit	Grade	Semester	Remarks
5 Semesters							
FALL SEMESTER, 2012							
ACA 122 College Transfer Success	1	0	0	1			
CIS 110 Introduction to Computers	2	2	0	3			
ENG 111 Expository Writing*	3	0	0	3			
MAT 121 Algebra and Trigonometry I*	2	2	0	3			
OPH 131 Optical Dispensing I	3	0	0	3			
OPH 141 Optical Theory I	3	0	0	3			
SPRING SEMESTER, 2013							
OPH 111 Ophthalmic Lab I	2	3	0	3			
OPH 121 Anatomy & Physiology-Eye	3	0	0	3			
OPH 132 Optical Dispensing II	3	2	0	4			
OPH 142 Optical Theory II	3	0	0	3			
Science Elective				3			
SUMMER TERM, 2013							
ACC 120 Principles of Financial Accounting	3	2	0	4			
ENG 112 Argument-Based Research	3	0	0	3			
PSY 150 General Psychology	3	0	0	3			
FALL SEMESTER, 2013							
OPH 112 Ophthalmic Lab II	2	3	0	3			
OPH 222 Optical Business Management	3	0	0	3			
OPH 233 Advanced Optical Procedures	3	2	0	4			
OPH 251 Optical Internship I	0	0	3	1			
OPH 261 Contact Lenses I	3	3	0	4			
SPRING SEMESTER, 2014							
OPH 215 Laboratory Proficiency	0	6	0	2			
OPH 243 Technical Proficiency	3	0	0	3			
OPH 262 Contact Lenses II	3	3	0	4			
OPH 282 Optical Externship I	0	6	0	2			
Humanities Elective				3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 71

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

Humanities Electives. Choose a minimum of 3 hours from the following:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Science Electives. Choose a minimum of 3 hours from the following:
BIO 111, BIO 160, BIO 161, CHM 131 and CHM 131A, PHY 121, PHY 125

SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Summer 2006 | PLAN OF STUDY | Effective Summer Semester 2012-2013

OPTICAL APPRENTICE (C45520)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
OPH	101	Math for Opticians*	3	0	3			
OPH	131	Optical Dispensing I	3	0	3			
OPH	141	Optical Theory I	3	0	3			
OPH	121	Anatomy & Physiology-Eye	3	0	3			
OPH	102	Ophthalmic Lab Concepts	2	0	2			
OPH	260	Basic Contact Lens Concepts	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 17

* EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Term 2007 — PLAN OF STUDY — Effective Summer Term 2012-2013

OCCUPATIONAL THERAPY ASSISTANT (A45500)

Associate Degree
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
6 Semesters									
SUMMER TERM, 2012									
ACA	122	College Transfer Success	1	0	0	1			
BIO	168	Anatomy & Physiology I	3	3	0	4			
ENG	111	Expository Writing*	3	0	0	3			
OTA	110	Fundamentals of OT	2	3	0	3			
PSY	150	General Psychology	3	0	0	3			
FALL SEMESTER, 2012									
BIO	169	Anatomy & Physiology II	3	3	0	4			
ENG	112	Argument-Based Research	3	0	0	3			
OTA	120	OT Media I	1	3	0	2			
OTA	140	Professional Skills I	0	3	0	1			
PSY	281	Abnormal Psychology	3	0	0	3			
SPRING SEMESTER, 2013									
OTA	130	Assessment Skills	2	3	0	3			
OTA	161	Fieldwork I - Placement 1	0	0	3	1			
OTA	162	Fieldwork I - Placement 2	0	0	3	1			
OTA	170	Physical Dysfunction	2	3	0	3			
OTA	180	Psychosocial Dysfunction	2	3	0	3			
SUMMER TERM, 2013									
OTA	164	Fieldwork I - Placement 4	0	0	3	1			
OTA	250	Life Span Skills II	2	3	0	3			
OTA	240	Professional Skills II	0	3	0	1			
PSY	241	Developmental Psychology	3	0	0	3			
FALL SEMESTER, 2013									
OTA	150	Life Span Skills I	2	3	0	3			
OTA	163	Fieldwork I - Placement 3	0	0	3	1			
OTA	220	OT Media II	1	6	0	3			
OTA	245	Professional Skills III	0	3	0	1			
		Humanities Elective				3			

