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# COURSE DESCRIPTIONS BY <br> COURSE DISCIPLINE PREFIX 

## ACA ACADEMIC RELATED

| ACA-090 Student Success Strategies | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

$\begin{array}{ll}\text { Prerequisites: } & \text { None } \\ \text { Corequisites: } & \text { None }\end{array}$
This course is intended to provide students with skills and strategies to promote success in college, career, and life. Topics include the College's physical, academic, and social environment, promotes personal development, and cultivates learning strategies essential for student success. Upon completion, students should be able to manage their learning experiences to meet educational and life goals. (2014 FA) ACA-090 is required if a student placed into both ENG-002 and MAT-003

| ACA-115 | Success \& Study Skills | $\mathbf{1 ( 0 - 2 )}$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Summer |  |  |  |

ACA-122 College Transfer Success 1 (0-2) Fall

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 policies and 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.(2021 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or elective course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.G.E.-Nursing, A.S., and A.S. Teacher Preparation.


## ACC ACCOUNTING

ACC-115 College Accounting 4 (3-2) AND

Prerequisites: None
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. (2003 FA)

| ACC-120 Prin of Financial Accounting | $4(3-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002L, MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
Corequisites: None
This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decisionmaking and address ethical considerations.(2003FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| ACC-121 Prin of Managerial Accounting | $4(3-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ACC-120 ${ }^{\text {S }}$
Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems.(2003 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| ACC-13 | Federal Income Taxes | 3 (2-2) | Fall |
| :---: | :---: | :---: | :---: |
| Prerequisites: | ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$, MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$ |  |  |
| Corequisites: | None |  |  |
| partnerships, and corporations. Topics include tax law, electronic research and methodologies and the use technology for the preparation of individual and |  |  |  |
| business tax re tax scenarios, individuals, pa | urns. Upon completion, esearch applicable tax la nerships, and corporatio | to ana tax | e ba |

COURSE DESCRIPTIONS

| ACC-140 | Payroll Accounting | $2(1-3)$ | Spring |
| :--- | :--- | :--- | :--- | Prerequisites: $\mathrm{ACC}-115^{\mathrm{S}}$ or $\mathrm{ACC}-12 \mathrm{O}^{\mathrm{S}}$

Corequisites: None
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages calculating social security, income, and unemployment taxes preparing appropriate payroll tax forms and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.(2018 FA)

ACC-149 Intro to ACC Spreadsheets $\quad 2$ (1-3) | Fall |
| :--- |
| Summer |

Prerequisites: $\mathrm{ACC}-115^{\mathrm{S}}$ or $\mathrm{ACC}-12 \mathrm{O}^{\mathrm{S}}$
Corequisites: None
This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.(2018 FA)

## ACC-150 Accounting Software Appl 2 (1-3) Spring

Prerequisites: $\mathrm{ACC}-115^{\mathrm{S}}$ or ACC-120 ${ }^{\text {S }}$
Corequisites: None
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to accurately solve accounting problems.(2018 FA)

ACC-151 Acct Spreadsheet AppI 2(1-3) Spring
Prerequisites: ACC-149 ${ }^{\text {S }}$
Corequisites: None
This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. 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.(2018 FA)

ACC-180 Practices in Bookkeeping 3 (3-0) Spring Prerequisites: ACC-120 ${ }^{\text {S }}$
Corequisites: None
This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small businesses. (2003 FA)

| Default Catalog Header Text |  |  |  |
| :--- | :--- | :--- | :---: |
| ACC-220 | Intermediate Accounting I | $4(3-2)$ |  |
| Prerequisites: | ACC-120 ${ }^{\mathrm{S}}, \mathrm{ACC}-121^{\llcorner }$ | Fall |  |
| Corequisites: | None |  |  |
| This course is a continuation of the study of accounting principles with in- |  |  |  |
| depth coverage of theoretical concepts and financial statements. Topics include |  |  |  |
| generally accepted accounting principles and extensive analysis of balance |  |  |  |
| sheet components. Upon completion, students should be able to demonstrate |  |  |  |
| competence in the conceptual framework underlying financial accounting, |  |  |  |
| including the application of financial standards.(2006 SP) |  |  |  |

## AER AEROSPACE AND FLIGHT TRA

| AER-110 | Air Navigation |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |


| AER-111 | Aviation Meteorology | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the atmosphere, interpretation and measurement of meteorological elements, and the effects of such on aircraft operations and performance. Topics include heat exchanges in the atmosphere temperature, pressure, stability, clouds, air masses, fronts, and thunderstorms and the use and interpretation of weather data. Upon completion, students should be able to analyze weather data for flight planning and safe flying.(1997 SU)

| AER-112 | Aviation Laws and FARs |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |


| AER-113 | History of Aviation | 2(2-0) | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course provides a historical survey of the efforts of manned-flight. Topics |  |  |  |
| include the development of aircraft, milestones in aviation, noted pioneers, and |  |  |  |
| the socioeconomic impact of flight upon modern civilization. Upon completion, |  |  |  |
| students should be able to demonstrate an understanding of the advancements |  |  |  |
| that aviation has accrued for society and contemporary changes in aviation.(1997 |  |  |  |
| SU) |  |  |  |

COURSE DESCRIPTIONS

| AER-114 | Aviation Management | 3 (3-0) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers operation of a flight department on a cost-effective basis and analysis of profit and loss statements. Topics include flight operations costs, aircraft acquisition analysis and cost comparisons, costs versus revenue, and break-even points. Upon completion, students should be able to calculate cost of flight operations and apply monthly and annual budget analysis.(1997 SU)

| AER-115 | Flight Simulator | $\mathbf{2 ( 1 - 3 )} \quad$ AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course covers instrument instruction and training in a FAA-approved flight |  |  |
| simulator. Emphasis is placed on approach and navigation procedures including |  |  |
| holding and missed approaches. Upon completion, students should be able to plan |  |  |
| and execute an IFR flight and smoothly transition to instrument training in the |  |  |
| aircraft.(2023 FA) |  |  |

AER-116 Private Pilot Flight Simulato 2 (1-2) AND Prerequisites: None
Corequisites: None
This course provides classroom and hands-on simulator training needed to support FAA Private Pilot Certificate qualification requirements. Topics include introduction to checklists, flight procedures, radio procedures, ground and flight maneuvers that include take-offs, climbs, level flight, turns, glides, stalls, slow flight, descents, slips, landings, emergency procedures, cross country planning, and navigation. Upon completion, students should be able to log their simulator training time, transition to Private Pilot training in an actual aircraft, and successfully meet all FAA requirements for Private Pilot Certification.(2023 FA)

| AER-119 | Aircraft Structures |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces aircraft airframes and associated appliances. Emphasis |  |
| is placed on strength of materials, aircraft standards, type certificate data |  |
| sheets, basic airframe construction, and weight and balance fundamentals. Upon |  |
| completion, students should be able to analyze strength of materials data and |  |
| apply their analysis to semi-monocoque, full-cantilever, and truss-type airframes. |  |
| (1997 SU) |  |


| AER-150 | Private Pilot FIt Theory | 3(2-2) |
| :--- | :--- | :--- | | Fall |
| :--- |
| Spring |


| AER-151 | Flight-Private Pilot | $1(0-3)$ | Fall Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: None |  |  |  |
| Corequisites: None |  |  |  |
| This course provides the hands-on training needed to qualify for a Federal Aviation |  |  |  |
| Administration private pilot certificate. Topics include flight maneuvers (ground procedures, take-offs, climbs, level flight, turns, glides, stalls, slow flight, descents, slips, landings, emergency procedures) and cross-country planning and navigation. |  |  |  |
| Upon completion, students should be able to demonstrate the competencies required for the flight test practical exam for the private pilot certificate.(1997 SU) |  |  |  |
| Instructional flight hours are accomplished through partnerships with the localflight schools. |  |  |  |


| AER-160 | Instrument Flight Theory | 3(2-2) | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the required aeronautical knowledge of the Federal Aviation Administration Regulation Instrument Ground School. Topics include a study of instruments, systems, instrument flight charts, instrument flight planning, approach procedures, and the IFR regulations. Upon completion, students should be able to demonstrate the competencies required to complete the FAA written examination for an instrument rating.(1997 SU)

| AER-161 Flight-Instrument Pilot | $2(0-6)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: AER-151 ${ }^{\text {S }}$
Corequisites: None
This course covers instruction and training in instrument flight planning including IFR navigation, VOR, ILS, ADF, and compliance with ATC procedures. Emphasis is placed on approach and navigation procedures, including holding and missed approaches, and development of skill in executing en route and approach procedures. Upon completion, students should be able to plan and execute an IFR flight and demonstrate competencies required for the FAA instrument pilot flight exam.(1997 SU) Instructional flight hours are accomplished through partnerships with the local flight schools.

AER-170 Commercial Flight Theory $\quad 3(3-0) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: AER-160 ${ }^{\text {L }}$
Corequisites: None
This course covers advanced aircraft control, cross-country operations, and other topics required for the FAA commercial pilot written exam. Emphasis is placed on the principles of aircraft performance and operation, take-off performance, cruise performance, descent and landing performance, and weight and balance computations. Upon completion, students should be able to demonstrate commercial pilot skills and competence in the materials required for the FAA written commercial pilot examination.(1997 SU)

COURSE DESCRIPTIONS

| AER-171 | Flight-Commercial Pilot | 3 (0-6) | all |
| :---: | :---: | :---: | :---: |
| Prerequisites: AER-151 ${ }^{\text {S }}$ |  |  |  |
| Corequisites: None |  |  |  |
| This course provides the hands-on training needed to qualify for a Federal Aviation |  |  |  |
| Administration commercial pilot certificate. Topics include flight instruction in advanced precision maneuvers, maximum performance take-off and landings, emergency procedures, operation of complex aircraft, aircraft performance, and range and fuel planning. Upon completion, students should be able to demonstrate competence in the areas of the flight test practical exam for the commercial pilot certificate. (2017 FA) Instructional flight hours are accomplished through partnerships with the local flight schools. |  |  |  |
|  |  |  |  |
|  |  |  |  |

AER-210 Flight Dynamics 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course covers basic and advanced principles of aerodynamic phenomena and fluid flow. Topics include airflow phenomena lift/weight/thrust/drag aircraft configuration characteristics, stability, and control subsonic, transonic, and supersonic flight critical Mach numbers and the V-g Diagram. Upon completion, students should be able to explain the elements of applied aerodynamics and aeronautical engineering which relate directly to the problems of flight operations. (1997 SU)

| AER-211 | Air Traffic Control | 2(2-0) |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course provides a detailed analysis of all aspects of air traffic control. Emphasis is placed on an in-depth analysis of air traffic control, including utilization of the air traffic environment based on the pilot's and controller's perspective. Upon completion, students should be able to operate an aircraft within the national airspace system under FAA air traffic control.(1997 SU)

## AER-212 Air Transport Pilot 3 (3-0) AND <br> Prerequisites: AER-160 ${ }^{\text {S }}$, AER-170 ${ }^{\text {S }}$ <br> Corequisites: None

This course provides advanced study for the professional pilot. Topics include an in-depth study of B-727/737 weight and balance, high altitude weather, Part 121 FARs, and performance considerations of large aircraft. Upon completion, students should be able to calculate weight and balance of large aircraft, determine performance data, and apply high altitude weather principles.(1997 SU)
AER-213 $\quad$ Avionics
Prerequisites: None
Corequisites: $\quad$ None
This course covers standard navigational and communications equipment and
theory. Emphasis is placed on aviation radio spectrum, VHF omnirange, ILS, ADF,
transponders, weather radar, flight directors, and autopilots. Upon completion,
students should be able to utilize VOR, ADF, ILS, GPS, flight directors, HSI's, and
autopilots in the flight environment.(1997 SU)

| Default Catalog Header Text |  |  |
| :--- | :--- | :---: |
| AER-215 $\quad$ Flight Safety |  |  |
| Prerequisites: | None |  |
| Corequisites: $\quad$ None |  |  |
| This course covers the basic procedures and practices of aircraft accident |  |  |
| prevention, accident investigation, and reporting. Topics include a comprehensive |  |  |
| review of federal regulations pertinent to aviation safety and analyses of actual |  |  |
| aviation accident cases and their causes. Upon completion, students should be |  |  |
| able to demonstrate an understanding and respect for specific personal factors |  |  |
| such as attitude, motivation, and skill related to flight safety.(1997 SU) |  |  |

AER-216 $\quad$ Engines \& Systems
Prerequisites: None
Corequisites: $\quad$ None
This course introduces piston and turbine aircraft engines and associated systems.
Topics include aircraft hydraulic, pneumatic, electrical, air conditioning, and
pressurization systems along with the theory of engine operations, including
power and thrust computations. Upon completion, students should be able to
apply principles of engine and systems operation.(1997 SU)

AER-217 Air Transportation 3 (3-0) Spring Prerequisites: None
Corequisites: None
This course covers the development and present status of the air transportation system. Topics include federal legislation, characteristics and classification of air carriers, development of the air traffic control system, and the organization and function of the FAA. Upon completion, students should be able to relate the knowledge acquired to career development.(1997 SU)

| -218 | Human Factors in Aviation | $2(2-0)$ | Fall |
| :---: | :---: | :---: | :---: |
| rerequisite | None |  |  |
| orequisites: | Non |  |  |
| This course analyzes interpersonal relationships in the cockpit and related |  |  |  |
| psychological factors that affect pilot performance and efficiency during flight |  |  |  |
| operations. Topics include cockpit management, judgment, aircraft and flight crew |  |  |  |
| coordination and control, physiological factors, responsibility, and decision-making |  |  |  |
| routines to stress management, crew responsibility, and the team concept in the |  |  |  |


| AER-220 | Airport Management | $\mathbf{2 ( 2 - 0 )}$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course examines the major functions of airport management and the concepts underlying airport planning and construction. Topics include forecasting volumes and airport size and design, including master planning, location requirements, site selection, runway configuration, zoning laws, and other considerations. Upon completion, students should be able to demonstrate basic airport management skills including an understanding of the socioeconomic effect of airports on the community.(1997 SU)

COURSE DESCRIPTIONS

| AER-280 | Instructor Pilot FIt Theory |
| :--- | :--- |
| Prerequisites: | AER-170 |

AER-281 Flight-CFI 1 (0-3) AND

Prerequisites: AER-171 ${ }^{\text {S }}$
Corequisites: None
This course provides experience in preparation for the flight instructor practical test. Emphasis is placed on the ability to transition to right seat flight while teaching performance maneuvers including operation of a complex aircraft. Upon completion, students should be able to demonstrate competence in right seat operation and CFI maneuvers as specified in the FAA Practical Test Standards. (1997 SU) Instructional flight hours are accomplished through partnerships with the local flight schools.

| AER-285 | Flight-Multi-Engine |
| :--- | :--- |
| Prerequisites: | AER-171s |
| Corequisites: | None |

## ANT ANTHROPOLOGY

| ANT-210 | General Anthropology | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 or BSP-4002 |  |  |

## Corequisites: 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| ANT-220 | Cultural Anthropology | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{L}$ or BSP-4002 |  |  |

## Corequisites: None

This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## ANT-221 Comparative Cultures 3 (3-0) AND

 Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$Corequisites: None
This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family, economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| ANT-240 | Archaeology |
| :--- | :--- |
| Prerequisites: | ENG-0O2 ${ }^{\mathrm{L}}$ or BSP-4002 |
| Corequisites: | None |

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## ARC ARCHITECTURE

ARC-111 $\quad$ Intro to Arch Technology
Prerequisites:
Corequisites:
None
This course introduces basic architectural drafting techniques, lettering, use of
architectural and engineer scales, and sketching. Topics include orthographic,
axonometric, 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.(1997 SU)

COURSE DESCRIPTIONS

| ARC-112 | Constr Matls \& Methods | $4(3-2)$ | Fall |
| :--- | :--- | :--- | :--- |

Prerequisites: None
Corequisites: ARC-111 ${ }^{\text {L }}$
This course introduces construction materials and methodologies. Topics include construction terminology, traditional and alternative 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.(2013 FA)

| ARC-114 | Architectural CAD | 2(1-3) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | 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.(1998 FA)

## ARC-211 Light Constr Technology 3 (1-6) Fall

Prerequisites: ARC-111S
Corequisites: ARC-112 ${ }^{\text {S }}$
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 which are within accepted architectural standards(1997SU)
ARC-213 Design Project 4 (2-6) Spring

Prerequisites: $\quad$ ARC- $111^{\mathrm{S}}, \mathrm{ARC}-112^{\mathrm{S}}, \mathrm{ARC}-114^{\mathrm{S}}$
Corequisites: 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.(1998 FA)

ARC-230 Environmental Systems 4 (3-3) Spring
Prerequisites: ARC- $111^{\mathrm{S}}$; MAT- $121^{\mathrm{S}}$ or MAT- $171^{\mathrm{S}}$
Corequisites: None
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.(2014 FA)

| ART ART |  |  |  |
| :--- | :--- | :--- | :--- |
| ART-111 | Art Appreciation | $3(3-0)$ | Fall <br> Spring <br> Summer |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP- $4002^{\text {L }}$
Corequisites: None
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| ART-114 $\quad$ Art History Survey I | 3(3-0) | Fall <br> Spring |
| :--- | :--- | :--- |
| Prerequisites: | ENG-002L or BSP-4002 |  |


| ART-115 | Art History Survey II | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002L or BSP-4002 |  |  |
| Corequisites: | None |  |  |

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A. Music and Theatre, A.S. and A.S. Teacher Preparation
- Premajor and/or Elective course for A.F.A. Visual Arts
- Premajor and/or Elective course for A.F.A. Visual Arts
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| ART-121 | Two-Dimensional Design | $3(0-6)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the elements and principles of design as applied to twodimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art.(2012 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A., A.F.A. (visual arts), and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

ART-122 Three-Dimensional Design $3(0-6)$ Fall Prerequisites: None
Corequisites: None
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts.(2012 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A., A.F.A. (visual arts), and A.S.
ART-131 Drawing I
Prerequisites: None (0-6)
Corequisites: None
This course introduces the language of drawing and the use of various drawing
Spring
materials. Emphasis is placed on drawing techniques, media, and graphic
principles. Upon completion, students should be able to demonstrate competence
in the use of graphic form and various drawing processes.(1997 SU) This course
has been approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A., A.F.A. (visual arts), and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## ART-132 Drawing II

$3(0-6) \quad$| Fall |  |
| :--- | :--- |
|  | Spring |

Prerequisites: ART-131s
Corequisites: 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. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.

| ART-135 | Figure Drawing I | $\mathbf{3 ( 0 - 6 )} \quad$ AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ART-131 |  |


| ART-171 $\quad$ Digital Design I | 3(0-6) | Fall |
| :--- | :--- | :--- | :--- |
| Spring |  |  |

ART-214 Portfolio and Resume $1(0-2) \quad$ Spring Prerequisites: None
Corequisites: None
This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to photograph and present a digital portfolio and write an effective resume. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| ART-231 | Printmaking I |
| :--- | :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces printmaking: its history, development techniques, and |  |
| processes. Emphasis is placed on basic applications with investigation into image |  |
| source and development. Upon completion, students should be able to produce |  |
| printed images utilizing a variety of methods.(1997 SU) This course has been |  |
| approved to satisfy the following requirement(s): |  |
| - |  |
| Premajor and/or Elective course for A.A. and A.S. |  |

COURSE DESCRIPTIONS

| ART-232 | Printmaking II | 3 (0-6) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ART-231 |  |  |

## Prerequisites: ART-231 ${ }^{\text {S }}$

Corequisites: None
This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods.(1998 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| ART-240 Painting I | $3(0-6)$ | Fall <br> Spring |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course introduces the language of painting and the use of various painting |  |  |
| materials. Emphasis is placed on the understanding and use of various painting |  |  |
| techniques, media, and color principles. Upon completion, students should be |  |  |
| able to demonstrate competence in the use of creative processes directed toward |  |  |
| the development of expressive form.(1997 SU) This course has been approved to |  |  |
| satisfy the following requirement(s): |  |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E. |  |  |


| ART-241 Painting II | $3(0-6)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: ART-240 ${ }^{\text {S }}$
Corequisites: None
This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.

ART-264 Digital Photography I 3 (0-6) Fall
Prerequisites: None
Corequisites: None
This course introduces digital photographic equipment, theory and processes. Emphasis is placed on camera operation, composition, computer photo manipulation and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition.(2016 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| ART-281 | Sculpture I | $3(0-6)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches.(1999 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
ART-283 Ceramics I
Prerequisites: None (0-6)
Forequisites: None
This course provides an introduction to three-dimensional design principles using
Spring
the medium of clay. Emphasis is placed on fundamentals of forming, surface
design, glaze application, and firing. Upon completion, students should be able
to demonstrate skills in slab and coil construction, simple wheel forms, glaze
technique, and creative expression.(1997 SU) This course has been approved to
satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

ART-284 Ceramics II $\quad 3(0-6)$| Fall |
| :--- |
| Spring |

Prerequisites: ART-283 ${ }^{\text {S }}$
Corequisites: None
This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## ASL AMERICAN SIGN LANGUAGE

ASL-111 $\quad$ Elementary ASL I
Prerequisites: None
Corequisites: $\quad$ None
This course introduces the fundamental elements of American Sign Language
within a cultural context. Emphasis is placed on the development of basic
expressive and receptive skills. Upon completion, students will be able to
comprehend and respond with grammatical accuracy to expressive American Sign
Language and demonstrate cultural awareness.(2002 SP) This course has been
approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.

COURSE DESCRIPTIONS

| ASL-112 | Elementary ASL II | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | ASL-111 | AND |

## Corequisites: None

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language in a cultural context. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, the students should be able to comprehend and respond with increasing accuracy to expressive American Sign Language and demonstrate cultural awareness.(2002
SP) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.

| ASL-211 | Intermediate ASL I | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ASL-112 |  |  |
| Corequisites: | None |  |  |

This course provides a review and expansion of the essential skills of American Sign Language. Emphasis is placed on the progressive development of expressive and receptive skills, study of authentic and representative literacy and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively using American Sign Language about the past, present, and future.(2002 SP) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
ASL-212 Intermediate ASL II 3 (3-0) AND Prerequisites: ASL-211 ${ }^{\text {S }}$
Corequisites: None
This course provides a continuation of ASL 211. Emphasis is placed on the continuing development of expressive and receptive skills, with 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.(2002 SP) This course has been approved to satisfy the following requirement(s):
- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.


## AST ASTRONOMY

| AST-111 | Descriptive Astronomy |
| :--- | :--- |
| Prerequisites: | ENG-002 $2^{L}$ or BSP- $4002^{L}$, MAT-003 ${ }^{L}$ or BSP- $4003^{L}$ |
| Corequisites: | AST- $111 A^{L}$ |
| This course introduces an overall view of modern astronomy. Topics include an |  |
| overview of the solar system, the sun, stars, galaxies, and the larger universe. |  |
| Upon completion, students should be able to demonstrate an understanding of |  |
| the universe around them.(1997 SU) This course has been approved to satisfy the |  |
| following requirement(s): |  |

- UGETC course for A.A., A.A. Teacher Preparation and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.


The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.


## AUB AUTOMOTIVE BODY REPAIR

AUB-111 $\quad$ Painting \& Refinishing I (2-6) Fall
Prerequisites: None
Corequisites: None
This course introduces the proper procedures for using automotive refinishing
equipment and materials in surface preparation and application. Topics include
federal, state, and local regulations, personal safety, refinishing equipment and
materials, surface preparation, masking, application techniques, and other related
topics. Upon completion, students should be able to identify and use proper
equipment and materials in refinishing following accepted industry standards.(1997
SU)

| AUB-112 | Painting \& Refinishing II |
| :--- | :--- |
| Prerequisites: | $A \cup B-111^{S}$ |$\quad 4(2-6)$ Spring

## Corequisites: None

This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.(1997 SU)
AUB-114 $\quad$ Special Finishes (1-2) Summer
Prerequisites: $\quad$ AUB-111
Corequisites: $\quad$ None
This course introduces multistage finishes, custom painting, and protective
coatings. Topics include base coats, advanced intermediate coats, clear coats, and
other related topics. Upon completion, students should be able to identify and
apply specialized finishes based on accepted industry standards.(1997 SU)
AUB-121 $\quad$ Non-Structural Damage I
Prerequisites: None
Corequisites: None
This course introduces safety, tools, and the basic fundamentals of body repair.
Topics include shop safety, damage analysis, tools and equipment, repair
techniques, materials selection, materials usage, and other related topics. Upon
completion, students should be able to identify and repair minor direct and
indirect damage including removal/repairing/replacing of body panels to accepted
standards.(1997 SU)

COURSE DESCRIPTIONS

| AUB-122 | Non-Structural Damage II | $4(2-6)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware. ( 1997 SU)

| AUB-131 | Structural Damage I |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces safety, equipment, structural damage analysis, and damage |  |
| repairs. Topics include shop safety, design and construction, structural analysis |  |
| and measurement, equipment, structural glass, repair techniques, and other related |  |
| topics. Upon completion, students should be able to analyze and perform repairs |  |
| to a vehicle which has received light/moderate structural damage.(1997 SU) |  |

$\begin{array}{lll}\text { AUB-132 } & \text { Structural Damage II } & 4(2-6) \\ \text { Prerequisites: } & \text { AUB-131 }\end{array}$
Corequisites: None
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards.(1997 SU)

| AUB-136 | Plastics \& Adhesives | $3(1-4)$ | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards.(1997 SU)

| AUB-150 | Automotive Detailing |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course covers the methods and procedures used in automotive detailing |  |
| facilities. Topics include safety, engine, interior and trunk compartment detailing, |  |
| buffing/polishing exterior surfaces, and cleaning and reconditioning exterior trim, |  |
| fabrics, and surfaces. Upon completion, students should be able to improve the |  |
| overall appearance of a vehicle.(1997 SU) |  |


| AUB-162 | Autobody Estimating | $\mathbf{2 ( 1 - 2 )}$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report.(1997 SU)

## AUC AUTOMOTIVE CUSTOMIZING

| AUC-112 | Auto Custom Fabrication | $4(2-4)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course covers modifications of existing vehicle components, as well as fabrication of new vehicle components. Emphasis is placed on basic customizing techniques used on factory original parts, as well as fabrication of custom components using machining processes and customizing techniques. Upon completion, students should be able to modify existing factory components and create custom-fabricated components using auto customizing techniques.(2006 FA)

$$
\begin{array}{lll}
\text { AUC-114 } & \text { Custom Fiberglass Skills } & 4(2-4) \\
\text { Prerequisites: } & \text { Fone } \\
\text { Corequisites: } & \text { None } \\
\text { This course will provide instruction in non-metallic customizing and repair } \\
\text { techniques. Emphasis will be placed on diagnosis and repair of cracks, proper } \\
\text { use of bonding agents, fiberglass body parts removal/replacement, and custom } \\
\text { fabrication techniques using fiberglass materials. Upon completion, students } \\
\text { should be able to identify types of fiberglass and demonstrate the ability to } \\
\text { properly prepare, apply, and finish fiberglass components.(2006 FA) }
\end{array}
$$

## AUM - AUTOMOTIVE MANAGEMENT


#### Abstract

AUM-111 Managing Automotive Org 3 (3-0) Spring Prerequisites: None Corequisites: None This course will cover the principles and procedures involved in managing an automotive facility. Emphasis is placed on record maintenance, facility layout, technical service training, personnel management, parts management, and computer-based shop management systems. Upon completion, students should be able to demonstrate procedures used in the day-to-day operations of an automotive facility. (2007 FA)


## AUT AUTOMOTIVE

| AUT-113 | Automotive Servicing I | 2 (0-6) AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | TRN-110 |  |
| Corequisites: | None |  |

This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment. (2007 FA)

COURSE DESCRIPTIONS

| AUT-116 | Engine Repair | $3(2-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | TRN-110 |  |  |
| Corequisites: | AUT-116A |  |  |
|  | L |  |  |

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.(2007 FA)

| AUT-116A | Engine Repair Lab | $1(0-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | TRN-110 |  |  |

## Corequisites: AUT-116 ${ }^{\text {S }}$

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.(2007 FA)

## AUT-141 Suspension \& Steering Sys $\quad 3(2-3) \quad$ Fall Summer <br> Prerequisites: None <br> Corequisites: AUT-141A ${ }^{\text {L }}$ <br> 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.(2007 FA)

| AUT-141A | Suspension \& Steering Lab | $1(0-3)$ | Fall <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | AUT-141 |  |  |

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.(2007 FA)

## AUT-151 Brake Systems 3 (2-3) Spring

Prerequisites: TRN-110 ${ }^{\text {L }}$
Corequisites: AUT-151A ${ }^{\text {L }}$
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.(2007 FA)

| AUT-151A | Brakes Systems Lab | $\mathbf{1}(0-3)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | TRN-110 |  |  |
| Corequisites: | AUT-151 |  |  |

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.(2007 FA)

| AUT-163 Adv Auto Electricity | $3(2-3)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: TRN-120S
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.(2013 FA)

| AUT-181 | Engine Performance 1 | 3(2-3) | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| 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.(2007 |  |  |  |
| FA) |  |  |  |


| AUT-183 | Engine Performance 2 | 4(2-6) | Fall |
| :--- | :--- | :--- | :--- |
| Spring |  |  |  |

COURSE DESCRIPTIONS

| AUT-221 | Auto Transm/Transaxles | $3(2-3)$ | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| 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. (2007 FA)

AUT-231 Man Trans/Axles/Drtrains 3(2-3) Spring
Prerequisites: TRN-110 ${ }^{\text {L }}$
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.(2008 SP)

## BAF BANKING AND FINANCE

| BAF-110 | Principles of Banking | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the fundamentals of bank functions in a descriptive fashion. Topics include banks and the monetary system, the relationship of banks to depositors, the payment functions, bank loans and accounting, regulations, and examinations. Upon completion, students should be able to demonstrate an understanding of the business of banking from a broad perspective. (2015 FA)

## BAS BUSINESS ANALYTICS

| BAS-120 | Intro to Analytics | $3(2-3)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course introduces basic concepts and applications of analytics. Topics include an overview of the analytical process and the role of the analyst, applied descriptive statistics, and exploratory data analysis. Upon completion, students should be able to demonstrate a basic understanding of analytics for decisionmaking in business.(2015 FA)

## BIO BIOLOGY

BIO-094 $\quad$ Concepts of Human Biology
Prerequisites: None
Corequisites: $\quad$ ENG-002 ${ }^{\mathrm{L}}$ or BSP-4002 ${ }^{\mathrm{L}}$

| Fall |
| :--- |
| Spring |

terminology, biochemistry, cell biology, tissues, body systems, and other related
topics. Upon completion, students should be able to demonstrate preparedness for
college-level anatomy and physiology courses.(2020 FA)

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| :--- | :--- | :--- | :--- |
| BIO-110 | Principles of Biology | $4(3-3)$ | Fall <br> Spring <br> Summer |
| Prerequisites: | ENG-002L or BSP-4002 |  |  |

- UGETC course for A.A., A.A. Teacher Preparation, and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

| BIO-111 General Biology I | $4(3-3)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. (2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., A.S., and A.S. Teacher Preparation
- Other Gen. Ed. and Premajor Elective Hour course for A.E.
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

| BIO-112 General Biology II | $4(3-3)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: $\mathrm{BIO}-111^{\mathrm{S}}$, minimum grade CL
Corequisites: None
This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A., and A.A. Teacher Preparation
- Natural Science Gen. Ed. course for A.G.E.

COURSE DESCRIPTIONS
BIO-120 Introductory Botany 4 (3-3) AND Prerequisites: $\mathrm{BIO}-11 \mathrm{O}^{\mathrm{S}}$ or $\mathrm{BIO}-111^{\mathrm{S}}$, minimum grade CL Corequisites: None
This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.G.E.
BIO-130 Introductory Zoology 4 (3-3) AND

Prerequisites: $\mathrm{BIO}-11 \mathrm{O}^{\mathrm{S}}$ or $\mathrm{BIO}-111^{\mathrm{S}}$, minimum grade CL

## Corequisites: None

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups.
(1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.G.E.

| BIO-140 Environmental Biology | $3(3-0)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: $\mathrm{BIO}-140 \mathrm{~A}^{\mathrm{L}}$
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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

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| :--- | :--- | :--- | :--- |
| BIO-140A | Environmental Biology Lab | $1(0-3)$ | Fall <br> Spring |
| Prerequisites: | ENG-002 ${ }^{\text {L }}$ or BSP-4002 |  |  |

Corequisites: $\mathrm{BIO}-14 \mathrm{O}^{\mathrm{S}}$
This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

| BIO-155 Nutrition | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

BIO-163 Basic Anat \& Physiology

5 (4-2) $\quad$| Fall |
| :--- |
|  |
| Spring |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: 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.
( 1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Sciences Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| BIO-168 Anatomy and Physiology I | $4(3-3)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. ( 1998 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Sciences Gen. Ed. course for A.A.S. and A.G.E.


## BIO-169 Anatomy and Physiology II

| 4(3-3) | Fall |
| :--- | :--- |
|  | Spring |
|  | Summer |

Prerequisites: $\mathrm{BIO}-169^{\mathrm{S}}$, minimum grade CL
Corequisites: None
This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.(1998 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Science Gen. Ed. course for A.G.E.

BIO-175 General Microbiology 3 (2-2) Spring Prerequisites: $\mathrm{BIO}-11 \mathrm{O}^{\mathrm{S}}, \mathrm{BIO}-111^{\mathrm{S}}, \mathrm{BIO}-163^{\mathrm{S}}$, or $\mathrm{BIO}-165^{\mathrm{s}}$, minimum grade CL Corequisites: None
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. (2004 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Science Gen. Ed. course for A.G.E.

|  |  |  |
| :--- | :--- | :--- | :--- |
| BIO-275 Microbiology | $4(3-3)$ | Fall <br> Spring |
|  |  | Summer |

Prerequisites: $\mathrm{BIO}-110^{\mathrm{S}}$, $\mathrm{BIO}-111^{\mathrm{S}}$, $\mathrm{BIO}-163^{\mathrm{S}}$, or $\mathrm{BIO}-165^{\mathrm{S}}$, minimum grade CL Corequisites: None
This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.(2023 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Science Gen. Ed. course for A.G.E.