(Over)

SPRING SEMESTER, 2013

OTA	260	Fieldwork II - Placement 1**	0	0	18	6			
OTA	261	Fieldwork II - Placement 2**	0	0	18	6			
OTA	280	Professional Transition	0	2	0	1			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 70

Humanities Elective. Choose 3 hours from the following:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVES:

_____ _____ _____ ____ ____ ____ _____

*EFL O50, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

***OTA 260 and OTA 261 must be completed within 18 months of other coursework.

Note: Students must demonstrate computer competency by a satisfactory score on the computer competency test, by credit by exam, by transfer credit, or by completing CIS 110 by the end of the second semester of the program.

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2010-2011 | PLAN OF STUDY PARALEGAL TECHNOLOGY | Effective Fall Semester 2012-2013

Bankruptcy Law (C25380D)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course		Title	Hours Class	Lab	Credit	Grade	Semester	Remarks
LEX	260	Bankruptcy & Collections	3	0	3			
LEX	220	Corporate Law	2	0	2			
LEX	210	Real Property I	3	0	3			
LEX	211	Real Property II	1	4	3			
LEX	140	Civil Litigation I	3	0	3			
LEX	141	Civil Litigation II	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 17

*EFL 062, EFL 063, ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Please Note: Only Paralegal Technology A.A.S. degree graduates are eligible to sit for the Paralegal Certification Exam offered by the NC State Bar.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

PARALEGAL TECHNOLOGY

Business Law Option (C25380B)

Certificate

This is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
LEX	110	Introduction to Paralegal Study	2	0	2			
LEX	150	Commercial Law I	2	2	3			
LEX	210	Real Property I	3	0	3			
LEX	211	Real Property II	1	4	3			
LEX	220	Corporate Law	2	0	2			
LEX	260	Bankruptcy & Collections	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 16

* ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Please note: Only Paralegal Technology A.A.S. degree graduates are eligible to sit for the Paralegal Certification Exam offered by the NC State Bar.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2002-2003

PLAN OF STUDY

PARALEGAL TECHNOLOGY

Effective Fall Semester 2012-2013

Civil Litigation Option (C25380C)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
LEX	130	Civil Injuries	3	0	3			
LEX	140	Civil Litigation I	3	0	3			
LEX	141	Civil Litigation II	2	2	3			
LEX	150	Commercial Law I	2	2	3			
LEX	210	Real Property I	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

* ENG 070, ENG 080, ENG 090, ENG 090A, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

Please Note: Only Paralegal Technology A.A.S. degree graduates are eligible to sit for the Paralegal Certification Exam offered by the NC State Bar.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2012

PLAN OF STUDY

PARALEGAL TECHNOLOGY (A25380)

Effective Fall Semester 2012-2013

Associate Degree

Day & Evening Program

Paralegal Technology A.A.S. degree graduates are eligible to sit for the Paralegal Certification Exam offered by the NC State Bar.

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
CIS	110	Introduction to Computers	2	2	3			
ENG	111	Expository Writing*	3	0	3			
LEX	110	Introduction to Paralegal Study	2	0	2			
LEX	130	Civil Injuries	3	0	3			
LEX	140	Civil Litigation I	3	0	3			
LEX	160	Criminal Law & Procedure	2	2	3			
LEX	210	Real Property I	3	0	3			
SPRING SEMESTER, 2013								
ENG	112	Argument-Based Research	3	0	3			
LEX	141	Civil Litigation II	2	2	3			
LEX	150	Commercial Law I	2	2	3			
LEX	211	Real Property II	1	4	3			
LEX	220	Corporate Law	2	0	2			
SUMMER TERM, 2013								
LEX	240	Family Law	3	0	3			
MAT	115	Mathematical Models*	2	2	3			
FALL SEMESTER, 2013								
ACC	115	College Accounting	3	2	4			
COM	231	Public Speaking	3	0	3			
LEX	120	Legal Research/Writing I	2	2	3			
LEX	250	Wills, Estates, & Trusts	2	2	3			
LEX	285	Workers' Compensation Law	2	0	2			
		Humanities Elective			3			
SPRING SEMESTER, 2014								
LEX	121	Legal Research/Writing II	2	2	3			
LEX	180	Case Analysis & Reasoning	1	2	2			
LEX	260	Bankruptcy & Collections	3	0	3			
LEX	287	CLA Review Seminar	2	0	2			

(Over)

SPRING SEMESTER, 2014continued

Major Elective	2			
Social Sciences Elective	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 74

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement tests results.

Major Elective: Choose 2 hours from the following courses:
COE 110 and COE 111, LEX 281, LEX 286

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Humanities Electives. Choose 3 hours from the following courses:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____

Social Science Electives. Choose 3 hours from the following courses:
ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225

SOCIAL SCIENCE ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Spring Semester 2012-2013

PHARMACY TECHNOLOGY (A45580)

Associate Degree
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
6 Semesters							
SPRING SEMESTER 2012 or SUMMER TERM 2012							
ACA 122 College Transfer Success	1	0	0	1			
BIO 163 Basic Anatomy & Physiology	4	2	0	5			
PHM 110 Introduction to Pharmacy	3	0	0	3			
PHM 111 Pharmacy Practice I	3	3	0	4			
PHM 115 Pharmacy Calculations*	3	0	0	3			
FALL SEMESTER, 2012							
ENG 111 Expository Writing*	3	0	0	3			
PHM 118 Sterile Products	3	3	0	4			
PHM 120 Pharmacology I	3	0	0	3			BIO 163 is a Prerequisite for PHM 120
PHM 165 Pharmacy Professional Practice	2	0	0	2			
SPRING SEMESTER, 2013							
PHM 125 Pharmacology II	3	0	0	3			
PHM 140 Trends in Pharmacy	2	0	0	2			
COM 120 Intro to Interpersonal Communication	3	0	0	3			
PHM 138 Pharmacy Clinical	0	0	24	8			
SUMMER TERM 2013							
ENG 112 Argument Based Research	3	0	0	3			
BUS 137 Principles of Management	3	0	0	3			
FALL SEMESTER 2013							
PHM 150 Hospital Pharmacy	3	3	0	4			
PHM 155 Community Pharmacy	2	2	0	3			
PHM 160 Dosage Forms	3	0	0	3			
Humanities Elective				3			
SPRING SEMESTER 2014							
PSY 150 General Psychology	3	0	0	3			
PHM 132 Pharmacy Clinical	0	0	6	2			
PHM 134 Pharmacy Clinical	0	0	12	4			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 72

*EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

To graduate from the program, students must demonstrate computer competency. That competency may be demonstrated by a satisfactory score on the computer competency placement test, by credit by exam, or by completing CIS110 or CIS 113)

Humanities Electives. Choose 3 hours from the following courses:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, PHI 215, PHI 240, REL 110, REL 211

HUMANITIES ELECTIVE:

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Spring Semester 2012-2013

PHARMACY TECHNOLOGY (D45580)

Diploma

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title	Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
3 Semesters							
SPRING SEMESTER 2012 or SUMMER TERM 2012							
ACA 122 College Transfer Success	1	0	0	1			
BIO 163 Basic Anatomy & Physiology	4	2	0	5			
PHM 110 Introduction to Pharmacy	3	0	0	3			
PHM 111 Pharmacy Practice I	3	3	0	4			
PHM 115 Pharmacy Calculations*	3	0	0	3			
FALL SEMESTER, 2012							
ENG 111 Expository Writing*	3	0	0	3			
PHM 118 Sterile Products	3	3	0	4			
PHM 120 Pharmacology I	3	0	0	3			
PHM 165 Pharmacy Professional Practice	2	0	0	2			
SPRING SEMESTER, 2013							
PHM 125 Pharmacology II	3	0	0	3			
PHM 140 Trends in Pharmacy	2	0	0	2			
COM 120 Intro to Interpersonal Communication	3	0	0	3			
PHM 138 Pharmacy Clinical	0	0	24	8			

TOTAL SEMSTER HOURS REQUIRED FOR DIPLOMA 44

*EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070M, RED 070, RED 080, OR RED 090 may be required based on placement test results.