## BMT BIOMEDICAL EQUIPMENT

| BMT-111 | Intro to Biomed Field | 2(2-0) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the fundamental concepts of the health care delivery system. Topics include hospital organization and structure, BMET duties and responsibilities, and the professional and social interrelationships between services. Upon completion, students should be able to demonstrate an understanding of hospital organization as related to BMET duties.(2011 SU)

| BMT-212 | BMET Instrumentation I | 6 (3-6) |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

## BPA BAKING \& PASTRY ARTS

| BPA-120 | Petit Fours \& Pastries |
| :--- | :--- |
| Prerequisites: | CUL- $110^{\mathrm{s}}, \mathrm{CUL}-160^{\mathrm{s}}$ |
| Corequisites: | None |

COURSE DESCRIPTIONS

|  |  | 3 (1-4) | Summer |
| :---: | :---: | :---: | :---: |
| requisites | CUL-110 ${ }^{\text {S }}$, CUL-160 ${ }^{\text {S }}$ |  |  |
| orequis | None |  |  |
| This course introduces the production of a wide variety of classical and modern cakes suitable for restaurants, retail shops and large-scale production. Emphasis is placed on classic cakes using the methods of mixing, filling, glazing and icing. Upon completion, students should be able to prepare, assemble, and decorate gelatin-based and layered tortes and cakes such as Bavarian, Dobos, and Sacher. (2011 FA) |  |  |  |
|  |  |  |  |  |  |

BPA-150 Artisan \& Specialty Bread 4 (1-6) Spring Prerequisites: $\mathrm{CUL}-110^{\text {s }}$, CUL-160 ${ }^{\text {S }}$

## Corequisites: None

This course provides an advanced study in the art and craft of bread making. Topics include pertinent formulas and techniques associated with naturally leavened loaves, hearth breads, focaccia, flat breads, and other breads utilizing a variety of grains. Upon completion, students should be able to prepare artisan and specialty breads that meet or exceed the expectations of restaurant and retail publics.(2003 FA)

BPA-165 Hot and Cold Desserts 3 (1-4) Spring
Prerequisites: CUL-110 ${ }^{\text {S }}$, CUL-160 ${ }^{\text {S }}$
Corequisites: None
This course covers the principles and techniques of frozen desserts, souffles, cobblers, crisps, and strudel dough products. Topics include bombes, parfaits, baked Alaska, ice cream, sorbets, sherbets and granites hand-stretched strudel products, crepes, and hot/cold souffles. Upon completion, student should be able to prepare and plate hot and cold desserts with suitable sauces and garnishes. (2011 FA)

BPA-210 Cake Design \& Decorating $\quad 3$ (1-4) Fall
Prerequisites: BPA-130, CUL-110 ${ }^{\text {S }}$, CUL-160 ${ }^{\text { }}$; ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course covers advanced concepts in the design and decoration of wedding cakes and other specialty cakes. Topics include baking, filling, and assembling cakes cake design finishing techniques utilizing gum paste, fondant, and royal icing and advanced piping skills. Upon completion, students should be able to design, create, finish and evaluate the quality of wedding and specialty cakes.(2011 FA)

| BPA-220 | Confection Artistry | $3(1-4)$ |
| :--- | :--- | :--- |
| Prerequisites: | CUL-110 ${ }^{\text {S }}$, CUL-160 | Spring |

Prerequisites: CUL-110 ${ }^{\text {S }}$, CUL-160 ${ }^{\text {S }}$ : ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$

## Corequisites: None

This course introduces the principles and techniques of decorative sugar work and confectionary candy. Topics include nougat, marzipan modeling, pastillage and cocoa painting, confection candy and a variety of sugar techniques including blown, spun, poured and pulled. Upon completion, students should be able to prepare edible centerpieces and confections to enhance dessert buffets and plate presentations.(2021 FA)

| BPA-250 | ead P | 5 | Fall |
| :---: | :---: | :---: | :---: |
| Prerequisites: | BPA-150 ${ }^{\text {S }}$ ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$ |  |  |
| orequisites: | None |  |  |
| This course is designed to merge artistry and innovation with the practical baking and pastry techniques utilized in a production setting. Emphasis is placed on quantity bread and roll-in dough production, plated and platter presentations, seasonal/theme product utilization and cost effectiveness. Upon completion, students should be able to plan, prepare and evaluate breads and desserts within a commercial environment and determine production costs and selling prices.(2012 SU) |  |  |  |
|  |  |  |  |

BPA-260 Pastry \& Baking Marketing 3(2-2) Spring
Prerequisites: BPA-150 ${ }^{\text {S }}$, BPA-210 ${ }^{\text {S }}$
Corequisites: BPA-250 ${ }^{\text {S }}$
This course is designed to cover the marketing concepts and merchandising trends utilized in bakery and pastry operations. Emphasis is placed on menu planning, pricing products/strategies, resale and wholesale distribution methods, legal implications, and advertising techniques. Upon completion, students should be able to create a marketing plan that will serve as a basis for a capstone experience. (2011 FA)

## BPR BLUEPRINT READING

| BPR-130 | Print Reading-Construction | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the interpretation of prints and specifications that are associated with design and construction projects. Topics include interpretation of documents for foundations, floor plans, elevations, and related topics. Upon completion, students should be able to read and interpret construction prints and documents. (2013 FA)

## BUS BUSINESS

| BUS-110 | Introduction to Business | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | FNG-ll <br> Spring <br> Summer |  |
| Corequisites: | None |  |

COURSE DESCRIPTIONS

| BUS-115 | Business Law I | $3(3-0)$ |
| :--- | :--- | :--- | | Fall |
| :--- |
| Spring |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: None
This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them. (2015 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

BUS-121 Business Math $\quad$ 3(2-2) | Fall |
| :--- |
| Spring |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\text {L }}, \mathrm{MAT}-003^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
Corequisites: None
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.(1997 SU)

| BUS-125 | Personal Finance |
| :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$ |
| Corequisites: | None |

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.(1997 SU)

## BUS-137 Principles of Management

$3(3-0) \quad$| Fall |  |
| :--- | :--- |
|  | Spring |
|  | Summer |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: None
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. (2015 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
BUS-139 $\quad$ Entrepreneurship I
Prerequisites: $\quad \mathrm{ENG}-002^{\mathrm{L}}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: $\quad$ None
This course provides an introduction to the principles of entrepreneurship. Topics
Spring
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.
(2008 FA)

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| BUS-148 | Survey of Real Estate | $3(3-0)$ | Fall |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces real estate principles and practices. Topics include real estate finance, real estate law, brokerage, land use planning, property management, and valuation. Upon completion, students should be able to explain basic procedures involved in the lease, purchase, and sale of real property.(1997 SU)
BUS-151 $\quad$ People Skills
Prerequisites: None
Corequisites: None
This course introduces the basic concepts of identity and communication in
the business setting. Topics include self-concept, values, communication styles,
feelings and emotions, roles versus relationships, and basic assertiveness, listening,
and conflict resolution. Upon completion, students should be able to distinguish
between unhealthy, self-destructive, communication patterns and healthy, non-
destructive, positive communication patterns.(1997 SU)

## BUS-153

Human Resource Management
3 (3-0) Fall
Spring

## Prerequisites: $\mathrm{ENG}-002^{\mathrm{L}}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$

Corequisites: 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.(1997 SU)

BUS-225 Business Finance 3 (2-2) Spring
Prerequisites: ACC-120 ${ }^{\text {S }}$
Corequisites: None
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.(1997 SU)
BUS-230 $\quad$ Small Business Management 3(3-0)
Fall
Prerequisites: $\quad$ ENG- $002^{L}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: $\quad$ None

COURSE DESCRIPTIONS

| BUS-255 | Org Behavior in Business | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{L}$ or BSP-4002 |  |  |

## Corequisites: None

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.(1997 SU)

| BUS-260 | Business Communication | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |

## Corequisites: None

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.(2014 SP)

## CAT COMPUTED TOMOGRAPHY

CAT-210 CT Physics \& Equipment 3 (3-0) Spring
Prerequisites: None
Corequisites: None
This course covers the system operations and components, image processing and display, image quality, and artifacts in computed tomography. Emphasis is placed on the data acquisition components, tissue attenuation conversions, image manipulation, and factors controlling image resolution. Upon completion, students should be able to understand the physics and instrumentation used in computed tomography.(1997 SU)

CAT-211 CT Procedures 4(4-0) Fall
Prerequisites: None
Corequisites: None
This course is designed to cover specialized patient care, cross-sectional anatomy, contrast media, and scanning procedures in computed tomography. Emphasis is placed on patient assessment and monitoring, contrast agents' use, radiation safety, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of the imaging procedures in computed tomography.(2016 SP)

CAT-225 CT Clinical Practicum 5
Prerequisites: None
Corequisites: None
This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.(1997 SU)

| CAT-226 CT Clinical Practicum | 6 |
| :--- | :--- | :--- |
| $(0-0-18)$ |  |

Prerequisites: None
Corequisites: None
This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.(1997 SU)

## CEG CIVIL ENG. AND GEOMATIC

CEG-111 Intro to Gis and Gnss 4(2-4) Spring

Prerequisites: None
Corequisites: None
This course introduces the methods and techniques used in the Geographic Information Systems (GIS) and Global Navigation Satellite Systems (GNSS) professions. Emphasis is placed on data collection and mapping using GIS software. Upon completion, students should be able to use GNSS technologies to collect field data and create GIS maps.(2013 FA)

| CEG-115 | Intro to Tech \& Sustainability | $3(2-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | CEG-115 $\mathrm{A}^{\mathrm{L}}$ |  |  |

This course introduces basic skills, sustainability concepts and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, professional ethics, and related topics. Upon completion, students should be able to identify drawing elements and create sketches, perform basic engineering computations and identify measures of sustainable development.(2013 FA)

| CEG-115A | Tech \& Sustainability Lab |
| :--- | :--- | :--- |
| Prerequisites: | None |
| Corequisites: | CEG-115 |

CEG-210 Construction Mtls \& Methods 3 (2-3) Fall Prerequisites: None
Corequisites: EGR-115 ${ }^{\mathrm{L}}$ or CEG-115 ${ }^{\mathrm{L}}$
This course covers the behavior and properties of Portland cement, asphaltic concretes, and other construction materials, including construction methods and equipment. Topics include cementing agents, aggregates, water and admixture materials with their proportions, production, placement, consolidation, curing and their inspection. Upon completion, students should be able to proportion Portland concrete mixes to attain predetermined strengths, perform standard control tests on Portland cement concrete, identify inspection criteria for concretes, identify construction equipment and applications. (2013 FA)

COURSE DESCRIPTIONS

| CEG-211 | Hydrology \& Erosion Control |
| :--- | :--- |
| Prerequisites: | MAT- $121^{\mathrm{S}}, \mathrm{MAT}-171^{\mathrm{S}}, \mathrm{MAT}-003 \mathrm{w} / \mathrm{P} 2 \mathrm{~S}$, or BSP-4003 |
| Corequisites: | None |
| This course introduces basic engineering principles and characteristics of |  |

CEG-212 Intro to Environmental Tech 3(2-3) Spring Prerequisites: EGR-251 ${ }^{\text {S }}$

## Corequisites: None

This course introduces basic engineering principles of hydraulics, and water and wastewater technologies. Topics include fluid statics, fluid dynamics, flow measurement, the collection, treatment, and distribution of water and wastewater. Upon completion, students should be able to identify water and wastewater system elements, describe water and wastewater system processes and perform basic hydraulics and treatment computations.(2013 FA)

CEG-230 Subdivision Planning \& Design 3 (1-6) Spring
Prerequisites: EGR-120 ${ }^{\text {S }}$, CEG- $211^{\text {S }}$, SRV- $211^{\text {S }}$
Corequisites: None
This course covers the planning and design concepts related to subdivisions including analysis of development standards, engineering, and the creation of CAD drawings. Topics include applicable codes, lot creation, roadway system layout, stormwater drainage, low impact development (LID) concepts, and related topics. Upon completion, students should be able to prepare a set of subdivision plans. (2013 FA)

CEG-235 Project Management/Estimating 3(2-3) Spring
Prerequisites: CEG-115 ${ }^{\mathrm{S}}, \mathrm{CIS}-110^{\mathrm{S}}, \mathrm{CIS}-111^{\mathrm{S}}$, EGR- $115^{\mathrm{S}}$, or EGR-125 ${ }^{\mathrm{S}}$
Corequisites: None
This course covers planning and estimating practices which are applicable to the civil engineering and related construction industries. Emphasis is placed on construction project planning and management, material take-offs labor and equipment requirements in accordance with industry formats, and other economic topics. Upon completion, students should be able to accurately complete material take-offs, prepare cost estimates, and prepare construction schedules.(2014 SU)

## CET COMPUTER ENGINEERING TECH

CET-111 Computer Upgrade/Repair I \begin{tabular}{ll}

I 2-3) \& | Fall |
| :--- |
| Spring |
| Summer |

\end{tabular}

Prerequisites: None
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.(2007 FA)

| Default Catalog Header Text |  |  |  |
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| CET-211 | Computer Upgrade/Repair II | $3(2-3)$ | Spring |
| Prerequisites: | CET-111 |  |  |

## CHM CHEMISTRY

| CHM-130 | Gen, Org, \& Biochemistry | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | $C H M-130 A^{L}$ |  |

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.(1997 SU)
CHM-130A $\quad$ Gen, Org, \& Biochem Lab

Prerequisites: | None |
| :--- |
| Corequisites: $\quad$ CHM- $130^{\text {S }}$ |

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.(1997 SU)


COURSE DESCRIPTIONS

CHM-152 General Chemistry II $\quad 4(3-3)$\begin{tabular}{l}
Fall <br>

| Spring |
| :--- |
| Summer |

\end{tabular}

Prerequisites: $\quad \mathrm{CHM}-151^{\mathrm{S}}$, minimum grade CL
Corequisites: None
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.(1997 SU)
CHM-251 Organic Chemistry I 4 (3-3) Fall

Prerequisites: $\mathrm{CHM}-152^{\mathrm{S}}$, minimum grade CL
Corequisites: 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.(1997 SU)
CHM-252 Organic Chemistry II 4 (3-3) Spring

Prerequisites: $\mathrm{CHM}-251^{\mathrm{S}}$, minimum grade CL
Corequisites: None
This course provides continuation of 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 will be 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.(1997 SU)

## CIS INFORMATION SYSTEMS

| CIS-110 | Introduction to Computers | 3(2-2) |
| :--- | :--- | :--- | | Fall |
| :--- |
| Spring |
| Summer |

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.(2006 SP)

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| CIS-111 | Basic PC Literacy | $\mathbf{2 ( 1 - 2 )}$ | Fall <br> Spring <br> Summer |
|  |  |  |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course provides an overview of computer concepts. Emphasis is placed on the |  |  |  |
| use of personal computers and software applications for personal and fundamental |  |  |  |
| workplace use. Upon completion, students should be able to demonstrate basic |  |  |  |
| personal computer skills.(2006 SP) |  |  |  |


| CIS-115 Intro to Prog \& Logic | $3(2-3)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: MAT-003 ${ }^{\text {S }}, \mathrm{BSP}-4003^{\mathrm{S}}$, MAT $^{2} 121^{\mathrm{S}}$, or MAT- $171^{\text {S }}$
Corequisites: None
This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language. (2020 FA)

## CIV CIVIL ENGINEERING

| CIV-111 | Soils and Foundations | $4(2-4)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EGR-251 |  |  |
| Corequisites: | None |  |  |

This course presents an overview of soil as a construction material using both analysis and testing procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil.(2013 FA)
CIV-221 Steel and Timber Design 3 (2-3) Fall

Prerequisites: EGR-251 ${ }^{\text {S }}$
Corequisites: None
This course introduces the basic elements of steel and timber structures. Topics include strength of materials applications, the analysis and design of steel and timber beams, columns, and connections and concepts of structural detailing. Upon completion, students should be able to analyze, design, and draw simple plans using Computer Aided Drafting and Design software (CADD).(2013 FA)

CIV-222 Reinforced Concrete 3 (2-3) Spring
Prerequisites: EGR-251 ${ }^{\text {S }}$
Corequisites: None
This course introduces the basic elements of reinforced concrete structures. Topics include analysis and design of reinforced concrete beams, slabs, columns, footings, and retaining walls. Upon completion, students should be able to analyze and design components of a structure using reinforced concrete and draw simple plans using Computer Aided Drafting and Design software (CADD).(2013 FA)

## CJC CRIMINAL JUSTICE

| CJC-110 | Basic Law Enforcement BLET | 20 | Fall |
| :--- | :--- | :--- | :--- |
|  |  | (10-30) | Spring |

Prerequisites: None
Corequisites: None
This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics include those mandated by North Carolina Administration Code as essential for functioning in law enforcement. Upon completion, the student should be able to demonstrate competence in the topics required for the state comprehensive certification examination.(2019 FA)

| CJC-111 | Intro to Criminal Justice | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.( 1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| CJC-112 | Criminology | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation statistical analysis of criminal behavior past, present, and future social control initiatives and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.(1997 SU)

| CJC-113 | Juvenile Justice | 3 (3-0) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course covers the juvenile justice system and related juvenile issues. Topics |  |  |
| include an overview of the juvenile justice system, treatment and prevention |  |  |
| programs, special areas and laws unique to juveniles, and other related topics. |  |  |
| Upon completion, students should be able to identify/discuss juvenile court |  |  |
| structure/procedures, function and jurisdiction of juvenile agencies, processing/ |  |  |
| detention of juveniles, and case disposition.(1997 SU) Students who have |  |  |
| successfully completed CJC-110, Basic Law Enforcement, may receive credit for |  |  |
| CJC-113. This course has been approved to satisfy the following requirement(s): |  |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |  |


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| CJC-115 | Crime Scene Photography | $3(2-3) \quad$ Spring |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course covers methodologies for photographing crime scenes including their |  |  |  |
| application to forensic sciences, the legal system, and the proper use of digital |  |  |  |
| cameras and accessories. Topics include digital cameras, operational functions |  |  |  |
| required to properly photograph physical evidence and crime scenes, factors |  |  |  |
| affecting admissibility of crime scene photographs, and methods and techniques |  |  |  |
| specific to photographing crime scenes. Upon completion, students should be |  |  |  |
| able to operate digital cameras using appropriate settings to control exposure and |  |  |  |
| depth of field, properly compose various types of crime scene photographs, and |  |  |  |
| use specialized techniques to properly photograph key items of evidence.(2016 |  |  |  |
| FA) |  |  |  |


| CJC-120 | Interviews/Interrogations | 2(1-2) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/ interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.(1997 SU) Students who have successfully completed CJC-110, Basic Law Enforcement, may receive credit for CJC-120.

| CJC-121 | Law Enforcement Operations |
| :--- | :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces fundamental law enforcement operations. Topics include |  |
| the contemporary evolution of law enforcement operations and related issues. |  |
| Upon completion, students should be able to explain theories, practices, and issues |  |
| related to law enforcement operations.(1997 SU) This course has been approved to |  |
| satisfy the following requirement(s): |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |


| CJC-131 | Criminal Law |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course covers the history/evolution/principles and contemporary applications |  |
| of criminal law. Topics include sources of substantive law, classification of crimes, |  |
| parties to crime, elements of crimes, matters of criminal responsibility, and other |  |
| related topics. Upon completion, students should be able to discuss the sources of |  |
| law and identify, interpret, and apply the appropriate statutes/elements.(1997 SU) |  |
| Students who have successfully completed CJC-110, Basic Law Enforcement, may |  |
| receive credit for CJC-131. |  |

COURSE DESCRIPTIONS

| CJC-132 | Court Procedure \& Evidence | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.(1997 SU) Students who have successfully completed CJC-110, Basic Law Enforcement, may receive credit for CJC-132.

CJC-141 Corrections 3 (3-0) Spring Prerequisites: None
Corequisites: None
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| CJC-144 | Crime Scene Processing |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces the theories and practices of crime scene processing and |  |
| investigating. Topics include legal considerations at the crime scene, processing |  |
| indoor and outdoor scenes, recording, note taking, collection and preservation of |  |
| evidence and submission to the crime laboratory. Upon completion, the student |  |
| should be able to evaluate and search various crime scenes and demonstrate |  |
| theapprpriate techniques.(2000 SP) |  |

CJC-146 Trace Evidence $\quad 3$ (2-3) Fall
Prerequisites: None
Corequisites: None
This course provides a study of trace evidence as it relates to forensic science. Topics include collection, packaging, and preservation of trace evidence from crime scenes such as bombings, fires and other scenes. Upon completion, students should be able to demonstrate the fundamental concepts of trace evidence collection, preservation and submission to the crime laboratory.(2000 SP)

| CJC-212 | Ethics \& Comm Relations | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems social change, values, and norms cultural diversity citizen involvement in criminal justice issues and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| CJC-221 | Investigative Principles | $4(3-2)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.(1997 SU) Students who have successfully completed CJC-110, Basic Law Enforcement, may receive credit for CJC-221.

## CJC-222 Criminalistics 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.(1997 SU)

| CJC-225 | Crisis Intervention | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, 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.(1997 SU)

COURSE DESCRIPTIONS

| CJC-231 | Constitutional Law | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.(1997 SU) Students who have successfully completed CJC-110, Basic Law Enforcement, may receive credit for CJC-231.

CJC-232 Civil Liability 3 (3-0) Summer
Prerequisites: None
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.(1997 SU)

## CJC-241 Community-Based Corrections 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.(1997 SU)
CJC-244 $\quad$ Footwear and Tire Imprint
Prerequisites:
None (2-3) Spring
Corequisites: $\quad$ None
This course provides a study of the fundamental concepts of footwear and
tire imprint evidence as related to forensic science. Topics include proper
photographic recording, casting, recognition of wear patterns and imprint
identification. Upon completion, the student should be able to recognize, record,
photograph, and identify footwear and tire imprints.(2000 SP)

CJC-245 Friction Ridge Analysis 3 (2-3) Summer
Prerequisites: None
Corequisites: None
This course introduces the basic elements of fingerprint technology and techniques applicable to the criminal justice field. Topics include the history and meaning of fingerprints, pattern types and classification filing sequence, searching and referencing. Upon completion, the students should be able to discuss and demonstrate the fundamental techniques of basic fingerprint technology.(2000 SP)

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| CJC-246 | Adv. Friction Ridge Analy | 3 (2-3) | Spring |
| Prerequisites: | CJC-245 |  |  |

## CMT CONSTRUCTION MANAGEMENT

## CMT-210 Construction Management Fund 3 (3-0) Fall

Prerequisites: None
Corequisites: 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, students should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry.(2013 FA)

## CMT-212 Total Safety Performance 3 (3-0) Spring <br> Prerequisites: None <br> Corequisites: CMT-210s

This course covers the importance of managing safety and productivity equally by encouraging people to take individual responsibility for safety and health in the workplace. Topics include safety management, controlling construction hazards, communicating and enforcing policies, OSHA compliance, personal responsibility and accountability, safety planning, training, and personal protective equipment. Upon completion, the student should be able to properly supervise safety at a construction jobsite and qualify for OSHA Training Certification.(2004 SP)

## COM COMMUNICATION

| COM-110 | Introduction to Communication | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Communication Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Other Gen. Ed. and Premajor Elective Hours course for A.E.
- Communication course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| COM-120 Intro Interpersonal Com | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |

Prerequisites: None
Corequisites: None
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. (2007 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., and A.S.
- Communication course for A.A.S. and A.G.E.

COM-140 Intro Intercultural Com 3 (3-0) Fall
Prerequisites: None
Corequisites: None
This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture.(2009 SP) This course has been approved to satisfy the following requirement(s):

- Communication Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts course for A.A.S. and A.G.E.

```
COM-150 Intro. to Mass Comm. 3(3-0) AND
Prerequisites: ENG-111 S
Corequisites: None
This course introduces print and electronic media and the new information technologies in terms of communication theory and as economic, political, and social institutions. Topics include the nature, history, functions, and responsibilities of mass communication industries in a global environment and their role and impact in American society. Upon completion, students should be able to demonstrate awareness of the pervasive nature of mass media and how media operate in an advanced post-industrial society.(2010 SP) This course has been approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
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| COM-231 | Public Speaking | $3(3-0)$ |
| :--- | :--- | :--- |
|  | Fall <br> Spring <br> Summer |  |

Prerequisites: None
Corequisites: None
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Communication course for A.A.S.


## COS COSMETOLOGY

| COS-111 Cosmetology Concepts I | $4(4-0)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: $\mathrm{COS}-112^{\mathrm{S}}$
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.(1997 SU)

| COS-112 | Salon I | $8(0-24)$ |
| :--- | :--- | :--- |
| Fall |  |  |
| Spring |  |  |

COS-113 Cosmetology Concepts II 4(4-0) | Fall |
| :--- |
| Spring |

Prerequisites: $\operatorname{COS}-111^{\mathrm{S}}$, minimum grade CL , and $\mathrm{COS}-112^{\mathrm{S}}$
Corequisites: COS-114 ${ }^{\text {S }}$
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.(2016 FA)

COURSE DESCRIPTIONS

| $\cos -114$ | Salon II | $8(0-24)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | $\operatorname{coS}-111^{\mathrm{S}}$, minimum grade CL, and $\cos -112^{\mathrm{S}}$ |  |  |
| Corequisites: | $\cos -113^{\mathrm{S}}$ |  |  |

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.(2016 FA)

COS-115 Cosmetology Concepts III 4(4-0) Summer
Prerequisites: $\operatorname{COS}-111^{\mathrm{S}}$, minimum grade CL , and $\mathrm{COS}-112^{\mathrm{S}}$
Corequisites: COS-116 ${ }^{\text {L }}$
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/ light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. (2016 FA)

| COS-116 | Salon III |
| :--- | :--- |
| Prerequisites: | $\operatorname{COS}-111^{\mathrm{S}}$, minimum grade CL, and $\operatorname{COS}-112^{\mathrm{S}}$ |
| Corequisites: | $\mathrm{COS}-115^{\llcorner }$ |

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.(2016 FA)

COS-117 Cosmetology Concepts IV $\quad 2(2-0) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: $\operatorname{COS}-111^{\mathrm{S}}$, minimum grade CL , and $\operatorname{COS}-112^{\mathrm{S}}$
Corequisites: COS-118 ${ }^{\text {L }}$
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.(2016 FA)

| COS-118 Salon IV | $7(0-21)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: $\quad \mathrm{COS}-111^{\mathrm{S}}$, minimum grade CL , and $\mathrm{COS}-112^{\mathrm{S}}$
Corequisites: COS-117 ${ }^{\text {L }}$
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.(2016 FA)

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| COS-223 | Contemp Hair Coloring | $\mathbf{2 ( 1 - 3 )}$ | Fall <br> Spring |
| Prerequisites: | COS-111 $^{\mathrm{S}}$ and COS-112 ${ }^{\mathrm{s}}$ |  |  |
| Corequisites: | None |  |  |

## CSC COMPUTER SCIENCE

CSC-118 Swift Programming I 3 (2-3) Fall

Prerequisites: None
Corequisites: None
This course introduces the development of iOS applications and Apple applications using Swift programming language. Emphasis is placed on syntax, object-oriented principles, memory management, and functional concepts of Swift programming. Upon completion, students should be able to develop fully functional iOS and Apple applications using Swift programming language.(2018 SU)

CSC-134 C++ Programming 3 (2-3) Summer Prerequisites: MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
Corequisites: None
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.(2006 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective Hours course for A.E.
CSC-139 Visual BASIC Programming 3(2-3) AND

Prerequisites: MAT-003L or BSP-4003L
Corequisites: None
This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.(2006 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS
CSC-151 JAVA Programming 3 (2-3) AND
Prerequisites: MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$

## Corequisites: None

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs.(2006 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective Hours course for A.E.


## CSC-153 C\# Programming 3 (2-3) Spring

Prerequisites: MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
Corequisites: None
This course introduces computer programming using the C\# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment at the beginning level.(2006 SP)

## CSC-218 Swift Programming II 3 (2-3) Spring

Prerequisites: $\mathrm{CSC}-118{ }^{\mathrm{S}}$
Corequisites: None
This course introduces advanced iOS application development using the Swift programming language. Emphasis is placed on navigation, data manipulation, web services, prototyping, debugging, and project planning. Upon completion, students should be able to develop advanced multifunctional iOS and Apple applications using the Swift programming language.(2018 SU)

## CSC-253 Advanced C\# Programming 3(2-3) Fall

Prerequisites: CSC-153 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of CSC 153 using the C\# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.(2006 SP)

## CSC-289 Programming Capstone Project 3 (1-4) Spring

Prerequisites: $\mathrm{CTI}-110^{\mathrm{S}}, \mathrm{CTI}-120^{\mathrm{S}}$, and CTS-115 ${ }^{\mathrm{S}}$
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 placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation.(2016 FA)

## CST CONSTRUCTION

CST-111 Construction I 4 (3-3) Fall
Prerequisites: None
Corequisites: None
This course covers standard and alternative building methods to include wall framing. Topics include safety and footings, foundations, floor framing systems, and wall framing systems commonly used in the construction industry. Upon completion, students should be able to safely erect all framing necessary to begin roof framing.(1997 SU)

CST-112 Construction II 4(3-3) Spring
Prerequisites: CST-111 ${ }^{\text {S }}$
Corequisites: None
This course covers building methods and materials used to dry-in a building. Topics include safety, ceiling/roof framing applications, roof finishes, windows, and exterior doors. Upon completion, students should be able to safely erect different roof types and properly install windows and exterior doors, roofing, and exterior finish materials.(1997 SU)

CST-221 Statics/Structures 4 (3-3) Summer
Prerequisites: ARC-112 ${ }^{\text {S }}$ or CST- $112^{\text {S }}$; MAT- $110^{\text {S }}$, MAT- $121^{\text {S }}$, or MAT-171 ${ }^{\text {S }}$
Corequisites: None
This course covers the principles of statics and strength of materials as applied to structural building components. Topics include forces on columns, beams, girders, and footings and connection points when timber, steel, and concrete members are used. Upon completion, students should be able to accurately analyze load conditions present in structural members.(2016 SP)
CST-231 Soils \& Site Work 4 (3-2) Fall

Prerequisites: MAT-121s or MAT-171s
Corequisites: None
This course covers site conditions and soil types and their physical properties. Topics include site preparation, access, mechanical analysis, classification of soils, and hydrostatics of groundwater. Upon completion, students should be able to adequately prepare a building site according to plans and specifications.(2014 FA)

CST-241 Planning/Estimating I 3(2-2) Spring
Prerequisites: $\mathrm{BPR}-130^{\mathrm{S}}$ or MAT- $121^{\mathrm{S}}$ or MAT-171 ${ }^{\mathrm{S}}$
Corequisites: None
This course covers the procedures involved in planning and estimating a construction/building project. Topics include performing quantity take-offs of materials necessary for a building project. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs involved in a construction project.(2014 FA)

## CTI COMPUTER TECH INTEGRATION

CTI-110 Web, Pgm, \& Db Foundation
3(2-2) Fall
Spring
Prerequisites: None
Corequisites: None
This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table. (2009 FA)
CTI-120 Network \& Sec Foundation 3(2-2) Fall
Prerequisites: None
Corequisites: $\quad$ None
This course introduces students to the Network concepts, including networking
terminology and protocols, local and wide area networks, and network
standards. Emphasis is placed on securing information systems and the various
implementation policies. Upon completion, students should be able to perform
basic tasks related to networking mathematics, terminology, media and protocols.
(2009 FA)

CTI-140 Virtualization Concepts 3 (1-4) AND
Prerequisites: None
Corequisites: None
This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.(2012 SU)

## CTS COMPUTER INFORMATION TECH

CTS-115 Info Sys Business Concepts 3 (3-0) Spring

Prerequisites: None
Corequisites: None
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems. (2006 SP) This course has been approved to satisfy the following requirement(s): - Premajor and/or Elective course for A.A. and A.S.

## CUL CULINARY

CUL-110 Sanitation \& Safety 2(2-0) Fall<br>Spring<br>Summer

$\begin{array}{ll}\text { Prerequisites: } & \text { None } \\ \text { Corequisites: } & \text { None }\end{array}$
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam.(2011 FA)

| CUL-110A | Sanitation \& Safety Lab | $1(0-2)$ |
| :--- | :--- | :--- |
| Fall <br> Spring <br> Summer |  |  |

Prerequisites: None
Corequisites: CUL-110 ${ }^{\text {S }}$
This course provides a laboratory experience for enhancing student skills in the basic principles of sanitation and safety. Emphasis is placed on personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate practical applications of sanitation and safety procedures in the hospitality industry. (2011 FA)
CUL-112 Nutrition for Foodservice 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include personal nutrition fundamentals, weight management, exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection. (2011 FA)

| CUL-120 Purchasing | $2(2-0)$ | Fall <br> Spring |
| :--- | :--- | :--- |

## Prerequisites: MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$ <br> Corequisites: None

This course covers purchasing for foodservice operations. Emphasis is placed on yield tests, procurement, negotiating, inventory control, product specification, purchasing ethics, vendor relationships, food product specifications and software applications. Upon completion, students should be able to apply effective purchasing techniques based on the end-use of the product.(2011 FA)

COURSE DESCRIPTIONS

| CUL-130 | Menu Design | 2 (2-0) | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces menu design and its relationship to foodservice operations. Topics include layout, marketing, concept development, dietary concerns, product utilization, target consumers and trends. Upon completion, students should be able to design, create and produce menus for a variety of foodservice settings.(2011 FA)

CUL-135 Food \& Beverage Service $\quad 2(2-0) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: None<br>Corequisites: CUL-135A ${ }^{L}$

This course is designed to cover the practical skills and knowledge necessary for effective food and beverage service in a variety of settings. Topics include greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate competence in human relations and the skills required in the service of foods and beverages. ( 2011 FA )

CUL-135A Food \& Beverage Serv Lab $\quad 1(0-2) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: None
Corequisites: CUL-135 ${ }^{\text {S }}$
This course provides a laboratory experience for enhancing student skills in effective food and beverage service. Emphasis is placed on practical experiences including greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate practical applications of human relations and the skills required in the service of foods and beverages. (2011 FA)
CUL-140 Culinary Skills I

| Prerequisites: |
| :--- |
| Corequisites: |
| MAT-003 |
| CUL $-110^{S}$ |

This course introduces the fundamental concepts, skills and techniques in basic
cookery, and moist, dry and combination heat. Emphasis is placed on recipe
Conversion, measurements, terminology, classical knife cuts, safe food/equipment
handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon
completion, students should be able to exhibit the basic cooking skills used in the
foodservice industry.(2011 FA)
CUL-160 Baking I

| $3(1-4)$ | Fall |
| :--- | :--- |
|  | Spring |

Prerequisites: MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
Corequisites: CUL-110 ${ }^{\text {S }}$
This course covers basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products. (2011 FA)

| CUL-170 | Garde Manger I | $3(1-4)$ |
| :--- | :--- | :--- |
| Prerequisites: | MAT-003 <br> Coll <br> Spring <br> Summer |  |
| Corequisites: | CUL-110 |  |


| CUL-214 | Wine Appreciation | $\mathbf{2 ( 1 - 2 )}$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{\mathrm{L}}$ or BSP-4002 |  |  |
| Corequisites: | None |  |  |

This course provides an introduction to information about wine from all the major wine producing regions. Emphasis is placed on the history of wine, production, characteristics, wine list development, laws, purchasing and storing requirements. Upon completion, students should be able to evaluate varietal wines and basic food pairings.(2011 FA)
CUL-230 Global Cuisines 5 (1-8) Spring

Prerequisites: CUL-110 ${ }^{\text {S }}$, CUL-110A ${ }^{\text {L }}$, CUL-140 ${ }^{\text {S }}$, CUL-160 ${ }^{\text {L }, ~ C U L-240 ~}$ Corequisites: None
This course provides practical experience in the planning, preparation, and presentation of representative foods from a variety of world cuisines. Emphasis is placed on indigenous ingredients and customs, nutritional concerns, and cooking techniques. Upon completion, students should be able to research and execute a variety of international and domestic menus.(2011 FA)
CUL-240 Culinary Skills II 5 (1-8) Spring
 Corequisites: None
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods appropriate vegetable/starch accompaniments compound sauces plate presentation breakfast cookery and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.(2017 FA)


COURSE DESCRIPTIONS

| CUL-283 | Farm-To-Table | $5(2-6)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | CUL- $110^{S}, C U L-140^{S}$ |  |  |

## Corequisites: None

This course introduces students to the cooperation between sustainable farmers and foodservice operations. Emphasis is placed on environmental relationships, including how foods are grown, processed, and distributed, as well as related implications on quality and sustainability. Upon completion, students should be able to demonstrate an understanding of environmental stewardship and its impact on cuisine.(2011 FA)

## DBA DATABASE MANAGEMENT TECH

DBA-110 Database Concepts $3(2-3)$ Fall

Prerequisites: None
Corequisites: None
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.(2006 SP)

## DBA-120 Database Programming I 3(2-2) Fall <br> Prerequisites: None <br> Corequisites: None

This course is designed to develop SQL programming proficiency. Emphasis is placed 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.(2006 SP)
DBA-221 SQL Server DB Prog II 3(2-2) Spring

Prerequisites: DBA-120 ${ }^{\text {S }}$
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 a SQL Server DBMS application which includes a GUI front-end and report generation.(2006 SP)

## DFT DRAFTING

DFT-119 $\quad$ Basic CAD
Prerequisites: None (1-2) AND
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.(1997 SU)

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| DFT-170 | Engineering Graphics | $3(2-2)$ |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.(2005 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective Hours course for A.E.


## DME DIGITAL MEDIA TECHNOLOGY

DME-110 $\quad$ Intro to Digital Media
Prerequisites: $\quad$ None (2-2) Fall
Corequisites: None
This course introduces students to key concepts, technologies, and issues related
to digital media. Topics include emerging standards, key technologies and related
design issues, terminology, media formats, career paths, and ethical issues. Upon
completion, students should be able to demonstrate the various media formats
that are used in digital media technology.(2004 FA)
DME-115 $\quad$ Graphic Design Tools
Prerequisites: None
Corequisites: $\quad$ None
This course provides students with an introduction to creative expression and
art/design techniques in a digital environment. Emphasis is placed on designing,
creating, editing and integrating visual components consisting of bit-mapped and
vector-based images, drawings, banners, text, simple animations, and multiple
layers. Upon completion, students should be able to design and produce a range of
visual products using digital processing techniques.(2O23SP)
DME-120 $\quad$ Intro to Multimedia Appl
Prerequisites: None (2-2) Summer
Corequisites: None
This course introduces storyboarding and multimedia application design. Topics
include vector and bit-mapped graphics, interactive multimedia interfaces, layering
techniques, image and animation libraries, and scripting. Upon completion,
students should be able to produce basic high-quality interactive multimedia
applications.(2019 FA)
DME-130 Digital Animation I 3 (2-2) Fall

COURSE DESCRIPTIONS

| DME-140 | Intro to Audio/Video Media | $3(2-3)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course is designed to teach students how to manipulate digital and audio content for multimedia applications. Topics include format conversion and a review of current technologies and digital formats. Upon completion, students should be able to modify existing audio and video content to meet a range of production requirements associated with digital media applications.(2023 SP)

| DME-215 | Adv Graphic Design Tools | 3(2-3) | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | DME- $115^{\text {S }}$ |  |  |
| Corequisites: | None |  |  |

This course provides students with advanced design techniques in a digital environment. Emphasis is placed on understanding principles of design and typography, and applying them effectively in projects. Upon completion, students should be able to design and produce a range of visual products using advanced digital design techniques and principles.(2023 SP)

| DME-285 | Systems Project |
| :--- | :--- |
| Prerequisites: | DME-12O ${ }^{\text {S }}$, DME-130 |
| Corequisites: | None |

This course provides an opportunity to complete a significant digital media project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete, maintain and implement a digital media project.(2004 FA)

## DRA DRAMA/THEATRE

| DRA-111 | Theatre Appreciation | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| 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. (1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.
DRA-120 $\quad$ Voice for Performance
Prerequisites: None
Corequisites: None
This course provides guided practice in the proper production of speech for the
theatre. Emphasis is placed on improving speech, including breathing, articulation,
pronunciation, and other vocal variables. Upon completion, students should be
able to demonstrate effective theatrical speech.(1997 SU) This course has been
approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

| DRA-126 | Storytelling |  |  |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None | AND |  |
| This |  |  |  |

This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## DRA-128 Children's Theatre 3 (3-0) Spring

 Prerequisites: DRA-130 ${ }^{\text {L }}$
## Corequisites: None

This course introduces the philosophy and practice involved in producing plays for young audiences. Topics include the selection of age-appropriate scripts and the special demands placed on directors, actors, designers, and educators in meeting the needs of young audiences. Upon completion, students should be able to present and critically discuss productions for children.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| DRA-130 | Acting I | $3(0-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| DRA-131 | Acting II | $3(0-6)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | DRA- $130^{\mathrm{L}}$ |  |  |
| Corequisites: | None |  |  |

This course provides additional hands-on practice in the actor's craft. Emphasis is placed on further analysis, characterization, growth, and training for acting competence. Upon completion, students should be able to explore their creativity in an acting ensemble.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| DRA-135 | Acting for the Camera I | 3(1-4) $\quad$ Spring |
| :--- | :--- | :--- |
| Prerequisites: | DRA-130L |  |
| Corequisites: | None |  |

COURSE DESCRIPTIONS

| DRA-140 | Stagecraft I | $3(0-6)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the theory and basic construction of stage scenery and properties. Topics include stage carpentry, scene painting, stage electrics, properties, and backstage organization. Upon completion, students should be able to pursue vocational and avocational roles in technical theatre.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## DRA-141 Stagecraft II 3 (0-6) Spring

Prerequisites: DRA-140 ${ }^{\text {S }}$
Corequisites: None
This course provides additional hands-on practice in the elements of stagecraft. Emphasis is placed on the design and implementation of the arts and crafts of technical theatre. Upon completion, students should be able to pursue vocational or avocational roles in technical theatre.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
DRA-145 $\quad$ Stage Make-Up
Prerequisites: None (1-2) AND
Corequisites: None
This course covers the research, design, selection of materials, and application
of stage make-up, prosthetics, wigs, and hairpieces. Emphasis is placed on the
development of techniques, style, and presentation of the finished make-up. Upon
completion, students should be able to create and apply make-up, prosthetics,
and hairpieces.(1997 SU) This course has been approved to satisfy the following
requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
DRA-170 $\quad$ Play Production I
Prerequisites: None
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.(1997 SU) This course has been approved to satisfy the
following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

DRA-171 Play Production II $3(0-9)$ Fall Prerequisites: DRA-170 ${ }^{\text {S }}$

## 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. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

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| DRA-211 | Theatre History I | $3(3-0)$ | Fall |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the development of theatre from its origin to the closing of the British theatre in 1642. Topics include the history, aesthetics, and representative dramatic literature of the period. Upon completion, students should be able to trace the evolution of theatre and recognize the styles and types of world drama. (1997 SU) This course has been approved to satisfy the following requirement(s): - Humanities/Fine Arts Gen. Ed. course for A.A. and A.S.
DRA-212 $\quad$ Theatre History II

Prerequisites: | None |
| :--- |
| Corequisites: |
| None |

This course covers the development of theatre from 1660 through the diverse
influences which shaped the theatre of the twentieth century. Topics include
the history, aesthetics, and representative dramatic literature of the period.
Upon completion, students should be able to trace the evolution of theatre and
recognize the styles and types of world drama.(1997 SU) This course has been
approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A. and A.S.

DRA-240 Lighting for the Theatre 3 (2-2) Spring Prerequisites: None
Corequisites: None
This course is an applied study of theatre lighting and is designed to train theatre technicians. Emphasis is placed on lighting technology including the mechanics of lighting and light control equipment by practical work with lighting equipment. Upon completion, students should be able to demonstrate competence with lighting equipment.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## ECM ELECTRONIC COMMERCE

| ECM-210 | Intro. to E-Commerce | 3(2-2) |
| :--- | :--- | :--- |
| Prerequisites: | ENG-0O2 ${ }^{\mathrm{L}}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$; CIS- $110^{\mathrm{L}}$ or CIS-111 |  |
| Corequisites: | None |  |

This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to setup a working ecommerce Internet web site.(2003 FA)

COURSE DESCRIPTIONS

## ECO ECONOMICS

## ECO-151 Survey of Economics 3(3-0) Fall <br> Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {, MAT-003 }}$ or BSP-4003 ${ }^{\text {L }}$ <br> Corequisites: None

This course, for those who have not received credit for ECO 251 or 252, introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

ECO-251 Prin of Microeconomics \begin{tabular}{ll}

3(3-0) \& | Fall |
| :--- |
| Spring |
| Summer |

\end{tabular}

## Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {, }}$, MAT-003 ${ }^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$ <br> Corequisites: None

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., A.E., A.S., and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

ECO-252 Prin of Macroeconomics $\quad 3(3-0)$ Fall | Spring |
| :--- |

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}, \mathrm{MAT}-003^{\text {L }}$ or BSP-4003 ${ }^{\text {L }}$
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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., A.S., and A.S. Teacher Preparation
- Other Gen. Ed. and Premajor Elective course for A.E.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## EDU EDUCATION

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EDU-114 Intro to Family Childcare 3(3-0) Spring
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Prerequisites: None
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. (2020 FA)