To graduate from the program, students must demonstrate computer competency. That competency may be demonstrated by a satisfactory score on the computer competency placement test, by credit by exam, or by completing CIS110 or CIS 113)

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2010 | PLAN OF STUDY | Effective Fall Term 2012-2013

PRACTICAL NURSING (D45660)

Diploma

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
Students on this plan of study will be chosen via the competitive admissions process.									
FALL SEMESTER, 2012									
BIO	163	Basic Anatomy & Physiology	4	2	0	5			
PSY	110	Life Span Development	3	0	0	3			
NUR	101	Practical Nursing I	7	6	6	11			
SPRING SEMESTER, 2013									
NUR	102	Practical Nursing II	8	0	12	12			
ENG	111	Expository Writing	3	0	0	3			
FALL SEMESTER, 2013									
NUR	103	Practical Nursing III	6	0	12	10			
TOTAL SEMSTER HOURS REQUIRED FOR DIPLOMA						**44**			

Note: Students must pass all Nursing courses and BIO 163 with a B (80% or better).

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*EFL O50, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2011 | PLAN OF STUDY | Effective Fall Semester 2012-2013

RESPIRATORY THERAPY (A45720)

Associate Degree
Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation.

Course Title			Hours Class	Lab	Clinical	Credit	Grade	Semester	Remarks
5 Semesters									
FALL SEMESTER, 2012									
ACA	122	College Transfer Success	1	0	0	1			
BIO	168	Anatomy & Physiology I*	3	3	0	4			
RCP	110	Introduction to Respiratory Care	3	3	0	4			
RCP	113	RCP Pharmacology	2	0	0	2			
RCP	114	C-P Anatomy & Physiology	3	0	0	3			
RCP	123	Special Practice Lab	0	3	0	1			
SPRING SEMESTER, 2013									
BIO	169	Anatomy & Physiology II	3	3	0	4			
ENG	111	Expository Writing*	3	0	0	3			
RCP	111	Therapeutics/Diagnostics	4	3	0	5			
RCP	145	RCP Clinical Practice II	0	0	15	5			
SUMMER TERM, 2013									
RCP	112	Patient Management	3	3	0	4			
RCP	115	C-P Pathophysiology	2	0	0	2			
RCP	153	RCP Clinical Practice III	0	0	9	3			
RCP	223	Special Practice Lab	0	3	0	1			
FALL SEMESTER, 2013									
ENG	112	Argument-based Research	3	0	0	3			
PSY	150	General Psychology	3	0	0	3			
RCP	210	Critical Care Concepts	3	3	0	4			
RCP	214	Neonatal/Pediatric Respiratory Care	1	3	0	2			
RCP	235	RCP Clinical Practice IV	0	0	15	5			
SPRING SEMESTER, 2013									
		Humanities Elective				3			
RCP	211	Advanced Monitoring Procedures	3	3	0	4			
RCP	215	Career Prep-Advanced Level	0	3	0	1			
RCP	245	RCP Clinical Practice V	0	0	15	5			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 72

over

*EFL O50, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

Humanities Electives:. Choose 3 hours from the following courses:
ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122, HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

_____ _____ _____ _____ _____ _____ _____

Note: Students must demonstrate computer competency by a satisfactory score on the computer competency test, by credit by exam, by transfer credit, or by completing CIS 110.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Spring Semester 2003 | PLAN OF STUDY | Effective Fall Semester 2012-2013

COMMUNITY SPANISH INTERPRETER

Community Spanish Facilitator Option* (C55370F)

Certificate

Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, any required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
SPA	221	Spanish Conversation**	3	0	3		Fall	
SPA	231	Reading and Composition	3	0	3		Spring	Hybrid course
SPI	213	Review of Grammar	3	0	3		Fall	Online course
SPI	214	Introduction to Translation	3	0	3		Fall	Hybrid course
SPI	113	Introduction to Spanish Interpreting	3	0	3		Spring	Hybrid course
SPI	114	Analytical Skills Spanish Interpreting	3	0	3		Spring	

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

EFL 062, EFL 063, ENG 070, 080, 090, 090A, CIS 110 may be required based on placement test results.

*A prerequisite of the program is showing proficiency at the Intermediate Spanish II level as determined by the program director, or by completion of SPA 212.

** **Native/Heritage Spanish speakers will take either ENG 111, COM 231, or DRA 122 in place of the the SPA 221 Spanish Conversation course.**

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2008 | PLAN OF STUDY | Effective Fall Semester 2012-2013

COMMUNITY SPANISH INTERPRETER

Medical Spanish Facilitator Certificate (C55370M)

Evening Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, any required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
MED	121	Medical Terminology I	3	0	3		All	Taught in English
MED	122	Medical Terminology II	3	0	3		Fall, Spring	Taught in English
SPI	111	Cultural and Ethical Issues	3	0	3		Fall	On-line
SPI	221	Consecutive Interp I	3	0	3		Spring	
SPI	222	Consecutive Interp II	3	0	3		Spring	

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

EFL 062, EFL 063, ENG 070, 080, 090, 090A, and CIS 110 may be required based on placement test results.

*A prerequisite of the program is completion of the Community Spanish Facilitator Certificate option (C55370F) or successful completion of a translation/interpretation placement test.
The Medical Spanish Facilitator Certificate is recognized by IMIA (International Medical Interpreters Association) as one of the training programs in North Carolina acceptable as proof of medical interpreter education.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2009 | PLAN OF STUDY | Effective Fall Semester 2012-2013

SURGICAL TECHNOLOGY (D45740)

Diploma

Day Program

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

			Hours						
Course Title			Class	Lab	Clinical	Credit	Grade	Semester	Remarks
3 Semesters									
FALL SEMESTER, 2012									
ACA	122	College Transfer Success	1	0	0	1			
BIO	168	Anatomy & Physiology I	3	3	0	4			
ENG	111	Expository Writing	3	0	0	3			
PSY	150	General Psychology	3	0	0	3			
SUR	110	Introduction to Surgical Technology	3	0	0	3			
SUR	111	Periop Patient Care	5	6	0	7			
SPRING SEMESTER, 2013									
BIO	169	Anatomy & Physiology II	3	3	0	4			
SUR	122	Surgical Procedures I	5	3	0	6			
SUR	123	Surgical Clinical Practice I	0	0	21	7			
SUMMER TERM, 2013									
SUR	134	Surgical Procedures II	5	0	0	5			
SUR	135	Surgical Clinical Practice II	0	0	12	4			
SUR	137	Professional Success Preparation	1	0	0	1			

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA **48**

*EFL 050, EFL 055, ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, OR RED 090 may be required based on placement test results.

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Students of Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited programs are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four week period prior to or after graduation.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Spring Semester 2011 PLAN OF STUDY Effective Fall Semester 2012-2013

SUSTAINABILITY TECHNOLOGIES

Renewable Energy Diploma (D40370)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
3 Semesters								
FALL SEMESTER 2012								
ALT	120	Renewable Energy Tech	2	2	3			
CIS	110	Introduction to Computers	2	2	3			
ELC	112	DC/AC Electricity	3	6	5			
MAT	121	Algebra/Trigonometry I*	2	2	3			
BUS	137	Principles of Management	3	0	3			
SPRING SEMESTER 2013								
ALT	220	Photovoltaic Systems Technology	2	3	3			
ELC	113	Basic Wiring	2	6	4			
SST	120	Energy Use Analysis	2	2	3			
ALT	250	Thermal Systems	2	2	3			
SUMMER TERM 2013								
ALT	221	Adv Photovoltaic System Designs	2	3	3			
COE	111	Co-op Work Experience	0	10	1			
ISC	112	Industrial Safety	2	0	2			
ENG	111	Expository Writing*	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR Renewable Energy Diploma 39

*ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2011 PLAN OF STUDY Effective Fall Semester 2012-2013

SUSTAINABILITY TECHNOLOGIES

Energy Efficiency/Solar Power Certificate (C40370E)

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
FALL SEMESTER 2012								
SST	120	Energy Use Analysis	2	2	3			
ALT	120	Renewable Energy Tech	2	2	3			
SPRING SEMESTER 2013								
ALT	220	Photovoltaic Systems Technology	2	3	3			
ALT	250	Thermal Systems	2	2	3			
SUMMER TERM 2013								
ALT	221	Adv Photovoltaic System Designs	2	3	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 15

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2012 PLAN OF STUDY Effective Fall Semester 2012-2013

SUSTAINABILITY TECHNOLOGIES (A40370)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
6 Semesters								
FALL SEMESTER 2012								
ACA	122	College Transfer Success	1	0	1			
ENG	111	Expository Writing*	3	0	3			
CIS	110	Introduction to Computers	2	2	3			
ENV	110	Environmental Science	3	0	3			
SST	110	Intro to Sustainability	3	0	3			
MAT	121	Algebra/Trigonometry I*	2	2	3			
SPRING SEMESTER 2013								
ENG	112	Argument-based Research	3	0	3			
ELC	112	DC/AC Electricity	3	6	5			
ALT	120	Renewable Energy Tech	2	2	3			
SST	120	Energy Use Analysis	2	2	3			
SUMMER TERM 2013								
		Humanities Elective	3	0	3			
		Social/Behavioral Sciences Elective	3	0	3			
ELC	113	Basic Wiring	2	6	4			
FALL SEMESTER 2013								
ALT	220	Photovoltaic Systems Technology	2	3	3			
ALT	250	Thermal Systems	2	2	3			
ISC	112	Industrial Safety	2	0	2			
ARC	111	Intro to Architectural Technology	1	6	3			
BUS	137	Principles of Management	3	0	3			
SPRING SEMESTER 2014								
ALT	221	Adv Photovoltaic System Designs	2	3	3			
ARC	210	Intro to Sustainable Design	1	3	2			
CMT	210	Prof Construction Supervision	3	0	3			
SRV	110	Surveying I	2	6	4			

(Over)

SUMMER TERM, 2014

COE	111	Co-op Work Experience	0	10	1			
SST	210	Issues in Sustainability	3	0	3			

TOTAL SEMESTER HOURS REQUIRED FOR A.A.S. DEGREE 70

***ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.**

Humanities Electives. Choose one course from the following: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

HUMANITIES ELECTIVE:

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Social/Behavioral Sciences Elective. Choose one course from the following: : ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, GEO 112, HIS 111, HIS 112, HIS 121, HIS 122, HIS 131, HIS 132, POL 120, POL 220, PSY 150, PSY 241, PSY 281, SOC 210, SOC 213, SOC 215, SOC 220, SOC 225.

SOCIAL/BEHAVIORAL SCIENCES ELECTIVE:

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V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

New Fall Semester 2006 | PLAN OF STUDY | Effective Fall Semester 2012-2013

Web Technologies

Web Designer Option (C25290I)

Certificate

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
CIS	110	Introduction to Computers	2	2	3			
CIS	115	Intro to Prog & Logic	2	3	3			
WEB	110	Internet/Web Fundamentals	2	2	3			
WEB	115	Web Markup and Scripting	2	2	3			
WEB	140	Web Development Tools	2	2	3			
WEB	210	Web Design	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 18

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

Revised Fall Semester 2012-2013 | PLAN OF STUDY | Effective Fall Semester 2012-2013

WEB TECHNOLOGIES (A25290)