```
EDU-119 Intro to Early Child Educ 4(4-0) Fall
Prerequisites: None
Corequisites: None
This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional developmentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, appropriate environments, schedules, and activity plans.(2022 FA)
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## EDU-131 Child, Family, and Community $3(3-0) \quad$ Fall <br> Prerequisites: None <br> Corequisites: None

This course covers the development of partnerships among culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing and supporting respectful relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.(2020 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS

| EDU-144 | Child Development I | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/ atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.(2020 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
EDU-145
Child Development II
Prerequisites:
Corequisites:
None
This course includes the theories of child development, observation and
assessment, milestones, and factors that influence development, from preschool
through middle childhood. Emphasis is placed on knowledge, observation
and assessment of developmental sequences in approaches to play/learning,
emotional/social, health/physical, language/communication and cognitive
domains. Upon completion, students should be able to compare/contrast typical/
atypical developmental characteristics, explain biological and environmental
factors that impact development, and identify evidence-based strategies for
enhancing development for children that are culturally, linguistically, and ability
diverse.(202O FA) This course has been approved to satisfy the following
requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

| EDU-146 | Child Guidance |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces evidence-based strategies to build nurturing relationships |  |
| with each child by applying principles and practical techniques to facilitate |  |
| developmentally appropriate guidance. Topics include designing responsive/ |  |
| supportive learning environments, cultural, linguistic and socio-economic |  |
| influences on behavior, appropriate expectations, the importance of |  |
| communication with children/families including using technology and the use |  |
| of formative assessments in establishing intentional strategies for children with |  |
| unique needs. Upon completion, students should be able to demonstrate direct/ |  |
| indirect strategies to encourage social skills, self-regulation, emotional expression |  |
| and positive behaviors while recognizing the relationship between children's social, |  |
| emotional and cognitive development.(2020 FA) |  |


| EDU-151 | Creative Activities | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidencebased teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.(2022 FA)

## EDU-153 Health, Safety and Nutrition 3(3-0) Spring Prerequisites: None <br> Corequisites: None

This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.(2020 FA)
EDU-157 Active Play
Prerequisites: None (2-2) Fall
Corequisites: None
This course introduces physical activities to promote the development of the
whole child, birth through middle childhood. Topics include active play, outdoor
learning, design of the environment, development of play skills, loose parts play,
nature play, risk benefit assessment, advocacy, and family/community connection.
Upon completion, students should be able to discuss the stages of play, the role
of teachers in play, active play environments, advocate for the child's right to
play, and plan and assess appropriate experiences using NC Foundations for Early
Learning and Development.(2O22 FA)

| EDU-184 | Early Child Intro Pract | 2 (1-3) | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EDU-119 |  |  |
| Corequisites: | None |  |  |

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.(2022 FA)

COURSE DESCRIPTIONS

| EDU-187 | Teaching and Learning for All | $4(3-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces students to knowledge, concepts, and best practices needed to provide developmentally appropriate, effective, inclusive, and culturally responsive educational experiences in the classroom. Topics include growth and development, learning theory, student motivation, teaching diverse learners, classroom management, inclusive environments, student-centered practices, instructional strategies, teaching methodologies, observation/assessment techniques, educational planning, reflective practice, collaboration, cultural competence, ethics, professionalism, and leadership. Upon completion, students should be able to identify the knowledge, skills, roles, and responsibilities of an effective educator as defined by state and national professional teaching standards.(2020 FA) This course has been approved to satisfy the following requirement(s):

- Other Required Hours/Universal Ed. course for A.A. Teacher Preparation and A.S. Teacher Preparation
EDU-216 $\quad$ Foundations of Education
Prerequisites: None
Corequisites: None
This course introduces the examination of the American educational systems and
the teaching profession. Topics include the historical and philosophical influences
on education, various perspectives on educational issues, and experiences in
birth through grade 12 classrooms. Upon completion, students should be able to
reflect on classroom observations, analyze the different educational approaches,
including classical/traditional and progressive, and have knowledge of the various
roles of educational systems at the federal, state and local level.(2O2O FA) This
course has been approved to satisfy the following requirement(s):
- Other Required Hours for A.A. Teacher Preparation and A.S. Teacher
Preparation
- Premajor and/or Elective course for A.A. and A.S.
EDU-221 Children With Exceptionalities 3 (3-0) Spring

Prerequisites: EDU-144 ${ }^{\text {S }}$, EDU-145 ${ }^{\text {S }}$

## Corequisites: None

This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/ adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development. ( 2020 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

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| :--- | :--- | :--- | :--- |
| EDU-234 | Infants, Toddlers, and Twos | 3 (3-0) $\quad$ Spring |  |
| Prerequisites: | EDU-119S |  |  |


| EDU-235 | School-Age Develop \& Programs | 3(3-0) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| 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 and program |  |  |
| development. Upon completion, students should be able to discuss developmental |  |  |
| principles for culturally, linguistically, and ability diverse children ages five to |  |  |
| twelve and plan and implement developmentally appropriate programs and |  |  |
| activities.(2020 FA) |  |  |

EDU-250 Teacher Licensure Preparation 3 (3-0) Spring
Prerequisites: ENG-111 ${ }^{\text {S }}$; MAT-143 ${ }^{\text {S }}$, MAT-152 ${ }^{\text {S }}$, or MAT-171 ${ }^{\text {S }}$
Corequisites: None
This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.(2018 FA) This course has been approved to satisfy the following requirement(s):

- Other Required Hours/Universal Ed. course for A.A. Teacher Preparation and A.S. Teacher Preparation

| EDU-251 | Exploration Activities |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course covers fundamental concepts in the content areas of science, |  |
| technology, engineering, math and social studies through investigative |  |
| experiences. Emphasis is placed on exploring fundamental concepts, |  |
| developmentally appropriate scope and sequence, and teaching strategies to |  |
| engage each child in the discovery approach. Upon completion, students should |  |
| be able to understand major concepts in each content area and implement |  |
| appropriate experiences for young children.(2022 FA) |  |

COURSE DESCRIPTIONS

| EDU-259 | Curriculum Planning | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EDU-119 |  |  |

## Corequisites: None

This course is designed to focus on using content knowledge to build developmentally effective approaches for culturally/linguistically/ability diverse young children. Topics include components of curriculum, a variety of curriculum models, authentic observation and assessment, and planning developmentally appropriate experiences aligned with the NC Foundations for Early Learning and Development. Upon completion, students should be able to understand, evaluate, and use curriculum to plan for individual/group needs.(2022 FA)

EDU-261 Early Childhood Admin I 3 (3-0) Summer
Prerequisites: None
Corequisites: EDU-119 ${ }^{\text {S }}$
This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.(2020 FA)

## EDU-262 Early Childhood Admin II 3 (3-0) Summer

 Prerequisites: EDU-119 ${ }^{\text {S }}$, EDU-261 ${ }^{\text {S }}$
## Corequisites: None

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.(2020 FA)

| EDU-271 | Educational Technology |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces the ethical use of technology to enhance teaching and |  |
| learning in all educational settings. Emphasis is placed on technology concepts, |  |
| ethical issues, digital citizenship, instructional strategies, assistive technology, and |  |
| the use of technology for professional development and communication. Upon |  |
| completion, students should be able to discuss technology concepts, ethically use |  |
| a variety of technology resources, demonstrate appropriate technology skills in |  |
| educational environments, and identify assistive technology.(2020 FA) |  |


| EDU-275 |  |  | Effective Teach Train |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None | $\mathbf{2 ( 2 - 0 )}$ | AND |
| 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.(2020 FA)

| EDU-279 | Literacy Develop and Instruct |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course is designed to provide students with concepts and skills of literacy |  |
| development, instructional methods/materials and assessment techniques needed |  |
| to provide scientifically-based, systematic reading and writing instruction into |  |
| educational practice. Topics include literacy concepts, reading and writing |  |
| development, developmentally appropriate pedagogy, culturally-responsive |  |
| instruction, standards-based outcomes, lesson planning, formative/summative |  |
| assessment, recognizing reading difficulties, research-based interventions, |  |
| authentic learning experiences, classroom implementation, and reflective practice. |  |
| Upon completion, students should be able to plan, implement, assess, evaluate, |  |
| and demonstrate developmentally appropriate literacy instruction aligned to the |  |
| NC Standard Course of Study and other state and national standards.(202O FA) |  |
| This course has been approved to satisfy the following requirement(s): |  |
| - Other Required Hours/Universal Ed. course for A.A. Teacher Preparation and |  |
| A.S. Teacher Preparation |  |


| EDU-280 | Language/Literacy Experiences | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/ assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse. (2020 FA)

| EDU-284 | Early Child Capstone Prac |
| :--- | :--- |
| Prerequisites: | EDU- $119^{\mathrm{S}}$, EDU- $144^{\mathrm{S}}$, EDU- $145^{\mathrm{S}}$, EDU-146 ${ }^{\mathrm{S}}$, EDU-1515 |$\quad$ Spring

This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children supporting/engaging families and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.(2020 FA)

COURSE DESCRIPTIONS
EGR ENGINEERING
EGR-110 Intro to Engineering Tech 2(1-2) Fall
Spring
Prerequisites: None
Corequisites: None
This course introduces general topics relevant to engineering technology. Topics include career assessment, professional ethics, critical thinking and problem solving, usage of college resources for study and research, and using tools for engineering computations. Upon completion, students should be able to choose a career option in engineering technology and utilize college resources to meet their educational goals.(2005 SP)

| EGR-115 | Intro to Technology | $3(2-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | EGR-115A |  |  |

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.(2005 SP)

| EGR-115A | Intro to Technology Lab | $1(0-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | EGR- $115^{\mathrm{S}}$ |  |  |

This course provides a laboratory setting for EGR 111. Emphasis is placed on developing skills in dimensional analysis, measurement systems, engineering graphics, and calculator applications. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in EGR 115.(2005 SP)

EGR-120 Eng and Design Graphics 3 (2-2) Spring Prerequisites: None
Corequisites: None
This course introduces the graphical tools for engineering and design communications. Emphasis is placed upon selecting the appropriate methods and tools and conveying ideas using sketches, orthographic views and projections, and computer graphics applications. Upon completion, students should be able to communicate essential features or two-dimensional and three-dimensional objects using the proper tools and methods. (2013 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| EGR-125 | Appl Software for Tech |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course introduces personal computer software and teaches students how to |  |
| customize the software for technical applications. Emphasis is placed on the use |  |
| of common office applications software programs such as spreadsheets, word |  |
| processing, graphics, and internet access. Upon completion, students should be |  |
| able to demonstrate competency in using applications software to solve technical |  |
| problems and communicate the results in text and graphical formats.(2005 SP) |  |


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| :--- | :--- | :--- | :---: |
| EGR-150 $\quad$ Intro to Engineering | 2 (1-2) | Fall |  |
| Spring |  |  |  |

## EGR-220 Engineering Statics 3 (3-0) AND <br> Prerequisites: PHY-251 ${ }^{\text {S }}$ <br> Corequisites: MAT-272 ${ }^{\text {S }}$

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. (1997 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective course for A.E.

| EGR-251 | Statics | 3 (2-2) | Summer |
| :---: | :---: | :---: | :---: |
| Prerequisites: | ARC-111 ${ }^{\text {L }}$, CEG-115 ${ }^{\text {L }}$ or EGR-115 ${ }^{\text {L }}$ |  |  |
| Corequisites: | MAT-121 ${ }^{\text {L }}$ or MAT-171 ${ }^{\text {L }}$ |  |  |
| This course co of forces and Upon completion structures. $(20$ | ers the concepts and principle moments on structures in twon, students should be able to 3 FA ) | inclu ions in d mom | systems uilibrium. ts on |

## ELC ELECTRICITY

| ELC-113 | Residential Wiring | 4 (2-6) AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course introduces the care/usage of tools and materials used in residential |  |  |
| electrical installations and the requirements of the National Electrical Code. Topics |  |  |
| include NEC, electrical safety, and electrical print 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 residential electrical installations.(2013 FA) |  |  |

COURSE DESCRIPTIONS

| ELC-114 | Commercial Wiring | $4(2-6)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC safety electrical blueprints planning, layout, and installation of equipment and conduits and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.(2013 FA)

| ELC-115 | Industrial Wiring | $4(2-6)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment. (2013 FA)

| ELC-117 | Motors and Controls | $4(2-6)$ | AND |
| :--- | :--- | :--- | :--- |
| 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.(2013 FA)

| ELC-128 | Intro to PLC | $3(2-3)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs. (2013 FA)
ELC-131 $\quad$ Circuit Analysis I $\quad 4$ (3-3) Fall
Prerequisites: None
Corequisites: None
This course introduces DC and AC electricity with an emphasis on circuit analysis,
measurements, and operation of test equipment. Topics include DC and AC
principles, circuit analysis laws and theorems, components, test equipment
operation, circuit simulation, and other related topics. Upon completion, students
should be able to interpret circuit schematics design, construct, verify, and analyze
DC/AC circuits and properly use test equipment.(2013 FA)
ELC-215 $\quad$ Electrical Maintenance
Prerequisites: $\quad$ None
Corequisites:
This course introduces the theory of maintenance and the skills necessary to
maintain electrical equipment found 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.(2007 FA)

## ELN ELECTRONICS

ELN-131 Analog Electronics I 4(3-3) Spring

Prerequisites: None
Corequisites: None
This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.(2013 FA)

ELN-133 Digital Electronics 4(3-3) Summer
Prerequisites: None
Corequisites: None
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.(2013 FA)

ELN-232 Intro to Microprocessors 4(3-3) Spring
Prerequisites: None
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.(1997 SU)

EMS EMERGENCY MEDICAL SCIENCE

EMS-115
Prerequisites:
Defense Tactics for EMS
Corequisites:
None $\quad \mathbf{2 ( 1 - 3 )}$ AND

COURSE DESCRIPTIONS

| EMS-120 | Advanced EMT | $6(4-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | EMS $-110^{\text {S }}$ |  |
| Corequisites: | $\mathrm{EMS}-121^{\mathrm{S}}$ |  |

This course is designed to provide the essential information on pre-hospital management techniques appropriate to the level of the Advanced EMT. Topics must meet current credentialing and/or regulatory guidelines for the Advanced EMT as outlined by the NC Office of EMS. Upon completion, students should be able to demonstrate competency at the Advanced EMT level.(2019 SP)

## EMS-121 AEMT Clinical Practicum 2(0-0-6) AND

Prerequisites: EMS-110 ${ }^{\text {S }}$
Corequisites: EMS-120 ${ }^{\text {S }}$
This course provides the hospital and field internship/clinical experiences required in preparation for the Advanced EMT certification. Emphasis is placed on performing patient assessments, treatments, and interactions appropriate at the Advanced EMT level of care. Upon completion, students should be able to demonstrate competency at the Advanced EMT skill level.(2019 SP)

EMS-122 EMS Clinical Practicum I 1 (0-0-3) Spring
Prerequisites: EMS-110 ${ }^{\text {S }}$
Corequisites: None
This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competency with fundamental paramedic level skills.(2019 SP)
EMS-125 $\quad$ EMS Instructor Methodology
Prerequisites: None
Corequisites: $\quad$ (2-2) AND
This course covers the information needed to develop and instruct EMS courses.
Topics include instructional methods, lesson plan development, time management
skills, and theories of adult learning. Upon completion, students should be able to
teach EMS courses and meet the North Carolina EMS requirements for instructor
methodology.(2019 SP)

EMS-130 Pharmacology 4 (3-3) Spring
Prerequisites: EMS-110 ${ }^{\text {S }}$
Corequisites: None
This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.(2019 SP)

| Default Catalog Header Text |  |  |  |
| :--- | :--- | :--- | :---: |
| EMS-131 $\quad$ Advanced Airway Management | 2 (1-2) | Spring |  |
| Prerequisites: | EMS-110 |  |  |


| EMS-140 | Rescue Scene Management | 2(1-3) |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment. (2014 SP)

| EMS-150 | Emergency Vehicles \& EMS Comm |  |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This |  |  |

This course covers the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.(2014 SP)

| EMS-160 | Cardiology I | $3(2-3)$ |
| :--- | :--- | :--- |
| Prerequisites: | SMSing |  |

Prerequisites: EMS-110 ${ }^{\text {S }}$
Corequisites: None
This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and rhythm interpretation. Upon completion, students should be able to recognize and interpret rhythms.(2019 SP)
EMS-210 Adv. Patient Assessment 2 (1-3) Spring

Prerequisites: EMS-110 ${ }^{\text {S }}$
Corequisites: None
This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.(2019 SP)

| EMS-220 | Cardiology II |
| :--- | :--- | :--- |
| Prerequisites: | EMS-122 |
| , EMS $-13 O^{S}$, and EMS-160 |  |

COURSE DESCRIPTIONS

| EMS-221 | EMS Clinical Practicum II | 2 (0-0-6) Summer |
| :--- | :--- | :--- |
| Prerequisites: | EMS-121 ${ }^{\text {S }}$ or EMS-122 |  |

Corequisites: None
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.(2019 SP)

EMS-231 EMS Clinical Pract III 3 (0-0-9) Fall
Prerequisites: EMS-221 ${ }^{\text {S }}$
Corequisites: None
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advancedlevel care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.(2014 SP)
EMS-235 EMS Management
Prerequisites: None
Corequisites: $\quad$ None (2-0) AND
This course stresses the principles of managing a modern emergency medical
service system. Topics include structure and function of municipal governments,
EMS grantsmanship, finance, regulatory agencies, system management, legal
issues, and other topics relevant to the EMS manager. Upon completion, students
should be able to understand the principles of managing emergency medical
service delivery systems.(1997 SU)
EMS-240 Patients W/ Special Challenges 2(1-2) Fall

Prerequisites: $\mathrm{EMS}-122^{\mathrm{S}}$ and EMS-130 ${ }^{\text {S }}$
Corequisites: None
This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.(2014 SP)

## EMS-241 EMS Clinical Practicum IV

4 (0-0-12) Spring
Prerequisites: EMS-231 ${ }^{\text {S }}$
Corequisites: None
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.(2014 SP)

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| :--- | :--- | :--- | :--- |
| EMS-243 | Wilderness EMT | $\mathbf{2 ( 1 - 2 )}$ | AND |
| Prerequisites: | EMS-110 |  |  |


| EMS-250 | Medical Emergencies | $4(3-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EMS-122 ${ }^{\mathrm{S}}$ and EMS-130 |  |  |

## Corequisites: None

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/ injuries affecting the following systems: respiratory, neurological, abdominal/ gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.(2014 SP)

| EMS-260 | Trauma Emergencies | 2 (1-3) | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EMS-122 ${ }^{\mathrm{S}}$ and EMS-130 |  |  |
| Corequisites: | None |  |  |

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care. (2014 SP)

| EMS-270 | Life Span Emergencies | $4(3-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | EMS-122 ${ }^{\mathrm{S}}$ and EMS-130 |  |  |
| Corequisites: | None |  |  |

This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.(2019 SP)

| EMS-280 | EMS Bridging Course | $3(2-2) \quad$ AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course is designed to provide currently credentialed state or national |  |  |
| Paramedic students with the most current education trends in Paramedic Practice. |  |  |
| Emphasis is placed on transitions in healthcare. Upon completion, students should |  |  |
| be able to integrate emerging trends in pre-hospital care.(2019 SP) |  |  |


| COURSE DESCRIPTIONS |  |  |  |
| :--- | :--- | :--- | :--- |
| EMS-285 | EMS Capstone | $\mathbf{2 ( 1 - 3 )}$ | Spring |
| Prerequisites: | EMS-220 |  |  |
| Corequisites: | EMS-250 |  |  |
| None |  |  |  |
| This course provides an opportunity to demonstrate problem-solving skills |  |  |  |
| as a team leader in simulated patient scenarios and is required for paramedic |  |  |  |
| certification. Emphasis is placed on critical thinking, integration of didactic and |  |  |  |
| psychomotor skills, and effective performance in simulated emergency situations. |  |  |  |
| Upon completion, students should be able to recognize and appropriately respond |  |  |  |
| to a variety of EMS-related events.(1997 SU) |  |  |  |

ENG ENGLISH

| ENG-002 $\quad$ Transition English | 3(0-6) | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
|  |  |  |
| Summer |  |  |

ENG-011 Writing and Inquiry Support 2 (1-2) Fall
Spring Summer
Prerequisites: None
Corequisites: ENG-111 ${ }^{\text {L }}$
This course is designed to support students in the development of skills necessary for success in ENG 111 by complementing, supporting, and reinforcing ENG 111 Student Learning Outcomes. Emphasis is placed on developing a growth mindset, expanding skills for use in active reading and writing processes, recognizing organizational relationships within texts from a variety of genres and formats, and employing appropriate technology when reading and composing texts. Upon completion, students should be able to apply active reading strategies to collegelevel texts and produce unified, well-developed writing using standard written English.(2018 FA)

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| :---: | :---: | :---: |
| ENG-111 | Writing and Inquiry 3 (3-0) | Summ |
| Prerequisites: ENG-002 ${ }^{\text {S }}$ or BSP-4002 ${ }^{\text {S }}$ |  |  |
| Corequisites: ENG-011 ${ }^{\text {S }}$ |  |  |
| This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.(2020 FA) |  |  |
| This course has been approved to satisfy the following requirement(s): <br> - UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation <br> - English Composition Gen. Ed. course for A.A.S. and A.G.E. |  |  |

ENG-112 Writing/Research in the Disc $3(3-0) \quad$ Fall
Spring
Summer

Prerequisites: ENG-111 ${ }^{\text {S }}$
Corequisites: None
This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- English Composition Gen. Ed. course for A.A.S. and A.G.E.

| ENG-114 Prof Research \& Reporting | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-111 ${ }^{\text {S }}$
Corequisites: None
This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. ( 1997 SU) This course has been approved to satisfy the following requirement(s):

- English Composition Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
- English Composition Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| ENG-125 | Creative Writing I | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |

## Corequisites: None

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. (2001 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## ENG-126 Creative Writing II 3 (3-0) AND

Prerequisites: ENG-125 ${ }^{\text {S }}$
Corequisites: None
This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## ENG-131 Introduction to Literature 3 (3-0) AND

Prerequisites: ENG-111 ${ }^{\text {S }}$
Corequisites: ENG-112 ${ }^{\text {S }}$ or ENG-114 ${ }^{\text {S }}$
This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

ENG-231 American Literature I 3 (3-0) Fall
Spring
Summer
Prerequisites: ENG-112 ${ }^{\text {S }}$ or ENG- $114^{\text {S }}$

## Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

ENG-232 American Literature II $\quad 3$ (3-0) | Spring |
| :--- |
| Summer |

## Prerequisites: ENG-112 ${ }^{\text {S }}$ or ENG-114 ${ }^{\text {S }}$

Corequisites: None
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts.(2014
FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## ENG-241 British Literature I 3 (3-0) Fall Prerequisites: ENG-112 ${ }^{\text {S }}$ or ENG-114 ${ }^{\text {S }}$ <br> Corequisites: None

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. (1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.
ENG-242 British Literature II 3(3-0) Spring

Prerequisites: ENG-112 ${ }^{\text {S }}$ or ENG-114 ${ }^{\text {S }}$
Corequisites: None
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## ENG-261 World Literature I 3 (3-0) AND

Prerequisites: ENG-112 ${ }^{\text {S }}$ or ENG-114 ${ }^{\text {S }}$
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 placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| ENG-262 | World Literature II | 3(3-0) |
| :--- | :--- | :--- |
| Prerequisites: | ENG-112 ${ }^{\mathrm{S}}$ or ENG-114 |  |

ENG-112 or ENG-114
Corequisites: None
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| ENG-273 | African-American Literature | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-112 ${ }^{\mathrm{S}}$ or ENG-114 |  |  |
| Corequisites: | None |  |  |

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## ENV ENVIRONMENTAL SCIENCE

| ENV-226 | Environmental Law | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course covers federal laws and acts concerning environmental quality standards and the use of resources, legal procedures for enforcing laws, and problems concerning enforcement. Emphasis is placed on environmental law basics, water quality laws, air quality laws, waste disposal laws, and biological resource protection laws. Upon completion, students should be able to demonstrate an understanding of federal/state environmental laws and their importance to the protection of environmental quality. (2013 FA)

## EPT EMERGENCY PREPAREDNESS

EPT-140 $\quad$ Emergency Management $\quad 3(3-0) \quad$ Fall
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.(2014 FA)

## FIP FIRE PROTECTION

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FIP-120 Intro to Fire Protection 3(3-0) Fall
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Prerequisites: None
Corequisites: None
This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.(2014 FA)

| FIP-124 | Fire Prevention \& Public Ed | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. 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 citizens or industrial group.(2014 FA)

FIP-132 Building Construction 3 (3-0) Spring
Prerequisites: None
Corequisites: None
This course covers the principles and practices reference in NFPA standard 220 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 and their positive or negative aspects as related to fire conditions.(2014 FA)

## FIP-136 Inspections \& Codes 3 (3-0) Fall

Prerequisites: None
Corequisites: None
This course covers the fundamentals of fire and building codes and procedures to conduct an inspection referenced in NFPA standard 1730. 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.(2014 FA)

| FIP-152 | Fire Protection Law | 3 (3-0) |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course covers fire protection law as referenced in NFPA standard 1. Topics |  |  |
| include 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.(2014 FA) |  |  |

COURSE DESCRIPTIONS

| FIP-220 | Fire Fighting Strategies | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fireground 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.(2014 FA)

| FIP-224 | Fire Instructor I \& II |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None (4-0) Fall |
| 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 the requirements of the Fire |  |
| Instructor I and II objectives from National Fire Protection Association (NFPA) |  |
| 1041.(2014 FA) |  |

FIP-228 Local Govt Finance 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operations of a department.(2014 FA)

| FIP-230 | Chem of Hazardous Mat I | $5(5-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | Foll |  |
| Corequisites: | None |  |

FIP-232 Hydraulics \& Water Dist 3 (2-2) Fall
Prerequisites: None
Corequisites: None
This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices reference in NFPA standard 25. Emphasis is placed 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.(2014 FA)

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| FIP-240 | Fire Service Supervision | $3(3-0) \quad$ Spring |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course covers supervisory skills and practices in the fire protection field. |  |  |  |
| Topics include the supervisor's job, supervision skills, the changing work |  |  |  |
| environment, managing change, organizing for results, discipline and grievances, |  |  |  |
| and safety. Upon completion, students should be able to demonstrate an |  |  |  |
| understanding of the roles and responsibilities of effective fire service supervision, |  |  |  |
| meeting elements of NFPA 1021.(2014 FA) |  |  |  |

FIP-256 Munic Public Relations 3 (3-0) Spring

Prerequisites: None
Corequisites: None
This course is a general survey of municipal public relations and their effect on the governmental process referenced in NFPA standard 1035. 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 public relations functions of organizations which meet elements of NFPA 1021 for Fire Officer I and II.(2014 FA)

| FIP-276 | Managing Fire Services | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an overview of fire department operative services referenced in NFPA standard 1021. 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.(2014 FA)

## FRE FRENCH

FRE-111 $\quad$ Elementary French I
Prerequisites: None
Corequisites: $\quad$ None
This course introduces the fundamental elements of the French language within
a cultural context. Emphasis is placed on the development of basic listening,
Spring
Summer

COURSE DESCRIPTIONS

| FRE-112 | Elementary French II | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | FRE-111s |  |  |

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.