Associate Degree

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours Class	Lab	Credit	Grade	Semester	Remarks
5 Semesters								
FALL SEMESTER, 2012								
ACA	122	College Transfer Success	1	0	1			
CIS	110	Introduction to Computers	2	2	3			
WEB	110	Internet Web Fundamentals	2	3	3			
CIS	115	Intro to Programming & Logic	2	3	3			
ENG	111	Expository Writing*	3	0	3			
MAT	140	Survey of Mathematics*	3	0	3			
MAT	140A	Survey of Mathematics Lab	0	2	1			
SPRING SEMESTER, 2013								
WEB	115	Web Markup and Scripting	2	2	3			
WEB	140	Web Development Tools	2	2	3			
DBA	110	Database Concepts	2	3	3			
NOS	110	Operating System Concepts	2	3	3			
ENG	112	Argument-Based Research	3	0	3			
SUMMER TERM, 2013								
BUS	110	Introduction to Business	3	0	3			
COM	231	Public Speaking	3	0	3			
		Social Science Elective	2	3	3			
		Humanities Elective	2	3	3			
FALL SEMESTER, 2013								
WEB	111	Intro to Web Graphics	2	2	3			
WEB	120	Intro Internet Multimedia	2	2	3			
WEB	210	Web Design	2	2	3			
WEB	250	Database Driven Websites	2	2	3			
		Major Elective			3			
SPRING SEMESTER, 2014								
WEB	125	Mobile Web Design	2	2	3			
NET	110	Networking Concepts	2	2	3			
COE	110	World of Work†	1	0	1			
COE	111	Co-op Work Experience I†	0	10	1			
		Major Elective			3			
Total Semester Hours Required for A.A.S. Degree					**70**			

* ENG 070, ENG 080, ENG 090, ENG 090A, MAT 050, MAT 060, MAT 070, RED 070, RED 080, or RED 090 may be required based on placement test results.

† Requires prior approval by Department Head

Humanities Elective. Choose one course from the following: ART 111, ART 114, ART 115, ART 117, DRA 111, DRA 122, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 251, ENG 252, ENG 261, ENG 262, HUM 110, HUM 115, HUM 120, HUM 121, HUM 122**,** HUM 150, HUM 160, MUS 110, MUS 113, PHI 215, PHI 240, REL 110, REL 211.

Social Science Elective. Choose one course from the following:: ANT 210, ANT 220, ECO 251, ECO 252, GEO 111, HIS 115, HIS 121, HIS 122, HIS 131, HIS 132, HIS 151, POL 120, POL 220, PSY 150, PSY 237, PSY 241, PSY 263, PSY 281, SOC 210, SOC 213, SOC 220, SOC 225

Major Electives – Select 6 credit hours from the list below.

Course	Title		Hours Class	Lab	Credit
CSC	139	Visual BASIC Prog	2	3	3
CSC	239	Adv Visual BASIC Prog	2	3	3
CSC	151	JAVA Programming	2	3	3
CSC	251	Adv JAVA Programming	2	3	3
CSC	153	C# Programming	2	3	3
CSC	253	Adv C# Programming	2	3	3
DBA	120	Database Programming I	2	2	3
NOS	120	Linux/UNIX Single User	2	2	3
NOS	130	Windows Single User	2	2	3
WEB	151	Mobile App Development I	2	2	3

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.

DURHAM TECHNICAL COMMUNITY COLLEGE

PLAN OF STUDY

New Curriculum 2012

WELDING TECHNOLOGY

Welding (C50420W)

Certificate

Effective Fall Semester 2012-2013

The following plan of study is the standard curriculum for the above program. Any deviation from the prescribed curriculum must have approval in advance. All prerequisite course requirements must also be met. To graduate the student must successfully complete all the required courses, the required credit hours for electives, and have at least a 2.0 overall grade point average. This plan of study is subject to change when the college thinks such action is in the best interest of the student or the program. It is the responsibility of the student to meet requirements for graduation. If accepted students do not enroll for three successive semesters, they must contact the Admissions office to determine if readmission is necessary.

Course Title			Hours					
			Class	Lab	Credit	Grade	Semester	Remarks
WLD	112	Basic Welding Processes	1	3	2			
WLD	115	SMAW (Stick) Plate	2	9	5			
WLD	121	GMAW ((MIG) FCAW Plate	2	6	4			
WLD	141	Symbols & Specifications	2	2	3			

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE 14

V.A. Students: An approval signature from the V.A. Office is required before registering. Some courses may not be certifiable.