FRE-211 Intermediate French I 3 (3-0) | Spring |
| :--- |
| Summer |

Prerequisites: FRE-112 ${ }^{\text {S }}$
Corequisites: None
This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and A.S.

| FRE-212 | Intermediate French II |
| :--- | :--- |
| Prerequisites: | FRE-211 |
| Corequisites: | None |
| This course is a continuation of FRE 211. Emphasis is placed on the continuing |  |
| study of authentic and representative literary and cultural texts. Upon completion, |  |
| students should be able to communicate spontaneously and accurately with |  |
| increasing complexity and sophistication.(1997 SU) This course has been approved |  |
| to satisfy the following requirement(s): |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation, and |  |
| A.S. |  |

## GEL GEOLOGY

| GEL-111 | Geology | 4(3-2) | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. (2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Other Gen. Ed. And Premajor Elective course for A.E.
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.


## GIS GEOGRAPHIC INFO SYSTEMS

GIS-111 Introduction to GIS 3 (2-2) AND

Prerequisites: None
Corequisites: None
This course introduces the hardware and software components of a Geographic Information System and reviews GIS applications. Topics include data structures and basic functions, methods of data capture and sources of data, and the nature and characteristics of spatial data and objects. Upon completion, students should be able to identify GIS hardware components, typical operations, products/ applications, and differences between database models and between raster and vector systems.(1997 SU)

## GRA GRAPHIC ARTS

GRA-151 Computer Graphics I $\quad \mathbf{2 ( 1 - 3 )} \quad$ Fall
Prerequisites: None
Corequisites: None
This course introduces the use of hardware and software for production and
design in graphic arts. Topics include graphical user interface and current industry
uses such as design, layout, typography, illustration, and imaging for production.
Upon completion, students should be able to understand and use the computer as
a fundamental design and production tool.(1997 SU)

## GRD GRAPHIC DESIGN

GRD-167 Photographic Imaging I 3 (1-4) Spring

Prerequisites: None
Corequisites: None
This course introduces basic camera operations and photographic production. Topics include subject composition, depth of field, shutter control, light control, color, photo-finishing, and digital imaging, correction and output. Upon completion, students should be able to produce traditional and/or digital photographic prints with acceptable technical and compositional quality.(2006 SU)

HEA HEALTH

| HEA-112 | First Aid \& CPR | $2(1-2)$ | Fall Spring Summer |
| :---: | :---: | :---: | :---: |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.(1997 SU) This course has been approved to satisfy the following requirement(s): <br> - Premajor and/or Elective course for A.A. and A.S. |  |  |  |
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HFS HEALTH AND FITNESS SCI

| HFS-110 Exercise Science | $4(4-0)$ | Fall <br> Spring |
| :--- | :--- | :--- |

## Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$

Corequisites: None
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.(2017 FA)

| HFS-111 Fitness \& Exer Testing I | $4(3-2)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces the student to graded exercise testing. Topics include various exercise testing protocols with methods for prescribing exercise programs based on exercise tolerance tests and the use of various equipment and protocols. Upon completion, students should be able to conduct specific exercise tests and the use of various equipment.(2017 FA)

HFS-116 Pvnt \& Care Exer Injuries 3 (2-2) Spring Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries. (2017 FA)

| HFS-118 | Fitness Facility Mgmt |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None (4-0) Spring |
| This course provides information about the management and operation of |  |
| health and fitness facilities and programs. Topics include human resources, sales |  |
| and marketing, member retention, financial management, facility design and |  |
| maintenance, and risk management. Upon completion, students should be able to |  |
| demonstrate the knowledge and skills necessary to effectively manage a fitness |  |
| facility.(2017 FA) |  |

HFS-120 Group Exer Instruction 3 (2-2) Spring
Prerequisites: HFS-110 ${ }^{\text {S }}$
Corequisites: None
This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity. (2017 FA)

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| HFS-210 | Personal Training | $\mathbf{3 ( 2 - 2 )}$ | Spring |
| Prerequisites: | HFS-110 | and HFS-111 |  |


| HFS-212 | Exercise Programming | 3(2-2) | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | HFS-110 |  |  |
| Corequisites: | None |  |  |

This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.(2017 FA)

| HFS-214 | Health and Fitness Law |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course is |  |
| and legal issues to encountered in the health and fitness industry. Topics include |  |
| federal/state regulations, historical/current practices, risk management, torts, |  |
| employment, discrimination, contracts, waivers, health/fitness screening, client |  |
| confidentiality, facility safety, equipment liability, and emergency procedures. |  |
| Upon completion, students should be able to demonstrate an understanding of the |  |
| legal system to prevent or minimize liability in a fitness setting.(2017 FA) |  |

HFS-218 Lifestyle Chng \& Wellness 4 (3-2) Fall
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting. (2017 FA)

HIS HISTORY

| HIS-111 World Civilizations I | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| HIS-112 World Civilizations II | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: $\mathrm{ENG}-002^{\mathrm{L}}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. (1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.
HIS-121 Western Civilization I 3 (3-0) Fall

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or BSP- $4002^{\text {L }}$
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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| HIS-122 | Western Civilization II |
| :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{\text {L }}$ or BSP-40O2 |
| Corequisites: | None |
| This course introduces western civilization from the early modern era to the |  |
| present. Topics include the religious wars, the Industrial Revolution, World Wars |  |
| I and II, and the Cold War. Upon completion, students should be able to analyze |  |
| significant political, socioeconomic, and cultural developments in modern western |  |
| civilization.(1997 SU) This course has been approved to satisfy the following |  |
| requirement(s): |  |
| - Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation |  |
| and A.S. |  |
| - Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E. |  |


| HIS-131 | American History I | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{\text {L }}$ or BSP-4002 |  |  |
| Corequisites: | None |  |  |

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

HIS-132 American History II 3 (3-0) Fall
Spring
Summer

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S., and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.
HIS-151 Hispanic Civilization 3 (3-0) Fall

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## HIS-221 African-American History 3 (3-0) Spring

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

## HOR HORTICULTURE

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HOR-112 Landscape Design I 3(2-3) Fall
Prerequisites: HOR-160'; MAT-110', MAT-121', MAT-143',MAT-152', or MAT-171 }\mp@subsup{}{}{L
Corequisites: None
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This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization (encouraged use of native plants and discouraged use of invasive species). Upon completion, students should be able to read plans and draft a landscape design according to sustainable practices.(2013 FA)

HOR-114 Landscape Construction 3 (2-2) Spring
Prerequisites: MAT- $110^{L}$, MAT- $121^{L}$, MAT- $143^{L}$, MAT- $152^{L}$, or MAT-171
Corequisites: None
This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.(1997 SU)

HOR-134 Greenhouse Operations 3 (2-2) Spring
Prerequisites: None
Corequisites: None
This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.(1997 SU)

HOR-142 Fruit \& Vegetable Prod 2 (1-2) Summer
Prerequisites: None
Corequisites: None
This course introduces the principles and techniques of growing fruits and field-grown vegetables. Topics include site selection, proper varietal selection, nutritional values, cultural techniques, harvesting and marketing, and insect and disease control. Upon completion, students should be able to demonstrate an understanding of the principles related to the production of selected fruits and vegetables.(1997 SU)

| HOR-160 | Plant Materials I | 3(2-2) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course covers identification, culture, characteristics, and use of plants in a |  |  |
| sustainable landscape. Emphasis is placed on nomenclature, identification, growth |  |  |
| requirements, cultural requirements, soil preferences, and landscape applications. |  |  |
| Upon completion, students should be able to demonstrate knowledge of the |  |  |
| proper selection and utilization of plant materials, including natives and invasive |  |  |
| plants.(2013 FA) |  |  |


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| HOR-161 | Plant Materials II | 3(2-2) | Spring |
| Prerequisites: | HOR-160L |  |  |
| Corequisites: | None |  |  |
| This course provides a supplementary opportunity to cover identification, culture, |  |  |  |
| characteristics, and use of plants in a sustainable landscape, giving students a |  |  |  |
| broader knowledge of available landscape plants for utilization in landscapes |  |  |  |
| and plant production. Emphasis is placed on nomenclature, identification, growth |  |  |  |
| requirements, cultural requirements, soil preferences, landscape applications |  |  |  |
| and expansion of the plant palette. Upon completion, students should be able to |  |  |  |
| demonstrate knowledge of the proper selection and utilization of plant materials, |  |  |  |
| including natives and invasive plants. 2015 FA |  |  |  |

HOR-164 Hort Pest Management 3 (2-2) Spring
Prerequisites: TRF-110 ${ }^{\mathrm{L}}$ and HOR-160 ${ }^{\mathrm{L}}$
Corequisites: None
This course covers the identification and management of plant pests including insects, diseases, and weeds. Topics include pest identification and beneficial organisms, pesticide application safety and use of least toxic methods of management. Upon completion, students should be able to manage common landscape pests using least toxic methods of control and be prepared to sit for North Carolina Commercial Pesticide Ground Applicators license.(2013 FA)

HOR-166 Soils \& Fertilizers 3 (2-2) Spring
Prerequisites: MAT-110 ${ }^{\text {L }}$, MAT-121 ${ }^{\text {L }}$, MAT-143 ${ }^{\text {L }}$, MAT-152 ${ }^{\text {L }}$, or MAT-171 ${ }^{\text {L }}$
Corequisites: None
This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation classification physical, chemical, and biological properties (including microorganisms) testing and fertilizer application. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media according to sustainable practices.(2013 FA)
HOR-168 Plant Propagation 3 (2-2) Fall

Prerequisites: HOR-160 ${ }^{\text {L }}$,LSG-111 ${ }^{\text {L }}$
Corequisites: None
This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micropropagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.(1997 SU)

HOR-213 Landscape Design II 3 (2-2) Spring
Prerequisites: HOR-112 ${ }^{\text {S }}$, HOR-161 ${ }^{\text {L }}$
Corequisites: None
This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design.(1997 SU)

COURSE DESCRIPTIONS


This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems.(1997 SU)

HOR-225 Nursery Production 3(2-2) Spring
Prerequisites: HOR-161
Corequisites: None
This course covers all aspects of nursery crop production. Emphasis is placed on field production and covers soils, nutrition, irrigation, pest control, and harvesting. Upon completion, students should be able to produce a marketable nursery crop. (2009 SP)

HOR-235 Greenhouse Production 3 (2-2) Fall
Prerequisites: HOR-134 ${ }^{\text {L }}$
Corequisites: None
This course covers the production of greenhouse crops. Emphasis is placed on product selection and production based on market needs and facility availability, including record keeping. Upon completion, students should be able to select and make production schedules to successfully produce greenhouse crops.(1997 SU)

| HOR-257 | Arboriculture Practices | $2(1-3)$ |
| :--- | :--- | :--- |
| Prerequisites: | Spring |  |

Prerequisites: HOR-160 ${ }^{\text {L }}$
Corequisites: None
This course covers the culture and maintenance of trees and shrubs. Topics include fertilization, pruning, approved climbing techniques, pest control, and equipment use and safety. Upon completion, students should be able to properly prune trees and shrubs and perform arboricultural practices.(2013 SU)

HOR-265 Advanced Plant Materials 2 (1-2) Summer Prerequisites: HOR-161
Corequisites: None
This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, cultural requirements, and landscape uses. Upon completion, studentsshould be able to correctly select plants for specific landscape uses.(2001 FA)

## HRM HOTEL \& RESTAURANT MGMT

HRM-220 Cost Control-Food \& Bev 3 (3-0) Spring
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces controls and accounting procedures as applied to costs in the hospitality industry. Topics include reports, cost control, planning and forecasting, control systems, financial statements, operational efficiencies, labor controls and scheduling. Upon completion, students should be able to demonstrate an understanding of food, beverage, and labor cost control systems for operational troubleshooting and problem solving.(2011 FA)

HRM-230 Club \& Resort Management 3 (3-0) Spring
Prerequisites: None
Corequisites: None
This course introduces specific principles of managing a hospitality operation in a resort or club setting. Topics include operational efficiencies, resort and club marketing, recreational and sport activity management, and retail management. Upon completion, students should be able to demonstrate an understanding of the specialized skills involved in resort and club management.(2011 FA)

HRM-245 Human Resource Mgmt-Hosp 3 (3-0) Spring Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course introduces a systematic approach to human resource management in the hospitality industry. Topics include training/development, staffing, selection, hiring, recruitment, evaluation, benefit administration, employee relations, labor regulations/laws, discipline, motivation, productivity, shift management, contract employees and organizational culture. Upon completion, students should be able to apply human resource management skills for the hospitality industry.(2011 FA)

| HRM-275 | Leadership-Hospitality | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces leadership traits, styles, and the roles and responsibilities of successful hospitality leaders while developing the student?s personal leadership skills. Topics include formal and informal hospitality leadership defining effective and ineffective leadership behavior and leadership organizational change and planning within the hospitality industry. Upon completion, students will be able to apply appropriate leadership actions in real-world situations ranging from local to global hospitality environments.(2011 FA)

COURSE DESCRIPTIONS
HUM HUMANITIES

| HUM-110 Technology and Society | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or BSP- $4002^{\text {L }}$
Corequisites: None
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Other Gen. Ed. and Premajor Elective course for A.E.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-115 Critical Thinking | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: $\mathrm{ENG}-002^{\mathrm{S}}$ or BSP-4002 ${ }^{\text {S }}$
Corequisites: None
This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts.(2020 FA) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.
HUM-120 $\quad$ Cultural Studies
Prerequisites:
Conequisites:
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.(1997 SU) This course has been approved to satisfy the following
requirement(s):
- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and
A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-122 Southern Culture | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |

Prerequisites: $\mathrm{ENG}-002^{\mathrm{L}}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
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. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

HUM-130 Myth in Human Culture $3(3-0) \quad$ Fall Spring Summer
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP- $4002^{\text {L }}$
Corequisites: None
This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends on modern culture.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

HUM-150 $\quad$| American Women's Studies |
| :--- |
| Prerequisites: |
| ENG-OO2 | or BSP- $4002^{\text {L }}$

Corequisites: $\quad$ 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.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and
A.S.

COURSE DESCRIPTIONS

| HUM-160 | Introduction to Film | $3(2-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |  |
| Corequisites: | None |  |  |
| This course introduces the fundamental elements of film artistry and production. |  |  |  |
| Topics include film styles, history, and production techniques, as well as the social |  |  |  |
| values reflected in film art. Upon completion, students should be able to critically |  |  |  |
| analyze the elements covered in relation to selected films.(1999 FA) This course |  |  |  |
| has been approved to satisfy the following requirement(s): |  |  |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and |  |  |  |
| A.S. |  |  |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E. |  |  |  |

HUM-161 Advanced Film Studies 3 (2-2) AND

Prerequisites: HUM-160 ${ }^{\text {S }}$
Corequisites: None
This course provides an advanced study of film art and production, building on skills learned in HUM 160. Topics include advanced film production techniques, film genres, examination of master directors' styles, and the relation of film to culture. Upon completion, students should be able to recognize and critically analyze advanced elements of film production.(2002 SP) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-170 | The Holocaust | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 or BSP-4002 |  |  |
| Corequisites: | None |  |  |

This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-180 | Internat Cultural Explor |
| :--- | :--- |
| 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.(2009 SP) This course has been approved to satisfy the following |  |
| requirement(s): |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |


| HUM-211 | Humanities I | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |  |

Corequisites: None
This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-212 | Humanities II | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |  |
| Corequisites: | None |  |  |

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from early modern times to the present. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| HUM-220 | Human Values and Meaning | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | ENG-111 |  |

## Corequisites: None

This course presents some major dimensions of human experience as reflected in art, music, literature, philosophy, and history. Topics include the search for identity, the quest for knowledge, the need for love, the individual and society, and the meaning of life. Upon completion, students should be able to recognize interdisciplinary connections and distinguish between open and closed questions and between narrative and scientific models of understanding.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| HUM-230 | Leadership Development | $3(3-0)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-111s |  |  |
| Corequisites: | None |  |  |
| This course explores the theories and techniques of leadership and group process. |  |  |  |
| Emphasis is placed on leadership styles, theories of group dynamics, and the moral |  |  |  |
| and ethical responsibilities of leadership. Upon completion, students should be |  |  |  |
| able to identify and analyze a personal philosophy and style of Ieadership and |  |  |  |
| integrate these concepts in various practical situations.(1997 SU) This course has |  |  |  |
| been approved to satisfy the following requirement(s): |  |  |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |  |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E. |  |  |  |

## LDD LIGHT DUTY DIESEL

> LDD-112 Intro Light-Duty Diesel Prerequisites: None
> Corequisites: None
> This course covers the history, evolution, basic design and operational parameters for light-duty diesel (LDD) engines used in on-road applications. Topics include familiarization with the light-duty diesel, safety procedures, engine service and maintenance procedures, and introduction to combustion and emission chemistry. Upon completion, students should be able to describe the design and operation of the LDD, perform basic service operations, and demonstrate proper safety procedures.(2013 FA)
LDD-181 Ldd Fuel Systems 4(2-6) AND

Prerequisites: None
Corequisites: None
This course covers the light-duty diesel fuel delivery systems in on-road applications including hydraulic electronically controlled unit injectors, commonrail, mechanical pumps, and emerging technologies. Topics include diesel combustion theory, fuel system components, electronic and mechanical controls, and fuel types and chemistries that are common to the light-duty diesel engines. Upon completion, students should be able to demonstrate skills necessary to inspect, test, and replace fuel delivery components using appropriate service information and tools.(2013 FA)

## LSG LANDSCAPE GARDENING

| LSG-111 | Basic Landscape Technique | 2 (2-0) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course introduces basic principles essential to sustainable landscape |  |  |
| gardening. Topics include soils, propagation, watering, fertilizing, pruning, pest |  |  |
| control, and planting. Upon completion, students should be able to perform basic |  |  |
| sustainable gardening techniques essential to maintaining a sustainable landscape. |  |  |
| (2013 FA) |  |  |


| Default Catalog Header Text |  |  |  |
| :--- | :--- | :--- | :--- |
| LSG-121 | Fall Gardening Lab | $\mathbf{2}$ (0-6) | Fall |
| Prerequisites: | None |  |  |
| Corequisites: | LSG-111 |  |  |

LSG-122 Spring Gardening Lab 2 (0-6) Spring

Prerequisites: LSG-121 ${ }^{\text {L }}$
Corequisites: None
This course provides familiarization with basic gardening techniques by performing practical hands-on exercises required for the spring season. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, and landscape construction. Upon completion, students should be able to satisfactorily perform various practices essential to maintaining the landscape in the spring season. (2001 FA)

LSG-123 Summer Gardening Lab 2 (0-6) Summer
Prerequisites: LSG-122 ${ }^{\text {L }}$
Corequisites: None
This course provides basic hands-on experience in summer gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, landscape construction, and maintaining fruits and vegetables. Upon completion, students should be able to perform various techniques essential to maintaining the summer landscape.(2001 FA)
LSG-231 Landscape Supervision 4 (2-6) Fall

Prerequisites: LSG-123 ${ }^{\text {S }}$ and HOR-161 ${ }^{\text {S }}$
Corequisites: None
This course provides experience in planning, implementing, and supervising various landscape management projects. Emphasis is placed on supervisory skills, organizing, and scheduling. Upon completion, students should be able to supervise employees in various landscape management jobs.(2014 FA)

LSG-244 Advanced Issues/LSG 2(2-0) Spring
Prerequisites: None
Corequisites: None
This course covers advanced topics and issues in landscape gardening.
Emphasis is placed on current issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to demonstrate an understanding of advanced topics and critically analyze issues in landscape gardening.(2008 SP)

COURSE DESCRIPTIONS

## MAT MATHEMATICS

| MAT-003 | Transition Math | $3(0-6)$ |
| :--- | :--- | :--- | | Fall |
| :--- |
| Spring |
| Summer |

$\begin{array}{ll}\text { Prerequisites: } & \text { None } \\ \text { Corequisites: } & \text { ACA-090 }\end{array}$
This course provides an opportunity to customize foundational math content in specific math areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in their gateway level math courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.(2018 FA)
MAT-010 $\quad$ Math Measurement \& Literacy Su
Prerequisites: $N o n e$
Corequisites: $\quad$ MAT- $110^{L}$
This course provides an opportunity to customize foundational math content
specific to Math Measurement \& Literacy. Topics include developing the academic
habits, learning strategies, social skills, and growth mindset necessary to be
successful in mathematics. Upon completion, students should be able to build a
stronger foundation for success in Math Measurement \& Literacy by obtaining skills
through a variety of instructional strategies with emphasis placed on the most
essential prerequisite knowledge.(2018 FA)

MAT-021 Algebra/Trigonometry I Support 2(1-2) Spring Prerequisites: None
Corequisites: MAT-121 ${ }^{\text {L }}$
This course provides an opportunity to customize foundational math content specific to Algebra and Trigonometry I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Algebra/Trigonometry I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.(2018 FA)

| MAT-043 Quantitative Literacy Support | $2(1-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: None
Corequisites: MAT-143 ${ }^{\text {L }}$
This course provides an opportunity to customize foundational math content specific to Quantitative Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Quantitative Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.(2018 FA)

| MAT-052 $\quad$ Statistical Methods I Support | 2 (1-2) | Fall <br> Spring |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: $\quad$ MAT-152 |  |  |
| This course provides an opportunity to customize foundational math content |  |  |
| specific to Statistical Methods I. Topics include developing the academic habits, |  |  |
| learning strategies, social skills, and growth mindset necessary to be successful |  |  |
| in mathematics. Upon completion, students should be able to build a stronger |  |  |
| foundation for success in Statistical Methods I by obtaining skills through a variety |  |  |
| of instructional strategies with emphasis placed on the most essential prerequisite |  |  |
| knowledge.(2018 FA) |  |  |


| MAT-071 Precalculus Algebra Suppor | $2(0-4)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: None
Corequisites: MAT-171 ${ }^{\text {L }}$
This course provides an opportunity to customize foundational math content specific to Precalculus Algebra. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Precalculus Algebra by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.(2018 FA)

```
MAT-110 Math Measurement & Literacy 3(2-2) Fall
Prerequisites: MAT-003 }\mp@subsup{}{}{S}\mathrm{ or BSP-4003S
Corequisites: MAT-010 S
This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems ratio and proportion basic geometric concepts financial literacy and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.(2020 FA)
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| -121 | A | 3 (2-2) | Spring Summer |
| :---: | :---: | :---: | :---: |
| Prerequisites: | MAT-003 ${ }^{\text {S }}$ or BSP-4003 ${ }^{\text {S }}$, minimum grade P2S |  |  |
| Corequisites: | MAT-O21 ${ }^{\text {S }}$ |  |  |
| This course provides an integrated approach to technology and the skills required |  |  |  |
| to manipulate, display, and interpret mathematical functions and formulas used |  |  |  |
| area and volume, and basic proportion applications simplification, evaluation, and solving of algebraic equations and inequalities and radical functions |  |  |  |
| completion, students will be able to demonstrate the ability to use mathematics |  |  |  |
| and technology for problem-solving, analyzing and communicating results.(2020 |  |  |  |
| FA) This course has been approved to satisfy the following requirement(s): |  |  |  |

COURSE DESCRIPTIONS

| MAT-143 Quantitative Literacy | $3(2-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: MAT-0O3S or BSP-4OO3S ; ENG-0O2 ${ }^{\text {S }}$ or BSP-40O2 ${ }^{\text {S }}$
Corequisites: MAT-043 ${ }^{\text {S }}$
This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship.
Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.(2020 FA) This course has been approved to satisfy the following requirement(s):

- Mathematics Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A.S. and A.G.E.

| MAT-152 Statistical Methods I | $4(3-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: $\mathrm{MAT}-003^{\mathrm{S}}$ or BSP-4003 ${ }^{\text {S }}$ ENG-002 ${ }^{\text {S }}$ or BSP-4002 ${ }^{\text {S }}$
Corequisites: MAT-052 ${ }^{\text {S }}$
This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.(2020 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation and A.F.A. (visual arts and theatre)
- Mathematics Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A.S. and A.G.E.

| MAT-171 | Precalculus Algebra | $4(3-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
|  |  |  | Summer |

Prerequisites: $\mathrm{MAT}-003^{\mathrm{S}}$ or BSP-4003${ }^{\mathrm{S}}$, minimum grade P2S or MAT-121, minimum grade CS
Corequisites: MAT-071 ${ }^{\text {s }}$
This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. (2020 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A. (visual arts and theatre), A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A.S. and A.G.E.

| MAT-172 Precalculus Trigonometry | $4(3-2)$ | Fall |
| :--- | :--- | :--- |
|  | Spring |  |
|  | Summer |  |

Prerequisites: $\mathrm{MAT}-171^{\mathrm{s}}$, minimum grade CL
Corequisites: None
This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A. and A.A. Teacher Preparation

| MAT-263 | Brief Calculus | 4(3-2) |
| :--- | :--- | :--- | | Fall |
| :--- |
| Spring |
| Summer |

COURSE DESCRIPTIONS

| MAT-271 Calculus I | $4(3-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

$\begin{array}{ll}\text { Prerequisites: } & \text { MAT }-172^{\text {S }} \text {, minimum grade } C L \\ \text { Corequisites: } & \text { None }\end{array}$ Corequisites: None
This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.E., A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A. and A.A. Teacher Preparation
- A student may place directly into MAT 271 if the student has met at least one (1) of the following criteria within the past five (5) years:
- 1. A score of 2 or higher on the AP Calculus AB Exam.
- 2. A grade of $C$ or higher in an AP Calculus course and an unweighted HS GPA of 3.0 or higher.
- 3. A score of 90 or higher on the ACCUPLACER College-Level Math (CLM) test.
- 4. A score of 46 or higher on the trigonometry section of the ACT Compass Math Placement Test.
- 5. A score of 580 or higher on the old (prior to March 2016) SAT Math and a grade of C or higher in the North Carolina Standard Course of Study PreCalculus course or an equivalent course from another state.
- 6. A score of 600 or higher on the new (March 2016 and beyond) SAT Math and a grade of C or higher in the North Carolina Standard Course of Study Pre-Calculus course or an equivalent course from another state.
- 6. A score of 600 or higher on the new (March 2016 and beyond) SAT Math and a grade of C or higher in the North Carolina Standard Course of Study Pre-Calculus course or an equivalent course from another state.
- 7. A score of 24 or higher on the ACT Math and a grade of C or higher in the North Carolina Standard Course of Study Pre-Calculus course or an equivalent course from another state.
- 8. A score of 560 or higher on the SAT Subject Test in Mathematics Level 2.
- 9. Local diagnostic exam or challenge exam which demonstrates proficiency in Pre-Calculus course(s) competencies.
- 10. An unweighted HS GPA of 3.5 or higher and a grade of $C$ or higher in the North Carolina Standard Course of Study Pre-Calculus course or an equivalent course from another state.

| MAT-272 | Calculus II | 4 (3-2) | Fall Sprin |
| :---: | :---: | :---: | :---: |
| Prerequisites: | 271 |  |  |
| Corequisites: | No |  |  |
| This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology.(2014 FA) This course has been approved to satisfy the following requirement(s): <br> - UGETC course for A.E., A.S. and A.S. Teacher Preparation <br> - Mathematics Gen. Ed. course for A.A. and A.A. Teacher Preparation |  |  |  |
|  |  |  |  |
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|  |  |  |  |
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|  |  |  |  |

MAT-273 Calculus III 4(3-2) Spring

Prerequisites: MAT-272 ${ }^{\text {s }}$, minimum grade CL
Corequisites: None
This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology.(2014 FA) This course has been approved to satisfy the following requirement(s):

- Mathematics Gen. Ed. course for A.A., A.A. Teacher Preparation, A.E., A.S. and A.S. Teacher Preparation
MAT-285 Differential Equations 3 (2-2) Spring

Prerequisites: MAT-272 ${ }^{\text {s }}$, minimum grade CL

## Corequisites: None

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equationsrelated problems with and without technology.(2014 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective Hour course for A.E.

MED MEDICAL ASSISTING
$\begin{array}{lll}\text { MED-120 Survey of Med Terminology } & 2(2-0) & \begin{array}{l}\text { Fall } \\ \text { Spring } \\ \text { Summer }\end{array}\end{array}$
Prerequisites: None
Corequisites: None
This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.(1997 SU)

| MED-121 | Medical Terminology I | $3(3-0)$ |
| :--- | :--- | :--- |
| Fall <br> Spring |  |  |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
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.(1997 SU)

MED-122 Medical Terminology II 3 (3-0) Spring
Prerequisites: MED-121 ${ }^{\text {S }}$
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.(1997 SU)

MKT MARKETING AND RETAILING

MKT-120 Principles of Marketing $\quad 3(3-0) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or BSP- $4002^{\text {L }}$
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.(2015 FA)

MKT-223 Customer Service 3 (3-0) Fall
Prerequisites: None
Corequisites: None
This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.(1997 SU)

## MLT MEDICAL LABORATORY TECH

| MLT-110 | Intro to MLT | 3(2-3) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |


| MLT-111 | Urinalysis \& Body Fluids | $2(1-3)$ | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the laboratory analysis of urine and body fluids. Topics include physical, chemical, and microscopic examination of the urine and body fluids. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting urinalysis and body fluid tests.(1997 SU)

## MLT-120 Hematology/Hemostasis I 4(3-3) Spring

Prerequisites: None
Corequisites: None
This course introduces the theory and technology used in analyzing blood cells and the study of hemostasis. Topics include hematology, hemostasis, and related laboratory testing. Upon completion, students should be able to demonstrate theoretical comprehension of hematology/hemostasis, perform diagnostic techniques, and correlate laboratory findings with disorders.(1997 SU)

| MLT-126 | Immunology and Serology | $\mathbf{2 ( 1 - 2 )}$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the immune system and response and basic concepts of antigens, antibodies, and their reactions. Emphasis is placed on basic principles of immunologic and serodiagnostic techniques and concepts of cellular and humoral immunity in health and disease. Upon completion, students should be able to demonstrate theoretical comprehension and application in performing and interpreting routine immunologic and serodiagnostic procedures.(1997 SU)
MLT-127 Transfusion Medicine 3 (2-3) Summer

Prerequisites: None
Corequisites: None
This course introduces the blood group systems and their applications in transfusion medicine. Emphasis is placed on blood bank techniques including blood grouping and typing, pretransfusion testing, donor selection and processing, and blood component preparation and therapy. Upon completion, students should be able to demonstrate theoretical comprehension and application in performing/ interpreting routine blood bank procedures and recognizing/resolving common problems.(1997 SU)

COURSE DESCRIPTIONS

| MLT-130 | Clinical Chemistry I | $4(3-3)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the quantitative analysis of blood and body fluids and their variations in health and disease. Topics include clinical biochemistry, methodologies, instrumentation, and quality control. Upon completion, students should be able to demonstrate theoretical comprehension of clinical chemistry, perform diagnostic techniques, and correlate laboratory findings with disorders. (1997 SU)


#### Abstract

MLT-140 Intro to Microbiology 3 (2-3) Fall Prerequisites: None Corequisites: None This course introduces basic techniques and safety procedures in clinical microbiology. Emphasis is placed on the morphology and identification of common pathogenic organisms, aseptic technique, staining techniques, and usage of common media. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting basic clinical microbiology procedures.(1997 SU)


MLT-215 Professional Issues 1 (1-0) Spring
Prerequisites: None
Corequisites: None
This course surveys professional issues in preparation for career entry. Emphasis is placed on work readiness and theoretical concepts in microbiology, immunohematology, hematology, and clinical chemistry. Upon completion, students should be able to demonstrate competence in career entry-level areas and be prepared for the national certification examination.(1997 SU)
MLT-220 $\quad$ Hematology/Hemostasis II

Prerequisites: | None |
| :--- |
| Corequisites: |
| None |

This course covers the theories and techniques used in the advanced analysis of
human blood cells and hemostasis. Emphasis is placed on the study of hematologic
disorders, abnormal cell development and morphology, and related testing. Upon
completion, students should be able to demonstrate a theoretical comprehension
and application of abnormal hematology and normal and abnormal hemostasis.
(1997 SU)

MLT-240 Special Clin Microbiology 3 (2-3) Spring
Prerequisites: MLT-140 ${ }^{\text {S }}$
Corequisites: None
This course is designed to introduce special techniques in clinical microbiology. Emphasis is placed on advanced areas in microbiology. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting specialized clinical microbiology procedures.(1997 SU)

| MLT-251 | MLT Practicum I | $\mathbf{1 ( 0 - 0 - 3 )}$ Fall |
| :--- | :--- | :--- |
|  |  |  |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course provides entry-level clinical laboratory experience. Emphasis is placed |  |  |
| on technique, accuracy, and precision. Upon completion, students should be able |  |  |
| to demonstrate entry-level competence on final clinical evaluations.(1997 SU) |  |  |

MLT-253 MLT Practicum I

## 3 (0-0-9) Fall Spring

Prerequisites: None
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.(1997 SU)

| MLT-261 MLT Practicum II | $1(0-0-3)$ Fall |
| :--- | :--- | :--- |
| Spring |  |

Prerequisites: None
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.(1997 SU)

| MLT-262 MLT Practicum II | $2(0-0-6)$ Fall |
| ---: | ---: |
| Spring |  |

Prerequisites: None
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.(1997 SU)
MLT-263 MLT Practicum II $3(0-0-9)$ Fall $\quad$ Spring

Prerequisites: None
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.(1997 SU)

MLT-273 MLT Practicum III 3(0-0-9) Fall
Spring
Prerequisites: None
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.(1997 SU)

## MTH THERAPEUTIC MASSAGE

| MTH-110 | Fundamentals of Massage | 10 | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: |  | Nene | $(6-9-3)$ |

Prerequisites: None
Corequisites: $\quad \mathrm{BIO}-163^{\mathrm{L}}$ or $\mathrm{BIO}-165^{\mathrm{L}}$
This course introduces concepts basic to the role of the massage therapist in a variety of clinical settings. Emphasis is placed on beginning theory and techniques of body work as well as skill in therapeutic touch. Upon completion of the course, the student should be able to apply basic practical massage therapy skills.(2008 SP)
MTH-120 Ther Massage Applications $10 \quad$ Spring

Prerequisites: $\mathrm{BIO}-163^{\mathrm{L}}$ or $\mathrm{BIO}-165^{\mathrm{L}}$; MTH- $11 \mathrm{O}^{\text {S }}$
Corequisites: $\mathrm{BIO}-166^{\mathrm{L}}$ (unless student completed BIO-163), ENG-111 ${ }^{\mathrm{L}}$
This course provides an expanded knowledge and skill base for the massage therapist in a variety of clinical settings. Emphasis is placed on selected therapeutic approaches throughout the lifespan. Upon completion, students should be able to perform entry level therapeutic massage on various populations.(2008 SP)

MTH-125 Ethics of Massage 2 (2-0) Summer
Prerequisites: MTH-110 ${ }^{\text {L }}$
Corequisites: MTH-130 ${ }^{\text {L }}$
This course is designed to explore issues related to the practice of massage therapy. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion of this course the student should be able to discuss issues relating to the practice of massage therapy, client/therapist relationships as well as ethical issues.(2005 FA)

| MTH-130 | Therapeutic Massage Mgmt 2(2-0) Summer |
| :--- | :--- | :--- |
| Prerequisites: | MTH-110 |
| Corequisites: | MTH-125 |

MTH-210 Adv Skills of Massage 8 (4-9-3) Fall
Prerequisites: MTH-120 ${ }^{\text {S }}$
Corequisites: None
This course provides knowledge and skills in diverse body work modalities in a variety of clinical settings. Emphasis is placed on selected techniques such as Neuromuscular Therapy, Sports Massage, Soft Tissue Release, Spa Approaches, Oriental Therapies, and energy techniques. Upon completion, students should be able to perform basic skills in techniques covered.(2008 SP)

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| MTH-220 | Outcome-Based Massage | 7 (4-6-3) Spring |
| Prerequisites: | MTH-120 |  |
| Corequisites: | WBL-111 |  |

This course provides knowledge and skills in more complex body works modalities in a variety of clinical settings. Emphasis is placed on developing advanced skills in outcome-based Massage. Upon completion, students should be able to perform basic skills in techniques covered.(2008 SP)

MUS MUSIC

| MUS-110 | Music Appreciation | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: <br> Corequisites: | None |  |  |
| None |  |  |  |

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

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MUS-111 Fundamentals of Music 3(3-0) AND
Prerequisites: None
Corequisites: None
This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music.(1999 FA) This course has been approved to satisfy the following requirement(s):
- Premajor and/or Elective Course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.
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| MUS-112 | Introduction to Jazz |  |
| :--- | :--- | :--- |
| Prerequisites: | None (3-0) | Fall <br> Spring |
| Corequisites: | None |  |
| This course introduces the origins and musical components of jazz and the |  |  |
| contributions of its major artists. Emphasis is placed on the development of |  |  |
| discriminating listening habits, as well as the investigation of the styles and |  |  |
| structural forms of the jazz idiom. Upon completion, students should be able to |  |  |
| demonstrate skills in listening and understanding this form of American music. |  |  |
| (1997 SU) This course has been approved to satisfy the following requirement(s): |  |  |
| - UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. |  |  |
| Teacher Preparation |  |  |
| - Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E. |  |  |

COURSE DESCRIPTIONS

| MUS-121 | Music Theory I | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | MUS-125 |  |  |

This course provides an introduction to the musical elements of melody, rhythm, and harmony. Emphasis is placed upon the interaction of these elements through fundamental analysis and an introduction to part writing. Upon completion, students should be able to demonstrate understanding of melodic voice leading, rhythmic functions within simple and compound meters, and simple harmonic progressions. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.


## MUS-122 Music Theory II 3 (3-0) Spring

Prerequisites: MUS-121 ${ }^{\text {S }}$
Corequisites: MUS-126 ${ }^{\text {L }}$
This course provides a comprehensive study of diatonic harmony. Emphasis is placed on voice leading tasks, part writing, and analysis using various labeling systems. Upon completion, students should be able to demonstrate harmonic principles through four-voice part writing, recognize and label non-harmonic tones, analyze chords using Roman numerals, figured bass, and lead sheet symbols, and classify small-scale phrase structure and cadence types. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.

| MUS-125 | Aural Skills I | $\mathbf{1 ( 0 - 2 )}$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | MUS- $121^{L}$ |  |  |

This course provides an introduction to the fundamentals in aural skills. Emphasis is placed on the study of basic melodies, harmonies, and rhythms through sight singing and ear training. Upon completion, students should be able to identify diatonic intervals, scales, and chords and perform and dictate simple melodies and rhythmic patterns. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.
MUS-126 Aural Skills II 1 (0-2) Spring

Prerequisites: MUS-125S
Corequisites: MUS-122 ${ }^{\text {L }}$
This course provides a foundation in aural skills. Emphasis is placed on the development of sight singing and ear training skills in diatonic melody, diatonic harmonic progression, and rhythmic patterns. Upon completion, students should be able to fluently read music in treble and bass clefs utilize any solmization system while sight singing simple diatonic melodies identify elementary diatonic chord progressions perform rhythms in simple and compound meters and dictate diatonic melodic, diatonic harmonic, and advanced rhythmic patterns. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.G.E.

| MUS-131 | Chorus I | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
MUS-132 Chorus II $1(0-2)$ Fall

Prerequisites: MUS-131 ${ }^{\text {S }}$
Corequisites: None
This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-133 | Band I | $\mathbf{1 ( 0 - 2 )}$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course provides an opportunity for those who play a band instrument to gain |  |  |  |
| experience playing in an ensemble. Emphasis is placed on band techniques and the |  |  |  |
| study and performance of a variety of styles and periods of band literature. Upon |  |  |  |
| completion, students should be able to demonstrate skills needed to participate |  |  |  |
| in ensemble playing leading to performance.(1997 SU) This course has been |  |  |  |
| approved to satisfy the following requirement(s): |  |  |  |

MUS-134 Band II 1 (0-2) Fall

Prerequisites: MUS-133 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 133. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS

| MUS-135 | Jazz Ensemble I | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: <br> Corequisites: | None |  |  |

This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-136 Jazz Ensemble II | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |

Prerequisites: MUS-135 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-137 Orchestra I $1(0-2)$ Fall Spring
Prerequisites: None
Corequisites: None
This course provides an opportunity for those who play an orchestral instrument to gain experience playing in an ensemble. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
MUS-138 Orchestra II
Prerequisites: $\quad$ MUS-137
Corequisites:

None | Fall |
| :--- |
| Spring |

| MUS-141 | Ensemble I | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-142 Ensemble II | $1(0-2)$ | Fall |
| :--- | :--- | :--- |
| Spring |  |  |

Prerequisites: MUS-141 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-151 | Class Music I | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-152 Class Music II |  |
| :--- | :--- | :--- |
| Prerequisites: | MUS-151 |
| Sorequisites: | None (0-2) | | Fall |
| :--- |
| Spring |

COURSE DESCRIPTIONS

| MUS-161 | Applied Music I | $\mathbf{2 ( 1 - 2 )}$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: <br> Corequisites: | None |  |  |

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1999 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective Course for A.A. and A.S.

MUS-162 Applied Music II $\quad 2$ (1-2) | Fall |
| :--- |
| Spring |

Prerequisites: MUS-161 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1999 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective Course for A.A. and A.S.
MUS-210 $\quad$ History of Rock Music
Prerequisites: None
Corequisites: None
This course is a survey of Rock music from the early 1950's to the present.
Emphasis is placed on musical groups, soloists, and styles related to the evolution
of this idiom and on related historical and social events. Upon completion, students
should be able to identify specific styles and to explain the influence of selected
performers within their respective eras.(2003 FA) This course has been approved
to satisfy the following requirement(s):
- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and
A.S.

MUS-221 Music Theory III 3 (3-0) Fall
Prerequisites: MUS-122 ${ }^{\text {S }}$
Corequisites: MUS-225 ${ }^{\text {L }}$
This course provides a comprehensive study of chromatic harmony. Emphasis is placed on advanced voice leading tasks, part writing, and analysis of chord progressions, modulations, and large-scale forms. Upon completion, students should be able to identify, notate, and analyze an array of chromatic chords, recognize the function and movement of chromatic harmonies, identify modulatory procedures, analyze formal structures including, but not limited to, binary, ternary, sonata, and rondo. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-222 | Music Theory IV | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | MUS-221 |  |  |
| Corequisites: | MUS-226 |  |  |

This course provides an advanced study of chromatic harmony, scale systems, and an introduction to twentieth-century music. Emphasis is placed on advanced part writing and analysis of chromatic harmony and basic twentieth-century compositional and analytical techniques. Upon completion, students should be able to analyze complex chord progressions, advanced modulations, and elemental serial procedures build an array of synthetic scales and identify characteristics of twentieth-century topics including, but not limited to, atonality, serialism, minimalism, indeterminacy, and electronic music. $(2018$ FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-225 | Aural Skills III | $\mathbf{1 ( 0 - 2 )}$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | MUS-126 |  |  |
| Corequisites: | MUS-221 |  |  |

This course provides advanced aural skills training in diatonicism and basic aural skills training in chromaticism. Emphasis is placed on the development of sight singing and ear training skills in complex rhythmic patterns, diatonic melodies and harmonies, and basic chromaticism. Upon completion, students should be able to utilize any solmization system while sight singing diatonic melodies with functional and non-functional chromaticism, fluently read music in multiple clefs in addition to treble and bass, identify modulations, perform complex rhythmic patterns in various meters, and dictate tonal melodies and harmonies including chromaticism. (2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-226 | Aural Skills IV | 1(0-2) | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | MUS-225 |  |  |
| Corequisites: | MUS-222 |  |  |

This course provides advanced aural skills training in diatonicism and chromaticism. Emphasis is placed on the development of sight singing and ear training skills in chromatic melodies, chromatic harmonies, and complex rhythmic patterns. Upon completion, students should be able to utilize any solmization system while sight singing melodies containing significant chromaticism fluently read music in multiple clefs, including treble, bass, alto, and tenor perform and dictate rhythmic patterns in irregular and changing meters and dictate diatonic and chromatic melodies and harmonic progressions.(2018 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-231 Chorus III $1(0-2) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: MUS-132 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| COURSE DESCRIPTIONS |  |  |  |
| :--- | :--- | :--- | :--- |
| MUS-232 Chorus IV | $1(0-2)$ | Fall <br> Spring |  |

Prerequisites: MUS-231 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
MUS-233 Band III 1 (0-2) Fall

Prerequisites: MUS-134 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 134. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-234 Band IV | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: MUS-233 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 233. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-235 Jazz Ensemble III | $1(0-2)$ | Fall |
| :--- | :--- | :--- |
| Spring |  |  |

Prerequisites: MUS-136 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

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| MUS-236 (0-2) | Jazz Ensemble IV | Fall <br> Spring |  |
| Prerequisites: | MUS-235 |  |  |
| Corequisites: | None |  |  |
| This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble |  |  |  |
| techniques and the study and performance of a variety of styles and periods of |  |  |  |
| jazz literature. Upon completion, students should be able to demonstrate skills |  |  |  |
| needed to participate in ensemble playing leading to performance.(1997 SU) This |  |  |  |
| course has been approved to satisfy the following requirement(s): |  |  |  |

MUS-237 Orchestra II
1 (0-2) Fall
Spring
Prerequisites: MUS-138 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 138. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-238 Orchestra IV $\quad 1(0-2) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: MUS-237 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 237. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-241 | Ensemble III | $\mathbf{1 ( 0 - 2 )}$ |
| :--- | :--- | :--- |
| Fall |  |  |
| Prerequisites: |  | MUS-142 |
| Spring |  |  |

COURSE DESCRIPTIONS

| MUS-242 | Ensemble IV | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |

Prerequisites: MUS-241 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-251 Class Music III 1 (0-2) Fall
Prerequisites: MUS-152 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| MUS-252 Class Music IV | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- |

Prerequisites: MUS-251 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-261 Applied Music III 2 (1-2) | Fall |
| :--- |
| Spring |

Prerequisites: MUS-162 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. (1999 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective Course for A.A. and A.S.

| MUS-262 | Applied Music IV | 2 (1-2) | Fall Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: MUS-261 ${ }^{\text {S }}$ |  |  |  |
| Corequisites: None |  |  |  |
| This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.(1999 FA) This course has been approved to satisfy the following requirement(s): |  |  |  |

MUS-271 Music History I 3(3-0) Fall

Prerequisites: MUS-122 ${ }^{\text {S }}$
Corequisites: None
This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

MUS-272 Music History II 3 (3-0) Spring
Prerequisites: MUS-271 ${ }^{\text {S }}$
Corequisites: None
This course is the second of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

NAS NURSING ASSISTANT
NAS-101 Nurse Aide I $6(3-4-3)$ Fall

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry.(2015 SP) This is a certificate-level course.

COURSE DESCRIPTIONS

| NAS-102 | Nurse Aide II | 6 (3-2-6) Fall Spring |
| :---: | :---: | :---: |
| Prerequisites: NAS-101 ${ }^{\text {S }}$ [ ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$ |  |  |
| Corequisites: None |  |  |
| This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV |  |  |
| assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry. (2015 SP) This is a certificate-level course. |  |  |
|  |  |  |

NET NETWORKING TECHNOLOGY
NET-125 $\quad$ Introduction to Networks
Prerequisites:

None (1-4) | Fall |
| :--- |
| Spring |

NET-126 Switching and Routing 3 (1-4) Fall Spring Summer
Prerequisites: None
Corequisites: None
This course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Emphasis is placed on configuring and troubleshooting routers and switches for advanced functionality using security best practices and resolving common network issues utilizing both IPv4 and IPv6 protocols. Upon completion, students should be able to configure VLANs and Inter-VLAN routing applying security best practices, troubleshoot inter-VLAN routing on Layer 3 devices, configure redundancy on a switched network using STP and EtherChannel, configure WLANs using a WLC and L2 security best practices and configure IPv4 and IPv6 static routing on routers. (2021 FA)

| NET-225 | Enterprise Networking | $3(1-4)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course is designed to cover the architecture, components, operations, and |  |  |  |
| security to scale for large, complex networks, including wide area network (WAN) |  |  |  |
| technologies. Emphasis is placed on configuring, troubleshooting, and securing |  |  |  |
| enterprise network devices and understanding how application programming |  |  |  |
| interfaces (API) and configuration management tools enable network automation. |  |  |  |
| Upon completion, students should be able to configure link state routing protocols, |  |  |  |
| implement ACLs to filter traffic and secure administrative access, configure |  |  |  |
| NAT services on the router to provide address scalability, explain techniques to |  |  |  |
| provide address scalability and secure remote access for WAN, and explain how |  |  |  |
| automation affects evolving networks.(2O21 FA) |  |  |  |

NOS NETWORK OPERATING SYSTEMS

NOS-120 Linux/UNIX Single User $\quad 3$ (2-2) | Spring |
| :--- |
| Summer |

Prerequisites: None
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.(2016 FA)

| NOS-130 Windows Single User | $3(2-2)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: None
Corequisites: None
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.(2016 FA)

NOS-230 Windows Administration I 3 (2-2) Spring
Prerequisites: None
Corequisites: None
This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.(2014 FA)

COURSE DESCRIPTIONS
NUR NURSING

|  | Intro to Health Concepts | 8 (4-6-6) Fall |
| :---: | :---: | :---: |
| Prerequisites: | ENG-002 w/P2L, BSP-4002 BSP-4003 w/P2L, MAT-O2 | ; MAT-003 w/P2L, $52^{\text {L }}$ or MAT-O71 |
| orequisites: | BIO-165 ${ }^{\text {L }}$, PSY-150 ${ }^{\text {L }}$, ENG |  |
| s course i althcare, a luding me ms, inform provement e incorpo | duces the concepts with nursing. Emphasis is place tion administration, ass cs, evidence-based prac pon completion, student g the concepts identifie | of the individual, ithin each domain ics, interdisciplinary ed care, and quality vide safe nursing FA) |

NUR-112 Health-IIIness Concepts 5 (3-0-6) Spring
Prerequisites: $\quad$ NUR- $111^{\text {S }}$; BIO- $165^{\text {L }}$, PSY-150 ${ }^{\text {L }}$, ENG-111 ; all minimum grade C Corequisites: $\quad \mathrm{BIO}-166^{\mathrm{L}}$, ENG-112 ${ }^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$
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.(2009 FA)

NUR-113 Family Health Concepts 5(3-0-6) Fall
Prerequisites: $\quad$ NUR- $111^{\text {S }}$, NUR- $112^{\text {L }}$, NUR- $114^{\mathrm{L}}$, NUR-211 , BIO- $165^{\mathrm{L}}$, BIO-166 , PSY-150 ${ }^{\mathrm{L}}$, PSY-241 ${ }^{\mathrm{L}}$, ENG-111 ${ }^{\mathrm{L}}$, ENG-112 ${ }^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$; all minimum grade C

## Corequisites: $\mathrm{BIO}-275^{\mathrm{L}}$, SOC-210 ${ }^{\mathrm{L}}$

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. (2009 FA)

| NUR-114 | Holistic Health Concepts 5 (3-0-6) Summer |
| :---: | :---: |
| Prerequisites: | NUR-111 ${ }^{\text {S }}$, NUR-112 ${ }^{\text {L }, ~ N U R-211 ~}{ }^{\text {L }, ~ B I O-165 ~}{ }^{\text {L }, ~ B I O-166 ~}{ }^{\text {L }}$, PSY- $150^{\text {L }}$, ENG-111 ${ }^{\text {L }}$, ENG-112 ${ }^{\text {L }}$ or ENG-114 ${ }^{\text {L }}$ all minimum grade C |
| Corequisites: | PSY-241 ${ }^{\text {L }}$ |
| This course is of the individu cellular regulation mood/affect, behaviors, cari be able to provi course.(2009 | esigned to further develop the concepts within the three domains al, healthcare, and nursing. Emphasis is placed on the concepts of on, perfusion, inflammation, sensory perception, stress/coping, ognition, self, violence, health-wellness-illness, professional interventions, and safety. Upon completion, students should ide safe nursing care incorporating the concepts identified in this A) |

NUR-211
Prerequisites:

Health Care Concepts
5 (3-0-6) Spring
NUR-111 ${ }^{\text {S }}$, NUR-112 ${ }^{\text {L }}$, BIO- $165^{\text {L }}$, PSY- $150^{\text {L }}$, ENG- $111^{\mathrm{L}}$; all minimum grade C
BIO-166 ${ }^{\mathrm{L}}$, ENG-112 ${ }^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$

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. (2009 FA)

NUR-212 Health System Concepts 5 (3-0-6) Fall
Prerequisites: NUR-111 ${ }^{\text {S }}$, NUR-112 ${ }^{\text {L }}$, NUR- $114^{\mathrm{L}}$, NUR-211 , BIO-165 ${ }^{\mathrm{L}}$, BIO-166 ${ }^{\mathrm{L}}$, PSY-150 ${ }^{\text {L }}$, PSY-241 ${ }^{\text {L }}$, ENG-111 ${ }^{\mathrm{L}}$, ENG- $112^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$; all minimum grade C
Corequisites: $\quad \mathrm{BIO}-275^{\mathrm{L}}$, SOC- $-210^{\mathrm{L}}$
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. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course(2009 FA)

NUR-213 Complex Health Concepts $10 \quad$ Spring
(4-3-15)
Prerequisites: $\quad$ NUR- $111^{\mathrm{S}}$, NUR- $1122^{\mathrm{S}} \mathrm{C}-\mathrm{LP}$, NUR- $113^{\mathrm{S}} \mathrm{C}-L P$, NUR- $114^{\mathrm{S}} \mathrm{C}-\mathrm{LP}$, NUR- $211^{\mathrm{S}} \mathrm{C}-$ LP, NUR-212 ${ }^{\text {C }}$ C-LP, BIO- $165^{\mathrm{L}}$, BIO- $166^{\mathrm{L}}$, PSY-150 ${ }^{\mathrm{L}}$, PSY-241 , ENG-111 ${ }^{\mathrm{L}}$, ENG-112 ${ }^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$, BIO-275 ${ }^{\mathrm{L}}$, SOC-210 ; all minimum grade C
Corequisites: ART-111 ${ }^{\text {L }}$, ART-114 ${ }^{\text {L }}$, ART- $115^{\text {L }}$, MUS- $110^{\mathrm{L}}$, MUS- $112^{\mathrm{L}}$, HUM- $115^{\mathrm{L}}$, PHI- $215^{\mathrm{L}}$ or $\mathrm{PHI}-240^{\mathrm{L}}$
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.(2011 FA)

NUR-214 Nsg Transition Concepts
4 (3-0-3) Spring
Prerequisites: ENG-111 ${ }^{\text {L }}$, BIO- $165^{\text {L }}$, PSY- $150^{\text {L }}$
Corequisites: $\mathrm{BIO}-166^{\mathrm{L}}$, ENG-112 ${ }^{\mathrm{L}}$ or ENG-114 ${ }^{\mathrm{L}}$
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 evidencedbased 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.(2009 SU)

COURSE DESCRIPTIONS

## OPH OPTICIANRY

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OPH-113 Intro to Diseases of Eye
Prerequisites: OPH-150', OPH-151 }\mp@subsup{}{}{\mathrm{ S}
Corequisites: None
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This course introduces common external and internal diseases of the eye and orbital region. Topics include common patient complaints, ocular emergencies, triage procedures and common ocular conditions and disorders. Upon completion, the student should be able to identify most common ocular diseases and determine appropriate emergency management of acute ocular problems.(2018 SU)

## OPH-114 Basic Ophthalmic Pharma. 2(2-0) Spring

## Prerequisites: $\mathrm{OPH}-150^{\text {S }}, \mathrm{OPH}-151^{\text {S }}$

## Corequisites: None

This course introduces and compares drug delivery systems. Topics include the use of diagnostic agents and various classes of drugs commonly used in ophthalmic practices. Upon completion, the students should administer and record topical and oral medications at the physician's direction. (2018 FA)
OPH-115 $\quad$ Ophthalmic Clin Proc I
Prerequisites: $\quad \mathrm{OPH}-150^{\mathrm{S}}, \mathrm{OPH}-151^{\mathrm{S}}$
Corequisites: $\quad$ (1-2) Fone
This course introduces basic clinical procedures for the ophthalmic practice.
Topics include telephone triage and basic procedures commonly used in the
preliminary examination of patients. Topics include basic procedures commonly
used in the preliminary examination of patients. Upon completion, the student
should be able to perform basic administrative tasks and perform basic procedures
commonly used in patient examinations. $(2018 \mathrm{FA})$
OPH-116 Ophtha Med Assist Pract I 6

Prerequisites: $\mathrm{OPH}-150^{\mathrm{S}}, \mathrm{OPH}-151^{\mathrm{S}}$
Corequisites: None
This course introduces ophthalmic patient care procedures. Topics include interpersonal skills with patients, work and legal ethics, confidentiality, clinical appearance and performance. Upon completion, the student will be able to demonstrate competence and efficiency in basic clinical skills.(2018 FA)

## OPH-117 Ophthalmic Clin Proc II 2(1-2) Spring

Prerequisites: $\mathrm{OPH}-115^{\mathrm{S}}$
Corequisites: None
This course introduces more intermediate clinical procedures for the ophthalmic practice. Topics include coding and testing associated with the treatment of glaucoma, cataracts and refractive errors. Upon completion, the student should understand coding for ophthalmic procedures and perform more intermediate clinical procedures.(2018 FA)

| OPH-118 | Ophthalmic Patient Care | 2 (2-0) | Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: | OPH-150 ${ }^{\text {S }}$, OPH- $151{ }^{\text {S }}$None |  |  |
| Corequisites: |  | None |  |
| This course is systemic disea supplies, infection equipment, an to apply these | n overview of the care of the ses in the eye, review of first on control, identification and aseptic technique. Upon principles in their interactio | Topics uipment nor surgi nts shou 8 FA) | clude <br> d <br> be able |

OPH-119 Ophtha Optics \& Basic Refract $2(2-0) \quad$ Fall Prerequisites: $\mathrm{OPH}-15 \mathrm{O}^{\mathrm{S}}, \mathrm{OPH}-151^{\mathrm{S}}$

## Corequisites: None

This course introduces basic theoretical and clinical optics. Topics include interaction of light and lenses, refractive states of the eye, and principles of retinoscopy and refractometry. Upon completion, the student will demonstrate physical and geometric optics, and basic refractometry techniques.(2018 FA)

## OPH-120 Ophtha Med Assist Pract II $6 \quad$ Spring

Prerequisites: $\mathrm{OPH}-116^{\mathrm{S}}$
Corequisites: None
This course provides additional clinical experience in ophthalmic patient care procedures. Topics include interpersonal skills with patients, work and legal ethics, confidentiality, appearance and performance. Upon completion, the student will be able to perform basic and intermediate clinical skills, working towards competence and efficiency.(2018 FA)

| OPH-150 | Intro to Ophth Med Assist |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | OPH-151 |

OPH-151 Ocular Anat. \& Physiology 2 (2-0) Summer Prerequisites: None
Corequisites: $\mathrm{OPH}-150^{\text {S }}$
This course studies the normal anatomy and physiology of eye and orbit. Topics include structures of the eye, functioning process of the eye and correct medical terminology of the structures and functions of the eye. Upon completion, the student should demonstrate a basic understanding and fundamental principles of anatomy and physiology of the eye.(1999 FA)

## OST OFFICE SYSTEMS TECHNOLOGY

OST-131 Keyboarding<br>2 (1-2) Fall<br>Spring<br>Summer

Prerequisites: None
Corequisites: None
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.(1997 SU)

| OST-134 | Text Entry \& Formatting | $3(2-2)$ |
| :--- | :--- | :--- |
| Fall <br> Spring <br> Summer |  |  |

Prerequisites: OST-131, minimum grade BL
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.(2008 FA)
OST-136 $\quad$ Word Processing
Prerequisites: $\quad$ None
Corequisites: $\quad$ 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.(2008 FA)

OST-137 Office Applications I 3 (2-2) Summer
Prerequisites: None
Corequisites: None
This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use software in a business environment.(2017 FA)
OST-148 Med Ins \& Billing
Prerequisites: None
Corequisites: $\quad$ MED- $121^{\mathrm{L}}$
This course introduces fundamentals of medical insurance and billing. Emphasis is
placed on the medical billing cycle to include third party payers, coding concepts,
Summer
and form preparation. Upon completion, students should be able to explain the life
cycle of and accurately complete a medical insurance claim.(2017 FA)

| OST-149 | Medical Legal Issues | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices the relationship of physician, patient, and office personnel 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.(1999 FA)

| OST-164 Office Editing | $3(3-0)$ | Fall <br> Spring |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |
| This course provides a comprehensive study of editing skills needed in the |  |  |
| workplace. Emphasis is placed on grammar, punctuation, sentence structure, |  |  |
| proofreading, and editing. Upon completion, students should be able to use |  |  |
| reference materials to compose and edit text.(2017 FA) |  |  |

OST-184 Records Management 3(2-2) Spring 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. (2008 FA)
OST-236 Adv Word Processing 3 (2-2) Fall

Prerequisites: OST-136 ${ }^{\text {S }}$
Corequisites: None
This course develops proficiency in the utilization of advanced word processing functions. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents. (2017 FA)

OST-243 Med Office Simulation 3(2-2) Fall
Prerequisites: OST-148S
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.(1998 FA)

OST-247 Procedure Coding 3(2-2) Fall
Prerequisites: MED-121 ${ }^{\mathrm{S}}$ or OST- $141^{\mathrm{S}}$; OST-148 ${ }^{\mathrm{L}}$
Corequisites: None
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.(2017 FA)

COURSE DESCRIPTIONS

| OST-248 | Diagnostic Coding | $3(2-2)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | MED-121 ${ }^{\mathrm{S}}$ or OST-141 ; OST-148 |  |  |

## Corequisites: None

This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility. (2017 FA)
OST-249 Med Coding Certification Prep 3(2-3) Spring

Prerequisites: OST- $247^{\text {S }}$, OST- $248^{\text {S }}$
Corequisites: None
This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.(2017 FA)
OST-250 Long-Term Care Coding 3(2-2) Spring

Prerequisites: MED-121 ${ }^{\mathrm{S}}$ or OST-141 ${ }^{\text {S }}$
Corequisites: None
This course covers diagnostic coding as it applies to long-term care facilities and home care. Topics include diagnostic coding and reimbursement in long-term care facilities and home care. Upon completion, students should be able to properly code conditions for long-term care and home care services.(2017 FA)

| OST-284 | Emerging Technologies |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |


| OST-286 | Professional Development | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | Spring |  | Prerequisites: None

Corequisites: None
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society. (1999 FA)

## OST-288 Medical Office Admin Capstone 3 (2-2) Spring

Prerequisites: OST-148 ${ }^{\text {S }}$
Corequisites: None
This course is designed to be a capstone course for the medical office professional and provides a working knowledge of medical office procedures. Emphasis is placed on written and oral communication skills, practice management, electronic health records, medical office procedures, ethics, and professional development. Upon completion, students should be able to demonstrate the skills necessary to manage a medical office.(2017 FA)

| OST-289 | Office Admin Capstone | 3 (2-2) | Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: | OST-134 ${ }^{\text {S }}$ or OST-136 ; OST-164 ${ }^{\text {S }}$ |  |  |
| Corequisites: | None |  |  |
| This course is provides a work is placed on writ office procedu students shoul | esigned to be a capstone course king knowledge of administrative itten and oral communication skills, es, ethics, and professional devel be able to adapt in an office enviro | profess ures. Em are ap compl 7 FA) | al and hasis ations, n, |

## PED PHYSICAL EDUCATION

| PED-110 Fit and Well for Life | 2(1-2) | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: None
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective course for A.E.

PED-111 Physical Fitness I 1(0-3) AND
Prerequisites: None
Corequisites: None
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-112 Physical Fitness II 1 (0-3) AND

Prerequisites: PED-111 ${ }^{\text {S }}$
Corequisites: None
This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS

| PED-113 | Aerobics I | $1(0-3)$ | Fall <br> Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

PED-117 Weight Training I $1(0-3)$\begin{tabular}{l}
Fall <br>

| Spring |
| :--- |
| Summer |

\end{tabular}

Prerequisites: None
Corequisites: None
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

PED-118 Weight Training II $1(0-3) \quad$| Fall |
| :--- |
| Spring |

Prerequisites: PED-117 ${ }^{\text {S }}$
Corequisites: None
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-119 | Circuit Training |
| :--- | :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course covers the skills necessary to participate in a developmental fitness |  |
| program. Emphasis is placed on the circuit training method which involves a |  |
| series of conditioning timed stations arranged for maximum benefit and variety. |  |
| Upon completion, students should be able to understand and appreciate the role |  |
| of circuit training as a means to develop fitness.(1997 SU) This course has been |  |
| approved to satisfy the following requirement(s): |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |


| PED-120 Walking for Fitness | $1(0-3)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: None |  |  |
| This course introduces fitness through walking. Emphasis is placed on stretching, |  |  |
| conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon |  |  |
| completion, students should be able to participate in a recreational walking |  |  |
| program.(1997 SU) This course has been approved to satisfy the following |  |  |
| requirement(s): |  |  |

PED-121 Walk, Jog, Run $\quad 1$ (0-3) AND
Prerequisites: None
Corequisites: None
This course covers the basic concepts involved in safely and effectively improving
cardiovascular fitness. Emphasis is placed on walking, jogging, or running as
a means of achieving fitness. Upon completion, students should be able to
understand and appreciate the benefits derived from these activities.(1997 SU)
This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-122 Yoga I

1 (0-2) Fall
Spring Summer

Prerequisites: None
Corequisites: None
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-123 | Yoga II | $1(0-2)$ |
| :--- | :--- | :--- |
| Prerequisites: | AND |  |

Prerequisites: PED-122S
Corequisites: None
This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-125 Self-Defense: Beginning 1 (0-2) AND Prerequisites: None
Corequisites: None
This course is designed to aid students in developing rudimentary skills in selfdefense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature. (1997 SU) This course has been approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS

| PED-128 | Golf-Beginning | $1(0-2)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

PED-129 Golf-Intermediate 1 (0-2) Fall
Prerequisites: PED-128S
Corequisites: None
This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

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PED-130 Tennis-Beginning 1(0-2) Fall
    Spring
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.(1997 SU) This course has been approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
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PED-131 Tennis-Intermediate 1(0-2) AND

Prerequisites: PED-130 ${ }^{\text {S }}$
Corequisites: None
This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-135 Fencing-Beginning 1 (0-2) AND

Prerequisites: None
Corequisites: None
This course introduces the fundamentals of fencing. Emphasis is placed on grip, stance, and establishment of good techniques for attacks and parries. Upon completion, students should be able to perform elementary foil techniques and demonstrate the basic skills of fencing.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-137 | Badminton | $1(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-138 Archery
Prerequisites: None (0-2) AND
Corequisites: None
This course introduces basic archery safety and skills. Topics include proper
techniques of stance, bracing, drawing, and releasing as well as terminology
and scoring. Upon completion, students should be able to participate safely in
target archery.(1997 SU) This course has been approved to satisfy the following
requirement(s):
• Premajor and/or Elective course for A.A. and A.S.
PED-142 Lifetime Sports 1 (0-2) AND

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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## PED-143 Volleyball-Beginning 1 (0-2) Fall

Prerequisites: None
Corequisites: None
This course covers the fundamentals of volleyball. Emphasis is placed 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-145 Basketball-Beginning | 1(0-2) | Fall <br> Spring |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

COURSE DESCRIPTIONS

| PED-147 | Soccer | $1(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-149 Flag Football $\quad \mathbf{1 ( 0 - 2 )}$ AND
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.
(1997 SU) This course has been approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

| PED-152 | Swimming-Beginning | $1(0-2)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## PED-153 Swimming-Intermediate 1(0-2) AND

Prerequisites: PED-152 ${ }^{\text {S }}$
Corequisites: None
This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissors kick, the underwater swim, and other related skills.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-154
Prerequisites:
Corequing for Fitness
Conequisites:
This course introduces lap swimming, aquacises, water activities, and games.
Emphasis is placed on increasing cardiovascular efficiency through aquatic
exercise. Upon completion, students should be able to develop an individualized
aquatic fitness program.(1997 SU) This course has been approved to satisfy the
following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

| PED-157 | Pickleball | $\mathbf{1 ( 0 - 2 )}$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the fundamentals of pickleball. Emphasis is placed on the basics of serving, ground strokes (drives, drops, dinks, punches, and lobs), overhead strokes (smashes and slams), and the rules and strategies of singles and doubles play. Upon completion, students should be able to apply these skills in pickleball playing situations. (2017 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-160 $\quad$ Canoeing-Basic
Prerequisites:
Conequisites:
None
This course provides basic instruction for the beginning canoeist. Emphasis
is placed on safe and correct handling of the canoe and rescue skills. Upon
completion, students should be able to demonstrate basic canoeing, safe-handling,
and self-rescue skills.(2007 SP) This course has been approved to satisfy the
following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
PED-161 Canoeing-Rivers 1(0-2) AND

Prerequisites: PED-160 ${ }^{\text {S }}$
Corequisites: None
This course provides practice in the basic skills of river and whitewater canoeing. Emphasis is placed on river running, safety, and care of equipment. Upon completion, students should be able to demonstrate navigation in a moving current, canoe safety, and self-rescue skills.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-162 | Angling |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None (0-2) AND |
| This course introduces the sport of angling. Emphasis is placed on fishing with |  |
| the use of artificial lures. Upon completion, students should be able to cast and |  |
| retrieve using baitcaster and spinning reels and identify the various types of |  |
| artificial lures.(1997 SU) This course has been approved to satisfy the following |  |
| requirement(s): |  |
| $\quad$ Premajor and/or Elective course for A.A. and A.S. |  |

PED-163 Kayaking-Basic 1 (0-2) AND

Prerequisites: None
Corequisites: None
This course is designed to teach the basic skills of kayaking. Topics include forward and reverse strokes, sweeps, Eskimo roll, and self-rescue skills. Upon completion, students should be able to maneuver and demonstrate safe kayaking practices.(2007 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

COURSE DESCRIPTIONS

| PED-169 | Orienteering | $1(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the various types of orienteering and proper orienteering techniques. Emphasis is placed on defining various types of orienteering and recognizing and drawing topographic map symbols. Upon completion, students should be able to draw topographic map symbols and negotiate a $3-5 \mathrm{~km}$ crosscountry orienteering course in a specified time period.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-170 $\quad$ Backpacking (0-2) AND
Prerequisites: None
Corequisites: None
This course covers the proper techniques for establishing a campsite, navigating
in the wilderness, and planning for an overnight trip. Topics include planning for
meals, proper use of maps and compass, and packing and dressing for extended
periods in the outdoors. Upon completion, students should be able to identify
quality backpacking equipment, identify the principles of no-trace camping, and
successfully complete a backpacking experience.(1997 SU) This course has been
approved to satisfy the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

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PED-173 Rock Climbing 1(0-2) AND
Prerequisites: None
Corequisites: None
This course teaches the fundamental skills and safety of rock climbing. Topics
include rock climbing, bouldering, rappelling, the correct method of belaying
for climbing and rappelling, and knowledge of equipment. Upon completion,
students should be able to demonstrate strong and skillful techniques in climbing
and rappelling.(1997 SU) This course has been approved to satisfy the following
requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
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| PED-174 | Wilderness Pursuits | $1(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-181 $\quad$ Snow Skiing-Beginning
Prerequisites: None
Corequisites: None
This course introduces the fundamentals of snow skiing. Topics include basic
techniques, safety, and equipment involved in snow skiing. Upon completion,
students should be able to ski a down slope, enter and exit a ski lift, and perform
basic maneuvers on skis.(1997 SU) This course has been approved to satisfy the
following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.

| PED-186 | Dancing for Fitness | $1(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| 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.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
PED-187 $\quad$ Social Dance-Beginning
Prerequisites: None (0-2) AND
Corequisites: None
This course introduces the fundamentals of popular social dances. Emphasis is
placed on basic social dance techniques, dances, and a brief history of social
dance. Upon completion, students should be able to demonstrate specific dance
skills and perform some dances.(1997 SU) This course has been approved to satisfy
the following requirement(s):
- Premajor and/or Elective course for A.A. and A.S.
PED-212 Snowboarding-Beginning 1 (0-2) AND

Prerequisites: None
Corequisites: None
This course is designed to develop the basic knowledge and skills of snowboarding. Topics include equipment, conditioning exercises, terminology, safety, rules, fundamental skills, and the use of lifts. Upon completion, students should be able to snowboard downhill, enter and exit a ski lift, and perform basic maneuvers on a snowboard.(2002 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-217 | Pilates I | $\mathbf{1}(0-2)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an introduction to the pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate pilates exercises using a mat or equipment, history of pilates method, and relevant anatomy and physiology. Upon completion, students should be able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles.(2005 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| COURSE DESCRIPTIONS |  |  |  |
| :--- | :--- | :--- | :--- |
| PED-218 | Pilates II | $\mathbf{1}$ (0-2) AND |  |
| Prerequisites: | PED-217 |  |  |
| Corequisites: | None |  |  |
| This course provides continued instruction to the pilates method of body |  |  |  |
| conditioning exercise. Topics include instruction in intermediate and advanced |  |  |  |
| pilates exercises using a mat or equipment, relevant anatomy and physiology, |  |  |  |
| and further discussion of related concepts. Upon completion, students should be |  |  |  |
| able to perform intermediate and advanced exercises, and possess the autonomy |  |  |  |
| to maintain their own personal pilates practice.(2005 SU) This course has been |  |  |  |
| approved to satisfy the following requirement(s): |  |  |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |  |  |

PED-219 Disc Golf 1(0-2) AND

Prerequisites: None
Corequisites: None
This course introduces the fundamentals of disc golf. Emphasis is placed on basic throwing techniques, putting, distance driving, scoring, and single and doubles play. Upon completion, students should be able to perform the skills required in playing situations.(2009 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.

| PED-254 | Coaching Basketball | $\mathbf{2 ( 1 - 2 )}$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course introduces the theory and methods of coaching basketball. Emphasis is placed on rules, game strategies, and selected techniques of coaching basketball. Upon completion, students should be able to demonstrate competent coaching skills in basketball.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## PHI PHILOSOPHY

| PHI-215 Philosophical Issues | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

## Prerequisites: ENG-111 ${ }^{\text {S }}$

Corequisites: None
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.



## PHY PHYSICS

| PHY-110 | Conceptual Physics | 3 (3-0) | Fall Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: |  |  |  |
| Corequisites: PHY-110A ${ }^{\text {L }}$ |  |  |  |
| 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.(1997 SU) This course has been approved to |  |  |  |


| PHY-110A Conceptual Physics Lab | $1(0-2)$ | Fall <br> Spring |
| :--- | :--- | :--- |

## Prerequisites: MAT-003L or BSP-4003 ${ }^{\text {L }}$ <br> Corequisites: $\mathrm{PHY}-11 \mathrm{~S}^{\mathrm{S}}$

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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| PHY-131 | Physics-Mechanics | $4(3-2)$ | Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | MAT-121 $^{\mathrm{S}}$ or MAT-171 |  |  |

Prerequisites: MAT-121S or MAT-171 ${ }^{\text {S }}$
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.(2014 FA) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.G.E.

| PHY-151 College Physics I | $4(3-2)$ | Fall |
| :--- | :--- | :--- |
| Summer |  |  |

Prerequisites: MAT-171 ${ }^{\text {S }}$ or MAT- $271^{\text {S }}$
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.(2018 SP) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A. and A.A. Teacher Preparation
- Natural Science Gen. Ed. course for A.G.E.

| PHY-152 | College Physics II |
| :--- | :--- |
| Prerequisites: | PHY-151S |
| Corequisites: | None (3-2) Spring |
| 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.(1997 SU) This course has been |  |
| approved to satisfy the following requirement(s): |  |
| - UGETC course for A.S. and A.S. Teacher Preparation |  |
| - Natural Science Gen. Ed. course for A.A. and A.A. Teacher Preparation |  |
| - Natural Science Gen. Ed. course for A.G.E. |  |


| Default Catalog Header Text |  |  |  |
| :--- | :--- | :--- | :--- |
| PHY-251 | General Physics I | $4(3-3)$ | Fall |
| Prerequisites: | MAT-271 |  |  |

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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.E., A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A. and A.A. Teacher Preparation
PHY-252 General Physics II 4 (3-3) Spring

Prerequisites: MAT-272 ${ }^{\text {S }}$ and PHY-251 ${ }^{\text {S }}$

## 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, alternatingcurrent 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.E., A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A. and A.A. Teacher Preparation


## POL POLITICAL SCIENCE

POL-110 $\quad$ Intro Political Science
Prerequisites: $\quad$ ENG- $002^{L}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: $\quad$ None
This course introduces basic political concepts used by governments and
addresses a wide range of political issues. Topics include political theory,
ideologies, legitimacy, and sovereignty in democratic and non-democratic
systems. Upon completion, students should be able to discuss a variety of
issues inherent in all political systems and draw logical conclusions in evaluating
these systems.(1997 SU) This course has been approved to satisfy the following
requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS

| POL-120 American Government | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- |

Prerequisites: $\mathrm{ENG}-002^{\mathrm{L}}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course is a study of the origins, development, structure, and functions of American 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 process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. (2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E


## POL-210 Comparative Government 3 (3-0) AND

## Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$

Corequisites: None
This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.

POL-220 International Relations 3 (3-0) AND
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E


## PSY PSYCHOLOGY

PSY-118 Interpersonal Psychology 3 (3-0) Spring

## Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$

Corequisites: None
This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E

| PSY-150 General Psychology | $3(3-0)$ | Fall |
| :--- | :--- | :--- |
|  |  | Spring |
|  | Summer |  |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E
PSY-230 Biological Psychology 3 (3-0) AND

Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course provides an exploration of the anatomy and functions of the human nervous system as it relates to human behavior. Topics include neural communication, key brain and nervous system anatomy and functions, brain and behavior relationships, sensory systems (key anatomy and functions), and neurological/psychological disorders. Upon completion, students should be able to describe how new scientific knowledge is created, identify methods to study psychological phenomena, identify key nervous system structures and functions, explain basic psychological phenomena and identify associated brain structures, and describe characteristics of selected neurological/psychological disorders.
(2019 SP) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E

COURSE DESCRIPTIONS

| PSY-231 | Forensic Psychology | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | PSY $150^{S}$ |  |  |

Prerequisites: PSY-150 ${ }^{\text {S }}$

## Corequisites: None

This course introduces students to concepts which unite psychology and the legal system. Topics include defining competency, insanity, involuntary commitment, as well as introducing forensic assessment techniques, such as interviewing process, specialized assessments, and collecting collateral information. Upon completion, students should be able to demonstrate knowledge in areas of forensic psychology: risk assessment, criminal competencies, insanity, psychopathology, and mentally disordered offenders.(2004 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## PSY-237 Social Psychology <br> 3 (3-0) AND

Prerequisites: PSY- $150^{\text {S }}$ or SOC $-210^{\text {S }}$
Corequisites: None
This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| PSY-239 | Psychology of Personality | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: | PSY- $150^{S}$ |  |
| Corequisites: | None |  |

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

PSY-241 Developmental Psych $\quad 3(3-0)$| Fall |
| :--- |
| Spring |
| Summer |

Prerequisites: $\mathrm{PSY}-15 \mathrm{O}^{\mathrm{S}}$
Corequisites: None
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| PSY-243 | Child Psychology | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | PSY-150 |  |  |

## Corequisites: None

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.
PSY-249 Psychology of Aging 3 (3-0) AND

Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes biological and intellectual aspects of aging adjustments to retirement, dying, bereavement and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| 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.(1997 SU) This course has been approved to |  |
| satisfy the following requirement(s): |  |
| - Premajor and/or Elective course for A.A. and A.S. |  |
| - Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E. |  |

PSY-263 Educational Psychology 3 (3-0) Summer
Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

COURSE DESCRIPTIONS
PSY-271 Sports Psychology 3 (3-0) AND

Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course provides an overview of the field of sports and exercise psychology. Topics include concentration, goal setting, arousal level, exercise psychology, mental imagery, confidence, and other issues related to sport and exercise performance. Upon completion, students should be able to demonstrate a knowledge of psychological factors involved in sport and exercise.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## PSY-275 Health Psychology 3 (3-0) AND

Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course covers the biopsychosocial dynamics of stress and the maintenance of good health. Topics include enhancing health and well-being, stress management, lifestyle choices and attitudes, the mind-body relationship, nutrition, exercise, and fitness. Upon completion, students should be able to demonstrate an understanding of the psychological factors related to health and well-being.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

PSY-281 Abnormal Psychology 3 (3-0) Fall Spring Summer
Prerequisites: PSY-150 ${ }^{\text {S }}$
Corequisites: None
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.


## RAD RADIOGRAPHY

| RAD-110 | Rad Intro \& Patient Care | 3(2-3) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | RAD- $111^{L}$ and RAD-151 |  |
| This course provides an overview of the radiography profession and student |  |  |
| responsibilities. Emphasis is placed on basic principles of patient care, radiation |  |  |
| protection, technical factors, and medical terminology. Upon completion, students |  |  |
| should be able to demonstrate basic skills in these areas.(2022 SU) |  |  |


|  | RAD-111 |  |
| :--- | :--- | :--- |
| RAD Procedures I | $\mathbf{4 ( 3 - 3 )}$ | Fall |
| Prerequisites: | None |  |
| Corequisites: | RAD-111 and RAD-151 |  |
| This course provides the knowledge and skills necessary to perform standard |  |  |
| radiographic procedures. Emphasis is placed on radiography of the chest, |  |  |
| abdomen, extremities, bony thorax and pelvis. Upon completion, students should |  |  |
| be able to demonstrate competence in these areas.(2017 FA) |  |  |

RAD-112 RAD Procedures II 4 (3-3) $\quad$ Spring
Prerequisites: RAD-110 ${ }^{\text {L }}$, RAD- $111^{L}$ and RAD-151 ${ }^{\text {L }}$
Corequisites: RAD-121 ${ }^{\llcorner }$and RAD-161 ${ }^{\llcorner }$

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, spine, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.(2022 SU)
RAD-121 Image Production I 3(2-3) Spring

Corequisites: RAD-112 ${ }^{\text {L }}$ and RAD-161 ${ }^{\text {L }}$
This course provides the basic principles of radiographic image production. Emphasis is placed on image production, x-ray equipment, receptor exposure, and basic imaging quality factors. Upon completion, students should be able to demonstrate an understanding of basic principles of radiographic image production.(2022 SU)

| RAD-122 | Image Production II |
| :--- | :--- |
| Prerequisites: | RAD-112 ${ }^{L}$ RAD-121 $1^{L}$ and RAD-161 $1^{L}$ |
| Corequisites: | RAD-141 $1^{L}$ and RAD-171 ${ }^{L}$ |
| This course is designed to continue to develop the concepts and principles in the |  |
| field of radiologic technology. Emphasis is placed on advanced digital principles |  |
| and production. Upon completion, students should be able to demonstrate an |  |
| understanding of advanced principles of digital imaging production.(2022 SU) |  |

RAD-141 Radiation Safety 2 (2-0) Summer
Prerequisites: RAD-112 ${ }^{\text {L }}$, RAD-121 ${ }^{\text {L }}$ and RAD-161 ${ }^{\text {L }}$
Corequisites: RAD-122 ${ }^{\text {L }}$ and RAD-171 ${ }^{\text {L }}$

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.(2O22 SU)

| RAD-151 | RAD Clinical Ed I | 2 (0-0-6) Fall |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | RAD-110 and RAD-111 ${ }^{\text {L }}$ |  |

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.(2022 SU)

COURSE DESCRIPTIONS

| RAD-161 RAD Clinical Ed II | 5 | (0-0-15) |
| :--- | :--- | :--- |

## Prerequisites: RAD-110 ${ }^{\mathrm{L}}$, RAD- $111^{\mathrm{L}}$ and RAD-151 ${ }^{\mathrm{L}}$ <br> Corequisites: RAD-112 ${ }^{\text {L }}$ and RAD-121 ${ }^{\text {L }}$

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.(2022 SU)

RAD-171 RAD Clinical Ed III 3 (0-0-9) Summer
Prerequisites: RAD-112 ${ }^{\text {L }}$, RAD-121 ${ }^{\text {L }}$ and RAD-161 $1^{\llcorner }$
Corequisites: RAD-122 ${ }^{\llcorner }$and RAD-141 ${ }^{\text {L }}$
This course provides experience in patient management specific to advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and transitioning to mastering positioning of advanced studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.(2022 SU)

RAD-211 RAD Procedures III 3(2-3) Fall
Prerequisites: RAD-122 ${ }^{\text {, }}$ RAD-141 , and RAD-171 ${ }^{\text {L }}$
Corequisites: RAD-231 ${ }^{L}$ and RAD-251 ${ }^{L}$
This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, advanced imaging, radiographic pathology and image analysis. Upon completion, students should be able to demonstrate an understanding of these areas.(2022 SU)

RAD-231 Image Production III 2 (1-3) Fall
Prerequisites: RAD-122 ${ }^{L}$, RAD $-141^{L}$, and RAD-171 ${ }^{L}$
Corequisites: RAD- $211^{L}$ and RAD- $251^{L}$
This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on complex imaging production and principles, quality control and quality assurance in the imaging sciences. Upon completion, students should be able to demonstrate an understanding of advanced radiographic equipment and quality control programs.(2022 SU)

RAD-251 RAD Clinical Ed IV $7 \quad$ Fall
Prerequisites: RAD-122 ${ }^{\text {, }}$ RAD $-141^{\mathrm{L}}$, and RAD-171 ${ }^{\mathrm{L}}$
Corequisites: RAD-211 ${ }^{L}$ and RAD- $231^{L}$
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.(2O22 SU)

| RAD-261 RAD Clinical Ed $V$ | 7 | Spring |
| :--- | :--- | :--- | :--- |

Prerequisites: RAD-211 ${ }^{\text {L }}$, RAD-231 ${ }^{\text {L }}$, and RAD-251 ${ }^{\text {L }}$
Corequisites: RAD-271 ${ }^{\text {L }}$
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.(2022 SU)
RAD-271 Radiography Capstone 3 (2-3) Spring

Prerequisites: RAD-211 ${ }^{\text {L }}$, RAD-231 ${ }^{\text {L }}$, and RAD- $251^{\text {L }}$
Corequisites: RAD-261 ${ }^{\text {L }}$
This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of an entry-level radiographer.(2022 SU)

## RCP RESPIRATORY CARE


#### Abstract

RCP-110 Intro to Respiratory Care 4 (3-3) Fall Prerequisites: None Corequisites: None This course introduces the role of the respiratory care practitioner within interprofessional teams and interacting with diverse populations. Topics include medical gas administration, basic patient assessment, infection control, and medical terminology using proper written and oral communication methods to prepare students for clinical practice. Upon completion, students should be able to demonstrate competence in respiratory therapy concepts and procedures through written and laboratory evaluations.(2017 FA)


## RCP-111 Therapeutics/Diagnostics 5(4-3) Spring

Prerequisites: RCP-110 ${ }^{\text {S }}$

## Corequisites: None

This course provides emphasis on therapeutic and diagnostic procedures. Topics include applying problem solving strategies in the patient care setting, applying ethical principles in decision making, and practicing professional responsibilities, which will prepare students for clinical practice. Upon completion, students should be able to demonstrate competence in respiratory therapy concepts and procedures through written and laboratory evaluations.(2017 FA)

RCP-113 RCP Pharmacology 2 (2-0) Spring
Prerequisites: None
Corequisites: None
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.(1997 SU)

COURSE DESCRIPTIONS

| RCP-114 | C-P Anatomy \& Physiology | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

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. C-P A \& P(2008 SP)

RCP-115 C-P Pathophysiology 2(2-0) Summer
Prerequisites: None
Corequisites: None
This course introduces the etiology, pathophysiology, clinical signs and symptoms, diagnoses, prognoses, complications, and management of cardiopulmonary diseases. Emphasis is placed on developing, evaluating, and modifying respiratory care plans based on evidence-based medicine protocols and clinical practice guidelines. Upon completion, students should be able to demonstrate competence in cardio-pulmonary disease concepts through written evaluations.(2017 FA)
RCP-139 RCP Clinical Practice I $9 \quad$ Fall

Prerequisites: None
Corequisites: RCP-110 ${ }^{\text {S }}$
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.(1997 SU)

RCP-149 RCP Clinical Practice II $9 \quad$ Spring
Prerequisites: $\mathrm{RCP}-110^{\mathrm{S}}$
Corequisites: $\mathrm{RCP}-111^{\mathrm{S}}$
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.(1997 SU)

## RCP-210 Critical Care Concepts 4 (3-3) Summer

Prerequisites: RCP-111 ${ }^{\text {L }}$
Corequisites: None
This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the application and management of mechanical ventilation, assessment underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in respiratory therapy concepts and procedures through written, laboratory and/or clinical simulation evaluations.(2017 FA)

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| :--- | :--- | :--- | :--- |
| RCP-211 | Adv Monitoring/Procedures | $4(3-3)$ | Fall |
| Prerequisites: | RCP-210 |  |  |

RCP-213 Neonatal/Ped's Concepts $2(2-0)$ Fall
Prerequisites: RCP-111 ${ }^{\text {S }}$
Corequisites: None
This course provides comprehensive coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on pathophysiology, patient assessment and special therapeutic needs of neonates and children based on evidence-based medicine protocols and clinical practice guidelines. Upon completion, students should be able to demonstrate competence in the neonatal and pediatric respiratory care concepts through written evaluations.(2017 FA)

| RCP-215 | Career Preparation | $1(0-3)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides an overview of respiratory therapy concepts in preparation for credentialing exam. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of respiratory therapy and be prepared for successful completion of the credentialing process.(2017 FA)

## REL RELIGION

| REL-110 | World Religions | $3(3-0)$ |
| :--- | :--- | :--- |
|  | Fall <br> Spring |  |
| Summer |  |  |

COURSE DESCRIPTIONS

| REL-211 | Intro to Old Testament | $3(3-0)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| REL-212 | Intro to New Testament | $3(3-0)$ | Spring |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.

| REL-221 | Religion in America | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Humanities/Fine Arts Gen. Ed. course for A.A.S. and A.G.E.


## SCI SCIENCE

SCI-110 Principles of Science 4 (3-2) AND

Prerequisites: None
Corequisites: None
This course introduces basic principles of chemistry, physics, and biology. Emphasis is placed on chemical reactions, energy forms, and ecological studies. Upon completion, students should be able to demonstrate mastery of the scientific method of thought and a basic understanding of chemistry, physics, and biology. ( 1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A.S. and A.G.E.


## SEC INFO SYSTEMS SECURITY

SEC-110 $\quad$ Security Concepts

Prerequisites: $\quad$| 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.( 2013 SP )
SEC-160 $\quad$ Security Administration I 3(2-2) Spring
Prerequisites: None
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.(2016 FA)
SEC-210 $\quad$ Intrusion Detection
Prerequisites: $\quad$ None (2-2) Fall
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.(2016 FA)

## SGD SIMULATION \& GAME DEVELOP

SGD-112 $\quad$ SGD Design I
Prerequisites: None (2-3) Summer
Corequisites: None
This course introduces the fundamentals of simulation and game design. Topics
include industry standards and design elements for simulation and games. Upon
completion, students should be able to design simple simulations and/or games.
(2022 SP)

SGD-113 SGD Programming I 3 (2-3) Fall
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.(2022 SP)

COURSE DESCRIPTIONS

| SGD-114 | SGD 3D Modeling I | $3(2-3)$ | Summer |
| :--- | :--- | :--- | :--- |
| 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. (2022 SP)

## SGD-162 SGD 3D Animation I 3 (2-3) Spring

Prerequisites: SGD-214 ${ }^{\text {L }}$
Corequisites: None
This course introduces the fundamental principles of 3D animation used in simulation and game development. Emphasis is placed on a historical survey of 3D animation, aspects of the 3D animation techniques. Upon completion, students should be able to produce 3D character sketches, morph simple objects, create walk and run cycles and develop professional storyboards.(2022 SP)
SGD-174 $\quad$ SGD Level Design I
Prerequisites: None
Corequisites: None
This course introduces the tools used to create levels for real-time simulation and
games. Topics include level design, architecture theory, modeling for 3D engines,
and texturing methods. Upon completion, students should be able to design simple
levels using industry-standard tools.(2022 SP)

SGD-212 SGD Design II 3 (2-3) Fall
Prerequisites: SGD-112S
Corequisites: None
This course covers the advanced principles of simulation and game design. Topics include advanced design concepts in simulation and game development. Upon completion, students should be able to design an advanced simulation or game. (2006 SP)

| SGD-214 | SGD 3D Modeling II | $3(2-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | SGD-114 |  |  |
| Corequisites: | None |  |  |

This course introduces the tools used to create and animate advanced 3dimensional models. Emphasis is placed on identifying and utilizing the tools required to create and animate advanced 3D models. Upon completion, students should be able to create and animate advanced 3D models using 3D modeling tools.(2022 SP)

SGD-289 SGD Project 3 (2-3) Spring
Prerequisites: SGD-212 ${ }^{\text {S }}$, SGD- $213^{\text {S }}$, SGD- $214^{\text {S }}$, or SGD- $285^{\text {S }}$
Corequisites: None
This course provides students with the opportunity to create a functional simulation or game with minimal instructor support. Emphasis is placed upon verbal and written communication, skill documentation, professional presentation and user training. Upon completion, students should be able to create and professionally present a fully functional simulation or game. (2009 FA)

## SOC SOCIOLOGY

SOC-210 Introduction to Sociology<br>3 (3-0) Fall<br>Spring<br>Summer

Prerequisites: None
Corequisites: None
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

SOC-213 Sociology of the Family $3(3-0)$ Fall Spring Summer

Prerequisites: ENG-0O2 ${ }^{\text {L }}$ or $\mathrm{BSP}-4002^{\mathrm{L}}$
Corequisites: None
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

SOC-220 Social Problems

| $3(3-0)$ | Fall |
| :--- | :--- |
|  | Spring |
|  | Summer |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$
Corequisites: None
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| SOC-225 | Social Diversity | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002 ${ }^{L}$ or BSP-4002 |  |  |

## 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.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A. and A.S.
- Social/Behavioral Science/Other Required Gen. Ed. course for A.A. Teacher Preparation and A.S. Teacher Preparation
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| SOC-230 | Race and Ethnic Relations | $3(3-0)$ |  |
| :--- | :--- | :--- | :--- |
| Prerequisites: AND | ENG- $002^{\mathrm{L}}$ or BSP-4002 |  |  |
| Corequisites: | None |  |  |

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| SOC-234 | Sociology of Gender | $3(3-0)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | ENG-002L |  |  |

Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$

## Corequisites: None

This course examines contemporary roles in society with special emphasis on recent changes. Topics include sex role socialization, myths and stereotypes, gender issues related to family, work, and power. Upon completion, students should be able to analyze modern relationships between men and women.(1997
SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

| SOC-240 | Social Psychology | $3(3-0)$ |
| :--- | :--- | :--- |
| Prerequisites: AND | ENG-002 ${ }^{L}$ or BSP-4002 |  |

## Corequisites: None

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Social/Behavioral Science Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
- Social/Behavioral Science Gen. Ed. course for A.A.S. and A.G.E.

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| :--- | :--- | :--- | :--- |
| SOC-242 | Sociology of Deviance | $3(3-0) \quad$ AND |  |
| Prerequisites: | ENG-002L or BSP-40O2L |  |  |

## SPA SPANISH

| SPA-111 | Elementary Spanish I | $3(3-0)$ | Fall <br> Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.

SPA-112 Elementary Spanish II $\quad 3(3-0)$| Fall |
| :--- |
| Spring |
| Summer |

Prerequisites: SPA-111 ${ }^{\text {S }}$
Corequisites: None
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.

| SPA-120 | Spanish for the Workplace |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course offers applied Spanish for the workplace to facilitate basic |  |
| communication with people whose native language is Spanish. Emphasis is |  |
| placed 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.(1997 SU) |  |

COURSE DESCRIPTIONS

| SPA-161 | Cultural Immersion | $3(2-3)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | SPA-111 |  |  |

Prerequisites: SPA-111 ${ }^{\text {S }}$

## Corequisites: None

This course explores Hispanic culture through intensive study on campus and field experience in a host country or comparable area within the United States. 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.(2014 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.


## SPA-211 Intermediate Spanish I

| $3(3-0)$ | Fall |
| ---: | :--- |
|  | Spring |
|  | Summer |

Prerequisites: SPA-112 ${ }^{\text {S }}$
Corequisites: None
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.
SPA-212 Intermediate Spanish II 3 (3-0) AND

Prerequisites: SPA-211 ${ }^{\text {S }}$
Corequisites: None
This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Humanities/Fine Arts Gen. Ed. course for A.A., A.A. Teacher Preparation and A.S.


## SRV SURVEYING

SRV-110 Surveying I 4(2-6) Summer

Prerequisites: ARC-111 or EGR-115 ${ }^{\text {L }}$
Corequisites: MAT-003 ${ }^{\text {S }}$, BSP-4003 ${ }^{\text {S }}$, MAT- $121^{\text {S }}$, or MAT- $171^{\text {S }}$
This course introduces the theory and practice of plane surveying. Topics include the precise measurement of distances, angles, and elevations bearing, azimuth and traverse computations topography and mapping. Upon completion, students should be able to use/care for surveying equipment, collect field survey data, perform traverse computations and create a contour map.(2020 FA)

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| :--- | :--- | :--- | :--- |
| SRV-111 | Surveying II | $4(2-6)$ | Fall |
| Prerequisites: | SRV-110S |  |  |
| Corequisites: | None |  |  |
| This course introduces route surveying and roadway planning and layout. |  |  |  |
| Topics include simple, compound, reverse, spiral, and vertical curves geometric |  |  |  |
| design and layout planning of cross-section and grade line drainage earthwork |  |  |  |
| calculations and mass diagrams. Upon completion, students should be able to |  |  |  |
| calculate and lay out highway curves prepare roadway plans, profiles, and sections |  |  |  |
| and perform slope staking.(1997 SU) |  |  |  |


| SRV-210 | Surveying III | $4(2-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | Spring |  |

Prerequisites: SRV-110 ${ }^{\text {S }}$
Corequisites: None
This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.(1997 SU)

| SRV-220 | Surveying Law | $3(2-2) \quad$ Fall |
| :--- | :--- | :--- |
| Prerequisites: |  |  |

Prerequisites: SRV-110 ${ }^{\text {S }}$
Corequisites: None
This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying.(1997 SU)

| SRV-240 | Topo/Site Surveying | $4(2-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | Spring |  |

Prerequisites: SRV-110 ${ }^{\text {S }}$
Corequisites: None
This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.(1997 SU)

## SST SUSTAINABILITY TECH

SST-140 Green Bldg \& Design Concepts $3(3-0) \quad$ Fall
Prerequisites: None
Corequisites: None
This course is designed to introduce the student to sustainable building design and construction principles and practices. Topics include sustainable building rating systems and certifications, energy efficiency, indoor environmental quality, sustainable building materials and water use. Upon completion, students should be able to identify the principles and practices of sustainable building design and construction.(2013 FA)

COURSE DESCRIPTIONS

## SUR SURGERY

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SUR-110 Intro to Surg Tech 3(3-0) Fall
Prerequisites: None
Corequisites: SUR-111 S
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This course provides a comprehensive study of peri-operative care, patient care concepts, and professional practice concepts within the profession of surgical technology. Topics include: introductory concepts, organizational structure and relationships, legal, ethical and moral issues, medical terminology, pharmacology, anesthesia, wound healing management concepts, and the technological sciences. Upon completion, students should be able to apply theoretical knowledge of the course topics to the practice of surgical technology.(2012 SP)

| SUR-111 | Periop Patient Care | $7(5-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | Foll |  |
| Corequisites: | SUR-110 |  |

This course provides the surgical technology student the theoretical knowledge required to function in the pre-operative, intra-operative, and post-operative role. Topics include asepsis, disinfection and sterilization, physical environment, instrumentation, equipment, peri-operative patient care, and peri-operative case management. Upon completion, students should be able to apply the principles and practice of the peri-operative team member to the operative environment. (2012 SP)
SUR-122 Surgical Procedures I 6 (5-3) Spring Prerequisites: SUR- $110^{\text {S }}$, SUR-111 ${ }^{\text {S }}$
Corequisites: SUR-123S
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. (2016 SP)

## SUR-123 Sur Clinical Practice I $7 \quad$ Spring

Prerequisites: SUR-110 ${ }^{\text {S }}$, SUR-111 ${ }^{\text {S }}$
Corequisites: SUR-122 ${ }^{\text {S }}$
This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is placed 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.(1997 SU)

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| SUR-134 | Surgical Procedures II |  |  |
| Prerequisites: | SUR-123 |  |  |
| Corequisites: | None |  |  |

SUR-135 SUR Clinical Practice II $\quad$| (0-0-12) |
| :--- |

Prerequisites: SUR-123 ${ }^{\text {S }}$
Corequisites: SUR-134 ${ }^{\text {s }}$
This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed 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.(2010 FA)

| SUR-137 | Professional Success Prep |
| :--- | :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |


| SUR-210 | Adv SUR Clinical Practice |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course is designed to provide individualized experience in advanced practice, |  |
| education, circulating, and managerial skills. Emphasis is placed on developing |  |
| and demonstrating proficiency in skills necessary for advanced practice. Upon |  |
| completion, students should be able to assume leadership roles in a chosen |  |
| specialty area.(2010 FA) |  |


| SUR-211 | Adv Theoretical Concepts | 2(2-0) | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers theoretical knowledge required for extension of the surgical technologist role. Emphasis is placed on advanced practice in complex surgical specialties, educational methodologies, and managerial skills. Upon completion, students should be able to assume leadership roles in a chosen specialty area. (2010 FA)

COURSE DESCRIPTIONS

## TRF TURFGRASS MANAGEMENT

TRF-110 Intro Turfgrass Cult \& ID 4(3-2) Spring<br>Prerequisites: LSG- $111^{\text {L}}$; MAT- $110^{\text {L }}$, MAT- $121^{\text {L }}$, MAT- $143^{\text {L }}$, MAT- $152^{\text {L }}$, or MAT- $171^{\text {L }}$<br>Corequisites: None

This course covers the principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawns. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species and develop an establishment and maintenance plan for high quality turf areas in accordance with sustainable practices.(2013 FA)

TRF-152 Landscape Maintenance 3 (2-2) Summer

MAT-143 ${ }^{\text {L }}$, MAT-152 ${ }^{\text {L }}$, or MAT- $171^{\text {L }}$
Corequisites: None
This course introduces the tasks of landscape maintenance. Emphasis is placed on lawns, shrubs, trees, flowers, and ground covers. Upon completion, students should be able to maintain a landscape area on a year-round schedule.(1997 SU)
TRF-210 Turfgrass Eqmt Mgmt 3 (1-4) Fall

Prerequisites: HOR-160 ${ }^{\text {L }}$, LSG- $111^{L}$, LSG- $123^{L}$, TRF- $110^{\text {L }}$; MAT- $110^{\mathrm{L}}$, MAT-121 ${ }^{\text {L }}$, MAT- $143^{\text {L }}$, MAT- $152^{\text {L }}$, or MAT- $171^{\text {L }}$
Corequisites: None
This course covers the operation and maintenance of specialized turfgrass management equipment. Topics include small engine use and repair operation, maintenance, and repair of turfgrass management equipment organization of shop areas and safety considerations. Upon completion, students should be able to operate and maintain turfgrass management equipment.(1997 SU)


## Corequisites: None

This course introduces the specific math concepts and calculations necessary in the turfgrass industry. Emphasis is placed on calibration of equipment used in the application of fertilizers and pesticides and calculation of solid materials used in construction. Upon completion, students should be able to correctly perform basic calculations and calibrations and estimate materials needed in specific professional turfgrass management situations.(1997 SU)

| -230 | Turfgrass Mgmt Apps | 2 (1-2) | F |
| :---: | :---: | :---: | :---: |
| Prerequisites: | HOR-166 ${ }^{\text {L }}$ MAT-110 ${ }^{\text {, }}$, MAT-121 ${ }^{\text {L }}$, MAT-143 ${ }^{\text {L }}$, MAT-152 ${ }^{\text {L }}$, or MAT-171 ${ }^{\text {L }}$ |  |  |
| Corequisites: | None |  |  |
| This course introduces specific sports field design, installation, and maintenance. Topics include natural grass croquet courts and baseball, soccer, and football |  |  |  |
|  |  |  |  |
| fields. Upon completion, students should be able to perform specific tasks in |  |  |  |
| layout, field marking, and preparing for tournament play.(1997 SU) Major emphasis |  |  |  |


| 26 | Adv Turfgrass Mgmt | 4 (3-2) | Spring |
| :---: | :---: | :---: | :---: |
| Prerequisites: | ENG-112 ${ }^{\text {L }}$ or ENG-114 ${ }^{\text {L }}$ TRF-110 ${ }^{\text {L }}$ |  |  |
| Corequisites: | None |  |  |
| This course covers the principles and practices involved in turfgrass management. |  |  |  |
| Topics include choosing the best management practice in mowing, pest control, fertilization, irrigation, traffic control, air control, budgeting, and materials procurement. Upon completion, students should be able to demonstrate knowledge of the principles covered and select and apply the best practices in turfgrass management.(1997 SU) |  |  |  |
|  |  |  |  |  |  |

## TRN TRANSPORTATION TECHNOLOGY

TRN-110 Intro to Transport Tech 2 (1-2) | Fall |
| :--- |
| Spring |

Prerequisites: None
Corequisites: None
This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.(2013 FA)

| TRN-112 | Powertrain Maint/Light Repair | $4(2-6)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |
| This course covers maintenance and light repair of transportation engines, |  |  |
| automatic and manual transmission/transaxles, engine performance systems, |  |  |
| and HVAC systems. Topics include general servicing and inspection procedures |  |  |
| of engines, engine lubrication and cooling systems, automatic and manual |  |  |
| transmission/transaxles, HVAC components, and fuel, air induction, and exhaust |  |  |
| systems. Upon completion, students should be able to perform maintenance |  |  |
| and light repair of transportation engines, automatic and manual transmission/ |  |  |
| transaxles, engine performance systems, and HVAC systems.(2015 SU) |  |  |

## TRN-120 Basic Transp 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.(2013 FA)

COURSE DESCRIPTIONS

| TRN-140 | Transp Climate Control | 2(1-2) | Spring <br> Summer |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course covers the theory of refrigeration and heating, electrical/electronic/ pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.(2013 FA)

TRN-140A Transp Climate Cont Lab 2 (1-2) | Spring |
| :--- |
| Summer |

Prerequisites: None
Corequisites: TRN-140 ${ }^{\text {S }}$
This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.(2013 FA)

| TRN-180 | Basic Welding for Transp | $3(1-4)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard(2013 FA)

## UAS UNMANNED AIRCRAFT SYSTEMS

UAS-110
Prerequisites: $\quad$ None to UAS Operations
Corequisites: None
This course provides an introduction to the history, various technologies, and
capabilities of unmanned aircraft systems (UAS). Topics include UAS history,
operational design and capabilities, popular applications, and the science of flight.
Upon completion, students should be able to identify and explain common aspects
of unmanned aircraft systems including their historical development, commonly
utilized technologies, applications, and unit flight capabilities.(2015 FA)

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| :--- | :--- | :--- | :--- |
| UAS-115 | Small UAS Certification | 2 (2-0) AND |  |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

## WBL WORK-BASED LEARNING

| WBL-110 World of Work | 1(1-0) Fall |
| :--- | :--- |
| Prerequisites: | None |
| Corequisites: | None |
| This course covers basic knowledge necessary for gaining and maintaining |  |
| employment. Topics include job search skills, work ethic, meeting employer |  |
| expectations, workplace safety, and human relations. Upon completion, students |  |
| should be able to successfully make the transition from school to work.(2014 FA) |  |


| WBL-111-ARC | Work-Based Learning I | $1(0-10)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-111-BPA | Work-Based Learning I | $1(0-10)$ |
| :--- | :--- | :--- | | Fall |
| :--- |
| Summer |


| WBL-111-BUS | Work-Based Learning I | $1(0-10)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

COURSE DESCRIPTIONS

| WBL-111-CET | Work-Based Learning I | $1(0-10)$ |
| :--- | :--- | :--- |
| Prerequisites: AND |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)
WBL-111-CIV Work-Based Learning I $\quad 1$ (0-10) AND
Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved
employer in an area related to the student's program of study. Emphasis is placed
on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability
skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-111-CJC Work-Based Learning I 1 (0-10) Summer
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$ CJC- $241^{\text {L }}$, CJC-132 ${ }^{\text {L }, ~ C J C-141 ~}{ }^{\text {L }}$, or CJC-121 ${ }^{\text {L }}$
Corequisites: WBL-115
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA) Students should plan their prerequisite course based upon where they plan to complete their co-op work: CJC-132, Courthouse; CJC-141, Department of Corrections; CJC-121, Law Enforcement Agency; CJC-241, Community Corrections.

| WBL-111-CUL Work-Based Learning I | $1(0-10)$ | Fall |
| :--- | :--- | :--- |
|  |  | Spring |
|  |  | Summer |

Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-111-FIP | Work-Based Learning I | $1(0-10)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-111-GEO | Work-Based Learning I | $1(0-10)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

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WBL-111-HFS Work-Based Learning I 1(0-10) Fall
Prerequisites: None
Corequisites: None
```

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-111-ITS | Work-Based Learning I | $1(0-10)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-111-LSG Work-Based Learning I 1 (0-10) Spring Prerequisites: LSG- $111^{\text {L }}$ and LSG-121 ${ }^{\text {L }}$; MAT- $110^{\text {L }}$, MAT-121 ${ }^{\text {L }}$, MAT-143 ${ }^{\text {L }}$, MAT-152 ${ }^{\text {L }}$, or MAT-171 ${ }^{\text {L }}$
Corequisites: HOR-134 ${ }^{\text {L }}$, LSG-122 ${ }^{\text {L }}$, TRF-110 ${ }^{\text {L }}$
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-111-MTH Work-Based Learning I 1(0-10) AND

 Prerequisites: NoneCorequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-111-TRF | Work-Based Learning I | 1 (0-10) |
| :--- | :--- | :--- |
| Prerequisites: |  |  |

Prerequisites: ENG-111 ${ }^{\text {L }}$, LSG-121
Corequisites: HOR-166

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA) Approved situations will include golf courses within ten (10) miles of Sandhills Community College.
WBL-112-ARC
Prerequisites:
Work-Based Learning I
Corequisites:
This course provides a work-based learning experience with a college-approved
employer in an area related to the student's program of study. Emphasis is placed
on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability
skills, and satisfactorily perform work-related competencies. 2014 FA )

| WBL-112-AUT | Work-Based Learning I | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)
WBL-112-CET Work-Based Learning I $\quad \mathbf{2 ( 0 - 2 0 )}$ AND
Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved
employer in an area related to the student's program of study. Emphasis is placed
on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability
skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-112-CIV | Work-Based Learning I | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-112-CUL | Work-Based Learning I | 2(0-20) Spring |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-112-GEO | Work-Based Learning I | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-112-ITS | Work-Based Learning I | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: |  |  |
| Conequisites: | None |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-113-ARC Work-Based Learning I 3 (0-30) AND Prerequisites: None <br> Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-113-CET | Work-Based Learning I | $3(0-30)$ AND |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: | None |  | This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)


| WBL-113-CIV | Work-Based Learning I | $3(0-30)$ AND |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

COURSE DESCRIPTIONS

| WBL-113-GEO | Work-Based Learning I | $3(0-30)$ AND |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-113-ITS Work-Based Learning I 3 (0-30) AND
Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-115-CJC Work-Based Learning Seminar I 1 (1-0) Summer
Prerequisites: ENG-002 ${ }^{\text {L }}$ or BSP-4002 ${ }^{\text {L }}$ CJC-241 ${ }^{\text {L }}$, CJC-132 ${ }^{\text {L }, ~ C J C-141 ~}{ }^{\text {L }}$, or CJC-121
Corequisites: WBL-111 ${ }^{\text {S }}$
This course description may be written by the individual colleges.(2014 FA) Students should plan their prerequisite course based upon where they plan to complete their co-op work: CJC-132, Courthouse; CJC-141, Department of Corrections; CJC-121, Law Enforcement Agency; CJC-241, Community Corrections.

| WBL-115-HFS | Work-Based Learning Seminar I |  |
| :--- | :--- | :--- |
| Prerequisites: | None | (1-0) Fall |
| Corequisites: | WBL-111 |  |

WBL-115-ITS Work-Based Learning Seminar I 1(1-0) AND Prerequisites: None
Corequisites: WBL-111 ${ }^{\text {S }}$
This course description may be written by the individual colleges.(2014 FA)
WBL-121-ARC Work-Based Learning II $\quad 1$ (0-10) AND
Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved
employer in an area related to the student's program of study. Emphasis is placed
on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability
skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-121-CET | Work-Based Learning II | $1(0-10)$ | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-121-CIV | Work-Based Learning II | $1(0-10)$ |
| :--- | :--- | :--- |
| Prerequisites: AND |  |  |
| Corequisites: None |  |  |

Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-121-CUL Work-Based Learning II 1 (0-10) Spring Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-121-FIP Work-Based Learning II 1 (0-10) Spring

 Prerequisites: NoneCorequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-121-GEO | Work-Based Learning II | $1(0-10)$ |
| :--- | :--- | :--- |
| Prerequisites: AND | None |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-121-HFS Work-Based Learning II
1 (0-10) Spring Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

COURSE DESCRIPTIONS

| WBL-121-ITS | Work-Based Learning II | 1 (0-10) | AND |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-121-LSG Work-Based Learning II $1(0-10)$ Fall

 Prerequisites: WBL-111
## Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-121-TRF Work-Based Learning II
1 (0-10) Summer Prerequisites: WBL-111 ${ }^{\text {L }}$, ENG-114 ${ }^{\text {L }}$
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-122-ARC Work-Based Learning II Prerequisites: None <br> Corequisites: None

2 (0-20) AND

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-122-CET | Work-Based Learning II | $2(0-20)$ |
| :--- | :--- | :--- |
| Prerequisites: | None |  |
| Corequisites: |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-122-CIV Work-Based Learning II 2 (0-20) AND Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-122-GEO | Work-Based Learning II | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-122-ITS Work-Based Learning II 2 (0-20) AND Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

| WBL-131-BPA | Work-Based Learning III | $1(0-10)$ |
| :--- | :--- | :--- |
| Prerequisites: AND |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WBL-131-LSG Work-Based Learning III 1 (0-10) Spring

 Prerequisites: NoneCorequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

WBL-131-TRF Work-Based Learning III $1(0-10)$ Fall Prerequisites: WBL-121 ${ }^{\text {L }}$
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA) Approved situations will include golf courses within ten (10) miles of Sandhills Community College.

COURSE DESCRIPTIONS

| WBL-132-BPA | Work-Based Learning III | $\mathbf{2 ( 0 - 2 0 )}$ AND |
| :--- | :--- | :--- |
| Prerequisites: None |  |  |
| Corequisites: None |  |  |

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)
WBL-212-LSG Work-Based Learning IV 2 (0-2O) Summer
Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved
employer in an area related to the student's program of study. Emphasis is placed
on integrating classroom learning with related work experience. Upon completion,
students should be able to evaluate career selection, demonstrate employability
skills, and satisfactorily perform work-related competencies.(2014 FA)
$\begin{array}{lll}\text { WBL-212-TRF } & \text { Work-Based Learning IV } \\ \text { Prerequisites: None } & 2(0-20) \text { Summer }\end{array}$ Prerequisites: None
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.(2014 FA)

## WEB WEB TECHNOLOGIES

WEB-115 Web Markup and Scripting $\quad 3$ (2-3) Summer
Prerequisites: None
Corequisites: None
This course introduces Worldwide Web Consortium (W3C) Internet programming
using JavaScript. Topics include basic syntax, object-oriented programming,
functions, variables, events, arrays, validation, accessibility, and web standards.
Upon completion, students should be able to write, debug, maintain well-formed
and well documented interactive web content using JavaScript code.(2022 SP)
WEB-140
Prerequisites:
None Development Tools
Corequisites:
This course provides an introduction to web development tools. Topics include
creating websites using web development tools and web standards. Upon
completion, students should be able to create small web sites and upload files to a
web server.(2020 FA)

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| :--- | :--- | :--- | :--- |
| WEB-151 | Mobile Application Dev I | $3(2-3)$ | Summer |
| Prerequisites: | None |  |  |
| Corequisites: | None |  |  |
| This course introduces students to programming technologies, design, and |  |  |  |
| development related to mobile applications. Topics include accessing device |  |  |  |
| capabilities, compliance with industry standards, and programming for mobile |  |  |  |
| applications. Upon completion, students should be able to develop basic |  |  |  |
| applications for mobile devices.(2022 FA) |  |  |  |

WEB-182 PHP Programming 3 (2-3) AND Prerequisites: None
Corequisites: None
This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.(2022 FA)

| WEB-210 | Web Design | $3(2-3)$ | Fall |
| :--- | :--- | :--- | :--- |
| Prerequisites: | None |  |  |
| 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. (2023 SP)

WEB-214 Social Media 3 (2-3) Spring
Prerequisites: None
Corequisites: None
This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.(2022 FA)

WEB-225 Content Management Sys 3(2-3) Spring Prerequisites: None
Corequisites: None
This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website. (2023 SP)

## WLD WELDING

WLD-111 Oxy-Fuel Welding 2 (1-3) AND
Prerequisites: None
Corequisites: None
This course introduces the oxy-fuel welding process. Topics include safety, proper equipment setup, and operation of oxy-fuel welding equipment with emphasis on bead application, profile, and discontinuities. Upon completion, students should be able to oxy-fuel weld fillets and grooves on plate and pipe in various positions. (1997 SU)

WLD-112 Basic Welding Processes $2(1-3)$ AND Prerequisites: None
Corequisites: None
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.(1997 SU)

## PROGRAMS

## ACCOUNTING

The Accounting curricula is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations.

Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

## Associate in Applied Science Degree Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| CIS-110 or | Introduction to Computers or |  |  |  |
| OST-137 | Office Applications I | 2 | 2 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| ${ }_{* * *}$ | Technical Elective |  |  | 3 |
|  | Credit Hours | $\mathbf{8}$ | $\mathbf{6}$ | $\mathbf{1 4}$ |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ACC-121 | Prin of Managerial Accounting | 3 | 2 | 4 |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| *** | Natural Science/Math Elective |  |  | 3-5 |
| *** | Technical Elective |  |  | 3 |
|  | Credit Hours | 7 | 5 | 15-17 |
| Third Semester (Summer) |  |  |  |  |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-131 | Federal Income Taxes | 2 | 2 | 3 |
| ACC-220 | Intermediate Accounting । | 3 | 2 | 4 |


|  |  | Course <br> Week |  |  |
| :--- | :--- | :--- | :--- | :--- |
| BUS-115 | Business Law I | 3 | 0 | Semester <br> Hours |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| BUS-225 | Business Finance | 2 | 2 | 3 |
|  | Credit Hours | 13 | 6 | 16 |
| Fifth Semester (Spring) |  |  |  |  |
| ACC-140 | Payroll Accounting | 1 | 3 | 2 |
| ACC-150 | Accounting Software Appl | 1 | 3 | 2 |
| ACC-151 | Acct Spreadsheet Appl | 1 | 3 | 2 |
| ACC-180 | Practices in Bookkeeping | 3 | 0 | 3 |
| BUS-151 | People Skills | 3 | 0 | 3 |
| ECO-251 or | Prin of Microeconomics or |  |  |  |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |
|  | Credit Hours | 12 | 9 | 15 |
| Total Required Minimum Semester Hours Credit |  |  | 66 |  |


| Technical | Electives: | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| BAF-110 | Principles of Banking | 3 | 0 | 3 |
| BAS-120 | Intro to Analytics | 2 | 3 | 3 |
| BUS-110 | Introduction to Business | 3 | 0 | 3 |
| BUS-125 | Personal Finance | 3 | 0 | 3 |
| BUS-139 | Entrepreneurship I | 3 | 0 | 3 |
| BUS-148 | Survey of Real Estate | 3 | 0 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| BUS-260 | Business Communication | 3 | 0 | 3 |
| MKT-120 | Principles of Marketing | 3 | 0 | 3 |

View Catalog Archives
Professor Kirk Lynch, Accounting Coordinator
108 Meyer Hall
910.695.3866
lynchk@sandhills.edu

## ACCOUNTING - BOOKKEEPING

The Accounting curricula is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations.

Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and
taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

## Certificate Program

|  | Course <br> Week | Sours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## ADVANCED EMT

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence-based practice under medical oversight and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

The Emergency Medical Services - Paramedic program at Sandhills Community College is accredited by the Commission of Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee of Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CoAEMSP:

## Certificate Program

|  |  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Clinic | Credit |
| EMS-110 | EMT | 6 | 6 | 3 | 9 |
|  | Credit Hours | 6 | 6 | 3 | 9 |
| Second Semester (Spring) |  |  |  |  |  |
| EMS-120 | Advanced EMT | 4 | 6 |  | 6 |
| EMS-121 | AEMT Clinical Practicum | 0 | 0 | 6 | 2 |
|  | Credit Hours | 4 | 6 | 6 | 8 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 17 |

View Catalog Archives
Associate Professor Ryan Teal, Emergency Medical Science Coordinator 108 Kennedy Hall
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Associate Professor Stefanie Williams, Emergency Medical Science Clinical Coordinator
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## ARCHITECTURAL TECHNOLOGY

These curriculums are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Construction Management Technology: A program that prepares individuals to supervise, manage, and inspect construction sites, buildings, and associated facilities. Includes instruction in site safety, personnel supervision, labor relations, diversity training, construction documentation, scheduling, resource and cost control, bid strategies, rework prevention, construction insurance and bonding,
accident management and investigation, applicable law and regulations, and communication skills.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per | Semester |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Week | Cab |  |


|  |  | Course Hours Per | Semester |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Week |  | Hours |
| CMT-212 | Total Safety Performance | 3 | 0 | 3 |
| $* * *$ | Social/Beh Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 12 | 2 | 13 |
| Total Required Minimum Semester Hours Credit |  |  | 73 |  |


| Technology | Electives: | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| CIS-111 | Basic PC Literacy | 1 | 2 | 2 |
| EGR-125 | Appl Software for Tech | 1 | 2 | 2 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |

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Instructor Mike Sassano, Construction Management Technology Coordinator
153 Little Hall
(910) 695-3940
sassanom@sandhills.edu
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## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Environmental Engineering Technology: A course of study that prepares students to use mathematical and scientific principles to modify, test, and operate equipment and devices used in the prevention, control and remediation of environmental problems and development of environmental remediation devices. Includes instruction in environmental safety principles, environmental standards, testing and sampling procedures, laboratory techniques, instrumentation calibration, safety and protection procedures, equipment maintenance, and report preparation.

Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| BPR-130 | Print Reading-Construction | 3 | 0 | 3 |
| CEG-115 | Intro to Tech \& Sustainability | 2 | 3 | 3 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| CEG-115A | Tech \& Sustainability Lab | 0 | 3 | 1 |
| CEG-210 | Construction Mtls \& Methods | 2 | 3 | 3 |
| $\begin{array}{r} \text { EGR-110 or } \\ \text { EGR-150 } \end{array}$ | Intro to Engineering Tech or Intro to Engineering | 1 | 2 | 2 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | Technology Elective | 1-3 | 0-2 | 2-3 |
|  | Credit Hours | 12-14 | 13-15 | 18-19 |
| Second Semester (Spring) |  |  |  |  |
| CEG-111 | Intro to Gis and Gnss | 2 | 4 | 4 |
| CEG-235 | Project Management/Estimating | 2 | 3 | 3 |
| EGR-120 | Eng and Design Graphics | 2 | 2 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| MAT*** | MAT-121 or MAT-171 | 2-3 | 2 | 3-4 |
|  | Credit Hours | 11-12 | 11 | 16-17 |
| Third Semester (Summer) |  |  |  |  |
| EGR-251 | Statics | 2 | 2 | 3 |
| SRV-110 | Surveying I | 2 | 6 | 4 |
| *** | Social/Beh Science Elective | 3 | 0 | 3 |
|  | Credit Hours | 7 | 8 | 10 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CEG-211 | Hydrology \& Erosion Control | 2 | 3 | 3 |
| CIV-111 | Soils and Foundations | 2 | 4 | 4 |
| SRV-111 | Surveying II | 2 | 6 | 4 |
| SST-140 | Green Bldg \& Design Concepts | 3 | 0 | 3 |
| $* * *$ | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 12 | 13 | 17 |


| Fifth Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CEG-212 | Intro to Environmental Tech | 2 | 3 | 3 |
| CEG-230 | Subdivision Planning \& Design | 1 | 6 | 3 |
| CHM-151 | General Chemistry I | 3 | 3 | 4 |
| ENV-226 | Environmental Law | 3 | 0 | 3 |
|  | Credit Hours | 9 | 12 | 13 |
| Total Required Minimum Semester Hours Credit |  |  | 74 |  |


| Technology Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| CIS-111 | Basic PC Literacy | 1 | 2 | 2 |
| EGR-125 | Appl Software for Tech | 1 | 2 | 2 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |

Course Hours Per Week

Semester Hours

20

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## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology. Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Geomatics Technology: A course of study that prepares students to use mathematical and scientific principles for the delineation, determination, planning and positioning of land tracts, boundaries, contours and features applying principles of route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other kinds of property description and measurement to create related maps, charts and reports.

Includes instruction in applied geodesy, computer graphics, photointerpretation, plane and geodetic surveying, mensuration, traversing, survey equipment operation and maintenance, instrument calibration, and basic cartography.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| BPR-130 | Print Reading-Construction | 3 | 0 | 3 |
| CEG-115 | Intro to Tech \& Sustainability | 2 | 3 | 3 |
| CEG-115A | Tech \& Sustainability Lab | 0 | 3 | 1 |
| CEG-210 | Construction Mtls \& Methods | 2 | 3 | 3 |
| EGR-110 or | Intro to Engineering Tech or |  |  |  |
| EGR-150 | Intro to Engineering | 1 | 2 | 2 |


| $\begin{aligned} & \text { ENG-111 } \\ & * * * \end{aligned}$ | Writing and Inquiry Technology Elective Credit Hours | Course Hours Per Week |  | Semester Hours 3 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3 | 0 |  |
|  |  | 1-3 | 0-2 | 2-3 |
|  |  | 12-14 | 13-15 | 18-19 |
| Second Semester (Spring) |  |  |  |  |
| CEG-111 | Intro to Gis and Gnss | 2 | 4 | 4 |
| CEG-235 | Project Management/Estimating | 2 | 3 | 3 |
| EGR-120 | Eng and Design Graphics | 2 | 2 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| MAT*** | MAT-121 or MAT-171 | 2-3 | 2 | 3-4 |
|  | Credit Hours | 11-12 | 11 | 16-17 |
| Third Semester (Summer) |  |  |  |  |
| EGR-251 | Statics | 2 | 2 | 3 |
| SRV-110 | Surveying I | 2 | 6 | 4 |
| *** | Physics Elective | 3 | 2-3 | 4 |
|  | Credit Hours | 7 | 10-11 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| CEG-211 | Hydrology \& Erosion Control | 2 | 3 | 3 |
| SRV-111 | Surveying II | 2 | 6 | 4 |
| SRV-220 | Surveying Law | 2 | 2 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Directed Elective | 0-3 | 2-30 | 3-4 |
|  | Credit Hours | 9-12 | 13-41 | 16-17 |
| Fifth Semester (Spring) |  |  |  |  |
| CEG-230 | Subdivision Planning \& Design | 1 | 6 | 3 |
| SRV-210 | Surveying III | 2 | 6 | 4 |
| SRV-240 | Topo/Site Surveying | 2 | 6 | 4 |
| *** | Social/Beh Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 8 | 18 | 14 |
| Total Requir | d Minimum Semester Hours Credit |  |  | 75 |


| Technology | Electives: | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| CIS-111 | Basic PC Literacy | 1 | 2 | 2 |
| EGR-125 | Appl Software for Tech | 1 | 2 | 2 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |
| UAS-115 | Small UAS Certification | 2 | 0 | 2 |


| Physics Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PHY-131 | Physics-Mechanics | 3 | 2 | 4 |
| PHY-151 | College Physics I | 3 | 2 | 4 |


|  |  | Course <br> Week |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PHY-251 | General Physics I | 3 | 3 | Semester <br> Hours |
| Directed Electives: |  | 4 |  |  |

## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Civil Engineering Technology: A course of study that prepares students to use basic engineering principles and technical skills to carry out planning, documenting and supervising tasks in sustainable land development and public works and facilities projects. Includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology, and surveying. Graduates should qualify for technicianlevel jobs with both public and private engineering, construction, and surveying agencies.

Associate in Applied Science Degree Program

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| BPR-130 | Print Reading-Construction | 3 | 0 | 3 |
| CEG-210 | Construction Mtls \& Methods | 2 | 3 | 3 |
| $\begin{array}{r} \text { EGR-110 or } \\ \text { EGR-150 } \end{array}$ | Intro to Engineering Tech or Intro to Engineering | 1 | 2 | 2 |
| EGR-115 | Intro to Technology | 2 | 3 | 3 |
| EGR-115A | Intro to Technology Lab | 0 | 3 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | Technology Elective | 1-3 | 0-2 | 2-3 |
|  | Credit Hours | 12-14 | 13-15 | 18-19 |
| Second Semester (Spring) |  |  |  |  |
| CEG-111 | Intro to Gis and Gnss | 2 | 4 | 4 |
| CEG-235 | Project Management/Estimating | 2 | 3 | 3 |
| EGR-120 | Eng and Design Graphics | 2 | 2 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| MAT*** | MAT-121 or MAT-171 | 2-3 | 2 | 3-4 |
|  | Credit Hours | 11-12 | 11 | 16-17 |
| Third Semester (Summer) |  |  |  |  |
| EGR-251 | Statics | 2 | 2 | 3 |
| SRV-110 | Surveying I | 2 | 6 | 4 |
| *** | Physics Elective | 3 | 2-3 | 4 |
|  | Credit Hours | 7 | 10-11 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| CEG-211 | Hydrology \& Erosion Control | 2 | 3 | 3 |
| CIV-111 | Soils and Foundations | 2 | 4 | 4 |
| SRV-111 | Surveying II | 2 | 6 | 4 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Directed Elective | 0-3 | 2-30 | 3-4 |
|  | Credit Hours | 9-12 | 15-43 | 17-18 |
| Fifth Semester (Spring) |  |  |  |  |
| CEG-212 | Intro to Environmental Tech | 2 | 3 | 3 |
| SRV-240 | Topo/Site Surveying | 2 | 6 | 4 |
| *** | Social/Beh Sciences Elective | 3 | 0 | 3 |
| *** | Directed Elective | 0-3 | 2-30 | 3 |
|  | Credit Hours | 7-10 | 11-39 | 13 |


|  | Course Hours Per | Semester |
| :--- | :--- | :--- |
| Total Required Minimum Semester Hours Credit | Week | Hours |
|  |  | 75 |


| Technology | Electives: | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| CIS-111 | Basic PC Literacy | 1 | 2 | 2 |
| EGR-125 | Appl Software for Tech | 1 | 2 | 2 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |
| UAS-115 | Small UAS Certification | 2 | 0 | 2 |


| Physics Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PHY-131 | Physics-Mechanics | 3 | 2 | 4 |
| PHY-151 | College Physics I | 3 | 2 | 4 |
| PHY-251 | General Physics I | 3 | 3 | 4 |


| Directed Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CIV-221 | Steel and Timber Design | 2 | 3 | 3 |
| CIV-222 | Reinforced Concrete | 2 | 3 | 3 |
| MAT-172 | Precalculus Trigonometry | 3 | 2 | 4 |
| MAT-263 | Brief Calculus | 3 | 2 | 4 |
| MAT-271 | Calculus I | 3 | 2 | 4 |
| MAT-272 | Calculus II | 3 | 2 | 4 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology. Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Environmental Engineering Technology: A course of study that prepares students to use mathematical and scientific principles to modify, test, and operate
equipment and devices used in the prevention, control and remediation of environmental problems and development of environmental remediation devices. Includes instruction in environmental safety principles, environmental standards, testing and sampling procedures, laboratory techniques, instrumentation calibration, safety and protection procedures, equipment maintenance, and report preparation.

## Certificate Program

|  |  | Course Hours Per <br> Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| CEG-115 | Intro to Tech \& Sustainability | 2 | 3 | 3 |
| CEG-115A | Tech \& Sustainability Lab | 0 | 3 | 1 |
| SST-140 | Green Bldg \& Design Concepts | 3 | 0 | 3 |
|  | Credit Hours | 5 | 6 | 7 |
| Second Semester (Spring) |  |  |  |  |
| CEG-111 | Intro to Gis and Gnss | 2 | 4 | 4 |
| CHM-151 | General Chemistry I | 3 | 3 | 4 |
| EGR-120 | Eng and Design Graphics | 2 | 2 | 3 |
|  | Credit Hours | 7 | 9 | 11 |
| Total Required Minimum Semester Hours Credit |  |  |  | 18 |
| View Catalog Archives |  |  |  |  |
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## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Geomatics Technology: A course of study that prepares students to use mathematical and scientific principles for the delineation, determination, planning and positioning of land tracts, boundaries, contours and features applying principles of route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other kinds of property description and measurement to create related maps, charts and reports.

Includes instruction in applied geodesy, computer graphics, photointerpretation, plane and geodetic surveying, mensuration, traversing, survey equipment operation and maintenance, instrument calibration, and basic cartography.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

## Certificate Program

|  | Course <br>  <br>  <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## ARCHITECTURAL TECHNOLOGY

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Civil Engineering Technology: A course of study that prepares students to use basic engineering principles and technical skills to carry out planning, documenting
and supervising tasks in sustainable land development and public works and facilities projects. Includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology, and surveying. Graduates should qualify for technicianlevel jobs with both public and private engineering, construction, and surveying agencies.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## ARCHITECTURAL TECHNOLOGY

Architectural and Construction Pathway: These programs are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Architectural Technology: A program that prepares individuals to assist architects, engineers, and construction professionals in developing plans and related documentation for residential and commercial projects in both the private and public sectors. Includes instruction in architectural drafting, computer-assisted drafting, construction materials and methods, environmental systems, codes and standards, structural principles, cost estimation, planning, graphics, and presentation.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Third Semester (Summer) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EGR-251 | Statics | 2 | 2 | 3 |
| SRV-110 | Surveying I | 2 | 6 | 4 |
| *** | Physics Elective | 3 | 2-3 | 4 |
|  | Credit Hours | 7 | 10-11 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| ARC-211 | Light Constr Technology | 1 | 6 | 3 |
| SST-140 | Green Bldg \& Design Concepts | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Directed Elective | 0-3 | 2-30 | 3 |
| *** | Directed Elective | 0-3 | 2-30 | 4 |
|  | Credit Hours | 7-13 | 10-66 | 16 |

Fifth Semester (Spring)

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| ARC-213 | Design Project | 2 | 6 | 4 |
| ARC-230 | Environmental Systems | 3 | 3 | 4 |
| *** | Technical Elective | 0-3 | 2-6 | 3-4 |
| *** | Social/Beh Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 8-11 | 11-15 | 14-15 |
| Total Req | d Minimum Semester Hours Cr |  |  | 74 |


| Technology | Electives: | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| CIS-111 | Basic PC Literacy | 1 | 2 | 2 |
| EGR-125 | Appl Software for Tech | 1 | 2 | 2 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |
| UAS-115 | Small UAS Certification | 2 | 0 | 2 |


| Physics Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PHY-131 | Physics-Mechanics | 3 | 2 | 4 |
| PHY-151 | College Physics I | 3 | 2 | 4 |
| PHY-251 | General Physics I | 3 | 3 | 4 |


| Directed Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CIV-111 | Soils and Foundations | 2 | 4 | 4 |
| CIV-221 | Steel and Timber Design | 2 | 3 | 3 |
| MAT-263 | Brief Calculus | 3 | 2 | 4 |
| MAT-271 | Calculus I | 3 | 2 | 4 |
| MAT-272 | Calculus II | 3 | 2 | 4 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |


| Technical Electives: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ART-121 | Two-Dimensional Design | 0 | 6 | 3 |
| ART-122 | Three-Dimensional Design | 0 | 6 | 3 |
| CEG-212 | Intro to Environmental Tech | 2 | 3 | 3 |
| CIV-222 | Reinforced Concrete | 2 | 3 | 3 |
| ELC-113 | Residential Wiring | 2 | 6 | 4 |
| ELC-114 | Commercial Wiring | 2 | 6 | 4 |
| ELC-115 | Industrial Wiring | 2 | 6 | 4 |
| ELC-117 | Motors and Controls | 2 | 6 | 4 |
| MAT-172 | Precalculus Trigonometry | 3 | 2 | 4 |
| SRV-210 | Surveying III | 2 | 6 | 4 |
| SRV-240 | Topo/Site Surveying | 2 | 6 | 4 |


|  |  | Course |  |
| :--- | :--- | :--- | :--- |
|  |  | Weurs Per | Semester <br> Wours |
| WLD-111 | Oxy-Fuel Welding | 1 | 3 |

View Catalog Archives

## Professor Ed Spitler, Architectural Technology Coordinator

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## ARCHITECTURAL TECHNOLOGY

Architectural and Construction Pathway: These programs are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Architectural Technology: A program that prepares individuals to assist architects, engineers, and construction professionals in developing plans and related documentation for residential and commercial projects in both the private and public sectors. Includes instruction in architectural drafting, computer-assisted drafting, construction materials and methods, environmental systems, codes and standards, structural principles, cost estimation, planning, graphics, and presentation.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

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## ARCHITECTURAL TECHNOLOGY

These curriculums are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Building Construction Technology: This program is designed to prepare individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; print reading; building codes; framing; masonry; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

## Certificate Program

|  | Course <br>  <br>  <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## ARCHITECTURAL TECHNOLOGY

These curriculums are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Building Construction Technology: This program is designed to prepare individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; print reading; building codes; framing; masonry; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ARC-111 | Intro to Arch Technology | 1 | 6 | 3 |
| ARC-112 | Constr Matls \& Methods | Print Reading-Construction | 3 | 2 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { PHY-131 or } \\ & \text { PHY-151 } \end{aligned}$ | Physics-Mechanics or |  |  |  |
|  | College Physics I | 3 | 2 | 4 |
| SRV-110 | Surveying I | 2 | 6 | 4 |
|  | Credit Hours | 8 | 11 | 12 |
| Fourth Semester (Fall) |  |  |  |  |
| CMT-210 | Construction Management Fund | 3 | 0 | 3 |
| CST-111 | Construction I | 3 | 3 | 4 |
| CST-231 | Soils \& Site Work | 3 | 2 | 4 |
| SST-140 | Green Bldg \& Design Concepts | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 15 | 5 | 17 |
| Fifth Semester (Spring) |  |  |  |  |
| CMT-212 | Total Safety Performance | 3 | 0 | 3 |
| CST-112 | Construction II | 3 | 3 | 4 |
| *** | Social/Beh Sciences Elective | 3 | 0 | 3 |
| *** | Technical Elective | 1-3 | 3-6 | 4 |
|  | Credit Hours | 10-12 | 6-9 | 14 |
| Total Required Minimum Semester Hours Credit |  |  |  | 76 |
| Technical Electives: Take 4 credits |  | Class | Lab | Credit |
| ARC-230 | Environmental Systems | 3 | 3 | 4 |
| ELC-113 | Residential Wiring | 2 | 6 | 4 |
| ELC-114 | Commercial Wiring | 2 | 6 | 4 |
| ELC-115 | Industrial Wiring | 2 | 6 | 4 |
| ELC-117 | Motors and Controls | 2 | 6 | 4 |
| PLU-115 |  |  |  |  |
| SRV-240 | Topo/Site Surveying | 2 | 6 | 4 |
| WLD-111 | Oxy-Fuel Welding | 1 | 3 | 2 |
| WLD-112 | Basic Welding Processes | 1 | 3 | 2 |
| View Catalog Archives |  |  |  |  |
| Instructor Mike Sassano, Building Construction Technology Coordinator <br> 153 Little Hall <br> (910) 695-3940 <br> sassanom@sandhills.edu |  |  |  |  |

## ARCHITECTURAL TECHNOLOGY

These curriculums are designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

Construction Management Technology: A program that prepares individuals to supervise, manage, and inspect construction sites, buildings, and associated facilities. Includes instruction in site safety, personnel supervision, labor relations, diversity training, construction documentation, scheduling, resource and cost control, bid strategies, rework prevention, construction insurance and bonding, accident management and investigation, applicable law and regulations, and communication skills.

## Certificate Program

|  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## ASSOCIATE IN APPLIED SCIENCE GENERAL EDUCATION ELECTIVES

Candidates for the Associate in Applied Science degree must complete general education and major courses required for the program in which they are enrolled. Students must successfully complete a minimum of 25 percent of course credit hours of the certificate, diploma, or associate degree requirements at Sandhills Community College, with that 25 percent coming from major and other major hours, and not from general education hours, for the program of study.

Please note: In accordance with accreditation standards, 1) All associate degree students must either place out of DMA-010 through O30 or MAT-003 or successfully complete DMA-010 through 030 or MAT-003 to demonstrate
competence in fundamental mathematical skills. 2) All graduates of associate degree programs are required to complete successfully at least one mathematic or laboratory-based quantitative science course.

## Associate in Applied Science General Education Electives

General Education electives for Associate in Applied Science degrees should be chosen from the list below:

GENERAL EDUCATION COURSES SEMESTER HOURS

Communication.......................................................................................... 6
Select two courses from the following:

COM-110, COM-120, COM-231, ENG-111, ENG-112, ENG-114
Humanities/Fine Arts................................................................................. 3
Select one of the following:
ART-111, 114, 115, 121, 131, 171, 240, 281, 283
COM-140

DRA-111, 120, 126, 130, 211, 212
ENG-125, 131, 231, 232, 241, 242, 261, 262, 273
HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230
MUS-110, 111, 112, 210

PHI-215, 240
REL-110, 211, 212, 221
Natural Sciences and Mathematics....................................................... 3
Select one of the following:
AST-111 \& 111A

BIO-110, 111, 140 \& 140A, 163, 168
CHM-130 \& 130A, 151
GEL-111

MAT-121, 143, 152, 171
PHY-110 \& 110A

SCI-110
Social and Behavioral Sciences............................................................... 3

Select one of the following:
ANT-210, 220, 221, 240
ECO-151, 251, 252
HIS-111, 112, 121, 122, 131, 132, 151, 221
POL-110, 120, 210, 220
PSY-118, 150, 230, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281
SOC-210, 213, 220, 225, 230, 234, 240, 242
Contact the coordinator for the appropriate Associate in Applied Science degree

## ASSOCIATE IN ARTS

The Associate in Arts degree is designed for students who wish to transfer to a university to earn a Bachelor of Arts (or Bachelor of Science, depending upon the university) degree in one of the following fields of study: anthropology, architecture, business administration (accounting, finance, and marketing), communication, economics, education, English language and literature, foreign languages, geography, linguistics, history, humanities, interdisciplinary studies, journalism, library science, philosophy, political science, psychology, religion, social sciences, and visual and performing arts. Students who are interested in a career in dentistry, law, medicine, theology or ministry, optometry, pharmacy, physical therapy, or veterinary medicine are usually required or at least strongly encouraged to earn a bachelor's degree before applying to one of these graduate or professional degree programs.

The Associate in Arts degree shall be granted for a planned program of study consisting of a minimum of 60 and a maximum of 61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use. More specifically, students foster a greater understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). To be eligible for the transfer of credits under the CAA, A.A. graduates must obtain a grade of "C" or better in all CAA courses and an overall GPA of at least 2.0 on a 4.0 scale. A.A. graduates who have met these criteria will receive at least 60 semester hours of academic credit upon admission to a university. A.A. transfer students are strongly encouraged to align their course work to the Baccalaureate Degree Plan (BDP) of their intended major at their intended university. Baccalaureate Degree Plans are available at www.northcarolina.edu. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

Through careful selection of courses with your advisor and/or the University Studies Coordinator, this degree can be completed as an eLearning Online Degree Program. Note that the only Mathematics courses offered online are MAT-143 and MAT-152.

## Associate in Arts Degree

## Courses <br> Semester Hours

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (31-32 SHC) 31-32
The Universal General Education Component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.

English Composition (6 SHC)................................................................. 6
Two English composition courses are required:
ENG-111 and ENG-112
Humanities/Fine Arts (9 SHC)................................................................ 9
Select three courses. Those courses must be from at least two different disciplines areas:

Art (ART-111, 114, 115)
Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (9 SHC) 9

Select three courses. Those courses must be from at least two different disciplines areas:

Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3-4 SHC) 3-4

Select one course from the following: MAT-143, 152, 171
Natural Sciences (4 SHC) 4

Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)

Biology (BIO-110, 111)
Chemistry (CHM-151)
Geology (GEL-111)
Physics (PHY-110 \& 110A)

## ADDITIONAL GENERAL EDUCATION HOURS (13-14 SHC)*.. 13-14

An additional 13-14 SHC of courses should be selected from the list below. Those courses are classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. While most of these are not UGETC courses, UGETC courses may also be used in this category, if not used elsewhere.

ANT-210, 220, 221, 240
ASL-111, 112, 211, 212

BIO-112, 120, 130, 140 and 140A
CHM-152
CIS-110, 115

COM-110, 140
DRA-126, 211, 212
ECO-151
ENG-114, 131, 261, 262
FRE-111, 112, 211, 212
HIS-121, 122
HUM-110, 115, 120, 122, 130, 150, 160, 211, 212, 220
MAT-172, 263, 271, 272, 273

MUS-210

PHY-151, 152, 251, 252
POL-110, 210, 220
PSY-237, 239, 241, 281
REL-110, 211, 212, 221

SOC-213, 220, 225, 230, 240

SPA-111, 112, 211, 212

```
Note: If students have more than 45 credits in the General Education section, the
extra credits can be applied to the Other Required Hours section.
OTHER REQUIRED HOURS (15 SHC)*................................................ }1
Academic Transition (1 SHC)........................................................... }
The following course is required:
ACA-122 College Transfer Success
```

An additional 14 SHC of courses should be selected from the list below. Those courses are classified as pre-major, elective or general education courses within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. UGETC courses and Additional General Education Hours courses may also be used in this category, if not used elsewhere.

ACC-120, 121

All ART Prefix Courses

BIO-155, 163, 168, 169, 175, 271, 275
BUS-110, 115, 137

CHM-130 and 130A, 251, 252
CJC-111, 113, 121, 141, 212

COM-150
CSC-134, 139, 151
CTS-115

DFT-170

All DRA Prefix Courses

EDU-131, 144, 145, 216, 221

EGR-120, 150, 220
ENG-125, 126, 273

HEA-112

HIS-151, 221, 236
HUM-170, 180, 230

MAT-285
All MUS Prefix Courses

All PED Prefix Courses
PSY-230, 231, 243, 249, 259, 263, 271, 275
SOC-234, 242
SPA-161
TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM...... 60-61
*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

## Associate in Arts Course Sequence Example

|  |  | Course Hours Per Week |  | Semeste <br> Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | AST, BIO, CHM, GEL, or PHY UGETC course |  |  | 4 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 12 | 2 | 17 |
| Second Semester (Spring) |  |  |  |  |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| MAT*** | Math UGETC course |  |  | 3-4 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 12 | 0 | 15-16 |
| Third Semester (Fall) |  |  |  |  |
|  | Additional Gen Ed courses or Oth Required Hours courses |  |  | 14 |
|  | Credit Hours | 0 | 0 | 14 |
| Fourth Semester (Spring) |  |  |  |  |
|  | Additional Gen Ed courses or Ot Required Hours courses |  |  | 14 |
|  | Credit Hours | 0 | 0 | 14 |
| Total Required Minimum Semester Hours Credit |  |  |  | 60 |

Please note: Students are strongly encouraged to complete their UGETC requirements during their first two semesters at Sandhills.

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## ASSOCIATE IN ARTS IN TEACHER PREPARATION

The Associate in Arts in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Associate in Arts in Teacher Preparation is based on the Uniform Articulation Agreement for Teacher Preparation. This agreement enables North Carolina community college graduates of two-year Associate in Arts in Teacher Preparation programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer into an educator preparation program with junior status. The Uniform Articulation for Teacher Preparation was founded on the Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA).

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

Students must meet individual institutional requirements and application deadlines for entrance into an Educator Preparation Program, including a minimum GPA and required testing benchmarks. Admission to an EPP leading to licensure requires passing and obtaining competitive scores on the Praxis exam. Admission into a specific EPP is not guaranteed.

## Associate Degree Program

Courses

## Semester Hours

## UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (28-29 SHC) 28-29

The Universal General Education Component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.

English Composition (6 SHC).................................................................. 6
Two English composition courses are required:
ENG-111 and ENG-112
Programs
Humanities/Fine Arts (9 SHC)9
Required Communication course:
Communication (COM-231)
Select two courses. Those courses must be from at least two different disciplines areas:
Art (ART-111, 114, 115)
Communication (COM-120)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (6 SHC) 6
Select two courses. Those courses must be from at least two different disciplines areas:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3-4 SHC)........................................................................ 3-4
Select one course from the following: MAT-143, 152, 171
Natural Sciences (4 SHC).......................................................................... 4
Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)
Biology (BIO-110, 111)
Chemistry (CHM-151)
Geology (GEL-111)
Physics (PHY-110 \& 110A)
ADDITIONAL GENERAL EDUCATION HOURS (17-18 SHC)*.. 17-18
Other Required General Education (3 SHC)

The following course is required:

SOC 225 Social Diversity. 3

An additional 14-15 SHC of courses should be selected from the list below. Those courses are classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. While most of these are not UGETC courses, UGETC courses may also be used in this category, if not used elsewhere.

ANT-210, 220, 221, 240
ASL-111, 112, 211, 212
BIO-112, 120, 130, 140 and 140A

CHM-152
CIS-110, 115

COM-110, 140
DRA-126, 211, 212
ECO-151
ENG-114, 131, 261, 262
FRE-111, 112, 211, 212
HIS-121, 122
HUM-110, 115, 120, 122, 130, 150, 160, 211, 212, 220
MAT-172, 263, 271, 272, 273
MUS-210
PHY-151, 152, 251, 252
POL-110, 210, 220
PSY-237, 239, 241, 281
REL-11O, 211, 212, 221
SOC-213, 220, 230, 240
SPA-111, 112, 211, 212
TOTAL GENERAL EDUCATION HOURS REQUIRED (45 SHC)...... 45
OTHER REQUIRED HOURS (15 SHC)*..................................................... 15

Education (14 SHC)............................................................................. 14
The following courses are required:
EDU 187 Teaching and Learning for All...................................... 4
EDU 216 Foundations of Education............................................. 3
EDU 250 Teacher Licensure Preparation................................... 3
EDU 279 Literacy Develop and Instruct...................................... 4
*Students who have completed Teacher Cadet or Teaching as a Profession courses in high school with a B or better may substitute that course for EDU 187 Teaching and Learning for All.
Academic Transition ( 1 SHC ) 1
The following course is required:
ACA-122 College Transfer Success............................................. 1
TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM...... 60-61
*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

## Associate in Arts in Teacher Preparation Course Sequence Example

|  |  | Course <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


| *** |  | Course Hours Per <br> Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  | Additional Gen Ed courses |  |  | 7 |
|  | Credit Hours | 9 | 0 | 16 |
| Fourth Semester (Spring) |  |  |  |  |
| EDU-250 | Teacher Licensure Preparation | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| *** | Additional Gen Ed courses |  |  | 7 |
|  | Credit Hours | 6 | 0 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  | 60 |
| View Catalog Archives |  |  |  |  |
| Associate Professor Susan Sheets, Teacher Preparation Coordinator <br> 230 Logan Hall <br> 910.695.3745 <br> sheetss@sandhills.edu |  |  |  |  |

## ASSOCIATE IN ENGINEERING

The Associate in Engineering degree is designed for students who wish to transfer to a state funded university with a Bachelor of Engineering program and earn a Bachelor of Science in Engineering. Baccalaureate Engineering Programs within the UNC system are offered at: East Carolina University, North Carolina Agricultural and Technical University, North Carolina State University, University of North Carolina at Charlotte, and Western Carolina University.

The Associate in Engineering shall be granted for a planned program of study consisting of a minimum of 60 and a maximum of 61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. More specifically, students foster a greater understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. Admission to Engineering programs is highly competitive and admission is not guaranteed. To be eligible for the transfer of credits under the Associate in Engineering to the Bachelor of Science in Engineering Articulation Agreement (A.E. to B.S.E. AA), A.E. graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

Associate Degree Program

The general education courses include study in the areas of English composition; humanities and fine arts; social and behavioral sciences; natural sciences and mathematics.

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC) Courses that are not classified as UGETC are italicized
English Composition (6 SHC) ..... 6
Two English composition courses are required:
ENG-111 and ENG-112
Humanities/Fine Arts and Communication (6 SHC) ..... 6
Humanities: Choose one:
Literature (ENG-231, 232, 241, 242)
Philosophy (PHI-215, 240)
Fine Arts and Communication: Choose one:
Art (ART-111, 114, 115)
Communication (COM-231)
Music (MUS-110, 112)
Social/Behavioral Sciences (6 SHC) ..... 6One course required:
Economics (ECO-251)Select second course from the following:
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (12 SHC) ..... 12
Calculus I (MAT-271) is the lowest level math course that will be accepted by theengineering programs for transfer as a math credit. Students who are not calculus-ready must take additional math courses.Calculus (MAT-271, 272, 273) Note: MAT-273 is not a UGETC course.
Natural Sciences (12 SHC). ..... 12
Take all of the following:

Chemistry (CHM-151)
Physics (PHY-251, 252)

## ADDITIONAL GENERAL EDUCATION HOURS (3-4 SHC)* 3-4

Select one course (not used elsewhere) from the following:
Biology (BIO-111)
Chemistry (CHM-152)**
Communication (COM-110, 231)
Economics (ECO-252)
Geology (GEL-111)**
Humanities (HUM-110)
Philosophy (PHI-240)

## TOTAL GENERAL EDUCATION HOURS REQUIRED (45-46 SHC) 45-46 <br> OTHER REQUIRED HOURS (15 SHC).

## Academic Transition (1 SHC)

The following course is required:
ACA-122 College Transfer Success............................................... 1
Students must complete ACA-122 within the first 30 hours of enrollment.
Pre-major Elective (2 SHC)
EGR-150 Introduction to Engineering.
Other General Education and Pre-major Elective Hours (12 SHC)
Select 12 SHC from the following courses classified as pre-major, elective, or general education courses (not used elsewhere) within the Comprehensive Articulation Agreement. Students should choose courses appropriate to the specific university and engineering major requirements.

Biology (BIO-111)
Chemistry (CHM-152, 251, 252)**
Communication (COM-110, 231)
Computer Science (CSC-134, 151)
Drafting (DFT-170)
Economics (ECO-252)

Engineering (EGR-220)
Geology (GEL-111)**
Humanities (HUM-110)
Mathematics (MAT-285)
Physical Education (PED-110)

## TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM 60-61***

*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.
**Students pursuing a 4-year Chemical Engineering degree will need CHM-251 and CHM-252. CHM-152 is a prerequisite to CHM-251.
**Students pursuing a 4-year Civil Engineering degree will need GEL-111.
***One semester hour of credit may be included in a 61 SHC associate in engineering program of study. The transfer of this hour is not guaranteed.

## Associate in Engineering Course Sequence Example

|  |  | Course <br> Week | Semester Per <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| *** | Other Gen Ed/Pre-major Elective Credit Hours | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 4 |
|  |  | 3 | 3 | 17-19 |
| Fourth Semester (Spring) |  |  |  |  |
| MAT-273 | Calculus III | 3 | 2 | 4 |
| PHY-252 | General Physics II | 3 | 3 | 4 |
| *** | Fine Arts/Com UGETC course |  |  | 3 |
| *** | Other Gen Ed/Pre-major Elective |  |  | 2-4 |
|  | Credit Hours | 6 | 5 | 13-15 |
| Total Required Minimum Semester Hours Credit |  |  |  | 60 |
| View Catalog Archives |  |  |  |  |
| Professor Jeanne Morse, Associate in Engineering Coordinator |  |  |  |  |
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| ASSOCIATE IN FINE ARTS IN MUSIC |  |  |  |  |


#### Abstract

The Associate in Fine Arts in Music (A.F.A. in Music) degree is designed for students who wish to transfer to one of the UNC Bachelor in Music (B.M.) programs under the Associate in Fine Arts in Music to Bachelor in Music Articulation Agreement (A.F.A. in Music to B.M. AA). There are ten B.M.-granting institutions within the UNC system: Appalachian State University, East Carolina University, North Carolina Central University, UNC Chapel Hill, UNC Charlotte, UNC Greensboro, UNC Pembroke, UNC School of the Arts, UNC Wilmington, and Western Carolina University.


A.F.A. in Music graduates must meet the admission requirements and associated timelines as published by each B.M. program. In addition to meeting entrance requirements, A.F.A. in music graduates may also be required to audition depending on the entrance requirements of each institution. Acceptance into any B.M. program is not guaranteed. Each student must follow the admissions process of the specific receiving university.

The Associate in Fine Arts in Music degree shall be granted for a planned program of study consisting of 61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. More specifically, students foster a greater understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

To be eligible for the transfer of credits under the A.F.A. in Music to B. M. A.A., A.F.A. in Music graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

## Associate Degree Program

## Courses <br> Semester Hours

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (25 SHC)*
The universal general education transfer component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.

English Composition (6SHC)............................................................ 6
ENG-111 and ENG-112
Humanities/Fine Arts (6 SHC)........................................................... 6
Select two courses from the following discipline areas:
Art (ART-111, 114, 115)
Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences ( 6 SHC) 6

Select two courses. Those courses must be from two different discipline areas:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3 SHC)
3
MAT-143 Quantitative Literacy
Natural Sciences (4 SHC)..................................................................... 4
Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)
Biology (BIO-110, 111)
Chemistry (CHM-151)

Geology (GEL-111)
Physics (PHY-110 \& 110A)
OTHER REQUIRED HOURS (36 SHC)*................................................. 36
Academic Related (1 SHC)
ACA-122 College Transfer Success............................................ 1
Major Core
Music Theory The following courses are required (12 SHC):
MUS-121 Music Theory I........................................................... 3
MUS-122 Music Theory II......................................................... 3
MUS-221 Music Theory III....................................................... 3
MUS-222 Music Theory IV....................................................... 3
Aural Skills The following courses are required (4SHC):
MUS-125 Aural Skills I............................................................... 1
MUS-126 Aural Skills II............................................................ 1
MUS-225 Aural Skills III........................................................... 1
MUS-226 Aural Skills IV........................................................... 1
Applied Music The following courses are required ( 8 SHC ):
MUS-161 Applied Music I........................................................ 2
MUS-162 Applied Music II....................................................... 2
MUS-261 Applied Music III....................................................... 2
MUS-262 Applied Music IV...................................................... 2
Other Required Music Courses
Music History The following courses are required ( 6 SHC ):
MUS-271 Music History I.......................................................... 3
MUS-272 Music History II......................................................... 3
Music Sequence Select one group from the following (3 SHC):
Chorus: MUS-131, MUS-132, MUS-231
Band: MUS-133, MUS-134, MUS-233
Jazz Ensemble: MUS-135, MUS-136, MUS-235

Orchestra: MUS-137, MUS-138, MUS-237
Ensemble: MUS-141, MUS-142, MUS-241
Class Music The following courses are required ( 2 SHC ):
MUS-151B Class Music I - Piano. 1

MUS-152B Class Music II - Piano. 1

TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM............ 61
*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Associate in Fine Arts in Music Course Sequence Example

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MUS-121 | Music Theory I | 3 | 0 | 3 |
| MUS-125 | Aural Skills I | 0 | 2 | 1 |
| MUS-151B | Class Music I (piano) | 0 | 2 | 1 |
| MUS-161 | Applied Music I | 1 | 2 | 2 |
| MUS*** | Music Sequence | 0 | 2 | 1 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 10 | 10 | 15 |
| Second Semester (Spring) |  |  |  |  |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| MUS-122 | Music Theory II | 3 | 0 | 3 |
| MUS-126 | Aural Skills II | 0 | 2 | 1 |
| MUS-152B | Class Music II (piano) | 0 | 2 | 1 |
| MUS-162 | Applied Music II | 1 | 2 | 2 |
| MUS*** | Music Sequence | 0 | 2 | 1 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 10 | 8 | 14 |
| Third Semester (Fall) |  |  |  |  |
| MAT-143 | Quantitative Literacy | 2 | 2 | 3 |
| MUS-221 | Music Theory III | 3 | 0 | 3 |
| MUS-225 | Aural Skills III | 0 | 2 | 1 |
| MUS-261 | Applied Music III | 1 | 2 | 2 |
| MUS-271 | Music History I | 3 | 0 | 3 |


|  |  | Course Hours Per <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| MUS*** | Music Sequence | 0 | 2 | 1 |
| ${ }^{* * *}$ | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | $\mathbf{1 2}$ | $\mathbf{8}$ | $\mathbf{1 6}$ |


| Fourth Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| MUS-222 | Music Theory IV | 3 | 0 | 3 |
| MUS-226 | Aural Skills IV | 0 | 2 | 1 |
| MUS-262 | Applied Music IV | 1 | 2 | 2 |
| MUS-272 | Music History II | 3 | 0 | 3 |
| $* * *$ | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| $* * *$ | Natural Science UGETC course |  |  | 4 |
|  | Credit Hours | 10 | 4 | 16 |
| Total Required Minimum Semester Hours Credit |  |  | 61 |  |

View Catalog Archives

Professor Ryan Book, Associate in Fine Arts Coordinator<br>126 Wellard Hall<br>910.695.3828<br>booka@sandhills.edu

## ASSOCIATE IN FINE ARTS IN THEATRE - ACTING

The Associate in Fine Arts (A.F.A.) in Theatre degree is designed for students who wish to transfer to one of the UNC Bachelor in Arts (B.A.) in Theatre programs under the Associate in Fine Arts in Theatre to Bachelor in Arts Articulation Agreement (A.F.A.T. to B.A.). There are eleven B.A.-granting institutions within the UNC system whose focus is on theatre: Appalachian State University (B.A. in Theatre Generalist), East Carolina University (B.A. in Theater Arts), Fayetteville State University (B.A. in Theatre), North Carolina Central University (B.A. in Theatre), UNC Asheville (B.A. in Drama), UNC Chapel Hill (B.A. in Dramatic Art), UNC Charlotte (B.A. in Theatre), UNC Greensboro (B.A. in Drama), UNC Pembroke (B.A. in Theater Arts), UNC Wilmington (B.A. in Theatre), and Western Carolina University (B.A. in Arts in Stage and Screen).

The agreement enables students who have graduated from a NCCCS institution with an A.F.A. in Theatre to complete a common list of courses that meet the entrance requirements at all of the B.A. in Theatre programs at UNC institutions. However, because theatre program admissions are competitive, no student is guaranteed admission to a UNC theatre program. In addition to meeting entrance requirements, transfer students may also be required to submit evidence of their creative work, depending on the requirements for each institution.

The Associate in Fine Arts in Theatre degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. More specifically, students foster a great understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

To be eligible for the transfer of credits under the A.F.A.T. to B.A. AA., A.F.A. in Theatre graduates must obtain a grade of " $C$ " or better in each course and an overall GPA of at least 2.0 on a 4.0 scale. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

## Associate Degree Program

Courses Semester Hours
UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (31-32 SHC)* 31-32
The universal general education transfer component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.

English Composition (6 SHC)............................................................ 6
ENG-111 and ENG-112
Humanities/Fine Arts (9 SHC)........................................................... 9
Select three courses. Those courses must be from at least two different discipline areas:

Art (ART-111, 114, 115)
Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (9 SHC)................................................... 9
Select three courses. Those courses must be from at least two different discipline areas:

Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3-4 SHC). 3-4

Select one from the following:
MAT-143

MAT-152

MAT-171
Natural Sciences (4 SHC)........................................................................ 4
Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)
Biology (BIO-110, 111)
Chemistry (CHM-151)
Geology (GEL-111)
Physics (PHY-110 \& 110A)
OTHER REQUIRED HOURS (30 SHC)........................................................ 30
Major Core ................................................................................................ 15
DRA-130 Acting I (3 SHC)
DRA-135 Acting for the Camera I (3 SHC)
DRA-170 Play Production I (3 SHC)
DRA-211 Theatre History I (3 SHC)
DRA-212 Theatre History II (3 SHC)
Acting Track Electives .................................................................... 14-15
The following courses are required:
DRA-120 Voice for Performance (3 SHC)
DRA-131 Acting II (3 SHC)
DRA-140 Stagecraft I (3 SHC)
Select two of the following:
DRA-128 Children's Theater (3 SHC)
DRA-145 Stage Make-up (2 SHC)
DRA-171 Play Production II (3 SHC)
Academic Transition (1 SHC)
The following course is required:
ACA-122 College Transfer Success............................................... 1

TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM 61
*One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Theatre program of study. The transfer of this hour is not guaranteed.

## Associate in Fine Arts in Theatre - Acting Course Sequence Example

|  |  | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| DRA-130 | Acting I | 0 | 6 | 3 |
| DRA-140 | Stagecraft I | 0 | 6 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 14 | 16 |
| Second Semester (Spring) |  |  |  |  |
| DRA-120 | Voice for Performance | 3 | 0 | 3 |
| DRA-135 | Acting for the Camera I | 1 | 4 | 3 |
| DRA-170 | Play Production I | 0 | 9 | 3 |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 10 | 13 | 15 |
| Third Semester (Fall) |  |  |  |  |
| DRA-131 | Acting II | 0 | 6 | 3 |
| DRA-211 | Theatre History I | 3 | 0 | 3 |
| MAT*** | Math UGETC course |  |  | 3-4 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 6 | 15-16 |
| Fourth Semester (Spring) |  |  |  |  |
| DRA-212 | Theatre History II | 3 | 0 | 3 |
| DRA*** | DRA Studio Elective |  |  | 2-3 |
| DRA*** | DRA Studio Elective |  |  | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| *** | Natural Science UGETC course |  |  | 4 |
|  | Credit Hours | 6 | 0 | 15-16 |
| Total Required Minimum Semester Hours Credit |  |  |  | 61 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| DRA-128 | Children's Theatre | 3 | 0 | 3 |
| DRA-145 | Stage Make-Up | 1 | 2 | 2 |
| DRA-171 | Play Production II | 0 | 9 | 3 |
| View Catalog Archives |  |  |  |  |
| Instructor Bill Saunders, Theatre Coordinator 010 Kennedy Hall |  |  |  |  |

## ASSOCIATE IN FINE ARTS IN THEATRE - TECHNICAL

The Associate in Fine Arts (A.F.A.) in Theatre degree is designed for students who wish to transfer to one of the UNC Bachelor in Arts (B.A.) in Theatre programs under the Associate in Fine Arts in Theatre to Bachelor in Arts Articulation Agreement (A.F.A.T. to B.A.). There are eleven B.A.-granting institutions within the UNC system whose focus is on theatre: Appalachian State University (B.A. in Theatre Generalist), East Carolina University (B.A. in Theater Arts), Fayetteville State University (B.A. in Theatre), North Carolina Central University (B.A. in Theatre), UNC Asheville (B.A. in Drama), UNC Chapel Hill (B.A. in Dramatic Art), UNC Charlotte (B.A. in Theatre), UNC Greensboro (B.A. in Drama), UNC Pembroke (B.A. in Theater Arts), UNC Wilmington (B.A. in Theatre), and Western Carolina University (B.A. in Arts in Stage and Screen).

The agreement enables students who have graduated from a NCCCS institution with an A.F.A. in Theatre to complete a common list of courses that meet the entrance requirements at all of the B.A. in Theatre programs at UNC institutions. However, because theatre program admissions are competitive, no student is guaranteed admission to a UNC theatre program. In addition to meeting entrance requirements, transfer students may also be required to submit evidence of their creative work, depending on the requirements for each institution.

The Associate in Fine Arts in Theatre degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. More specifically, students foster a great understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

To be eligible for the transfer of credits under the A.F.A.T. to B.A. AA., A.F.A. in Theatre graduates must obtain a grade of " $C$ " or better in each course and an overall GPA of at least 2.0 on a 4.0 scale. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

Associate Degree Program
The universal general education transfer component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.
English Composition (6 SHC)............................................................ 6
ENG-111 and ENG-112
Humanities/Fine Arts (9 SHC)............................................................ 9
Select three courses. Those courses must be from at least two different discipline areas:
Art (ART-111, 114, 115)
Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (9 SHC).................................................... 9
Select three courses. Those courses must be from at least two different discipline areas:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3-4 SHC).
3-4
Select one from the following:
MAT-143
MAT-152
MAT-171
Natural Sciences (4 SHC)................................................................... 4
Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)
Biology (BIO-110, 111)

```
Chemistry (CHM-151)
Geology (GEL-111)
Physics (PHY-110 & 110A)
OTHER REQUIRED HOURS (30 SHC)30
```

Major Core ..... 15
DRA-140 Stagecraft I (3 SHC)

```DRA-141 Stagecraft II (3 SHC)DRA-170 Play Production I (3 SHC)DRA-211 Theatre History I (3 SHC)
```

DRA-212 Theatre History II (3 SHC)
Technical Track Electives ..... 14-15

```The following courses are required:DRA-130 Acting I (3SHC)
```

DRA-171 Play Production II (3 SHC)
DRA-240 Lighting for Theater (3 SHC)

```Select two of the following:
```

DRA-128 Children's Theater (3 SHC)
DRA-135 Acting for the Camera I (3 SHC)
DRA-145 Stage Make-up (2 SHC)
Academic Transition ( 1 SHC )
The following course is required:
ACA-122 College Transfer Success ..... 1
TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM ..... 61

```*One semester hour of credit may be included in a 61 SHC Associate in Fine Arts inTheatre program of study. The transfer of this hour is not guaranteed.
```

Associate in Fine Arts in Theatre - Technical Course Sequence Example

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| DRA-130 | Acting I | 0 | 6 | 3 |
| DRA-140 | Stagecraft I | 0 | 6 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 14 | 16 |
| Second Semester (Spring) |  |  |  |  |
| DRA-141 | Stagecraft II | 0 | 6 | 3 |
| DRA-170 | Play Production I | 0 | 9 | 3 |
| DRA-240 | Lighting for the Theatre | 2 | 2 | 3 |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 8 | 17 | 15 |
| Third Semester (Fall) |  |  |  |  |
| DRA-171 | Play Production II | 0 | 9 | 3 |
| DRA-211 | Theatre History I | 3 | 0 | 3 |
| MAT*** | Math UGETC course |  |  | 3-4 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 9 | 15-16 |
| Fourth Semester (Spring) |  |  |  |  |
| DRA-212 | Theatre History II | 3 | 0 | 3 |
| DRA*** | DRA Studio Elective |  |  | 2-3 |
| DRA*** | DRA Studio Elective |  |  | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| *** | Natural Sciences UGETC course |  |  | 4 |
|  | Credit Hours | 6 | 0 | 15-16 |
| Total Required Minimum Semester Hours Credit |  |  |  | 61 |


| DRA Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| DRA-128 | Children's Theatre | 3 | 0 | 3 |
| DRA-135 | Acting for the Camera I | 1 | 4 | 3 |
| DRA-145 | Stage Make-Up | 1 | 2 | 2 |

View Catalog Archives
Instructor Bill Saunders, Theatre Coordinator

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## ASSOCIATE IN FINE ARTS IN VISUAL ARTS

The Associate in Fine Arts (A.F.A.) in Visual Arts degree is designed for students who wish to transfer to one of the UNC Bachelor in Fine Arts (B.F.A.) in Visual Arts programs under the Associate in Fine Arts in Visual Arts to Bachelor in Fine Arts Articulation Agreement (A.F.A.V.A. to B.F.A. AA). There are seven B.F.A.-granting institutions within the UNC system whose focus is on the visual arts: Appalachian State University (B.F.A. in Studio Art), East Carolina University (B.F.A. in Arts), UNC Asheville (B.F.A. in Art), UNC Chapel Hill (B.F.A. in Studio Art), UNC Charlotte (B.F.A. in Art), UNC Greensboro (B.F.A. in Studio Art), and Western Carolina University (B.F.A. in Art).
A.F.A. in Visual Arts graduates must meet the portfolio submission requirements and associated timelines as published by each B.F.A. program. Admission to a visual arts program is competitive and acceptance into any B.F.A. program is not guaranteed. Each student must follow the admissions process of the specific receiving university.

The Associate in Fine Arts in Visual Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. More specifically, students foster a great understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

To be eligible for the transfer of credits under the A.F.A.V.A. to B.F.A. AA, A.F.A. in Visual Arts graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

## Associate in Applied Science Degree Program

Courses
Semester Hours

## UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (25-26 SHC)* ......25-26

The universal general education transfer component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.
English Composition (6 SHC) ..... 6
ENG-111 and ENG-112
Humanities/Fine Arts (6 SHC) ..... 6

Select two courses. Those courses must be from two different discipline areas:

Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (6 SHC).................................................. 6
Select two courses. Those courses must be from two different discipline areas:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (3-4 SHC).................................................................... 3-4
Select one from the following:
MAT-143
MAT-152
MAT-171
Natural Sciences (4 SHC)................................................................... 4
Select 4 SHC from the following:
Astronomy (AST-111 \& 111A)
Biology (BIO-110, 111)
Chemistry (CHM-151)
Geology (GEL-111)
Physics (PHY-110 \& 110A)
OTHER REQUIRED HOURS (35 SHC).................................................... 35
Major Core ................................................................................................ 15
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
ART-121 Two-Dimensional Design (3 SHC)

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ART-122 Three-Dimensional Design (3 SHC)
ART-131 Drawing I (3 SHC)
Art Studio Electives ...................................................................... }1
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Select six courses from Art Studio Electives (choose at least one from each of the
three groups.)
Two-dimensional Electives:
ART-132 Drawing II (3 SHC)
ART-135 Figure Drawing I (3 SHC)
ART-231 Printmaking I (3 SHC)
ART-232 Printmaking II (3 SHC)
ART-240 Painting I (3 SHC)
ART-241 Painting II (3 SHC)
Three-dimensional Electives:
ART-281 Sculpture I (3 SHC)
ART-283 Ceramics I (3 SHC)
ART-284 Ceramics II (3 SHC)
Digital Electives:
ART-171 Digital Design I (3 SHC)
ART-264 Digital Photography I (3 SHC)
Portfolio and Resume (1 SHC)
ART-214 Portfolio and Résumé
$\qquad$ .

Validation of the level of achievement in studio course work may be determined through portfolio review at the receiving institution.

## Academic Transition (1 SHC)

The following course is required:

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ACA-122 College Transfer Success.1
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TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM. ..... 60-61*Students must meet the receiving university's foreign language and/or healthand physical education requirements, if applicable, prior to or after transfer to thesenior institution.

## Associate in Fine Arts in Visual Arts Course Sequence

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| ART-121 | Two-Dimensional Design | 0 | 6 | 3 |
| ART-131 | Drawing I | 0 | 6 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MAT*** | Math UGETC course | 2-3 | 2 | 3-4 |
| *** | Soc/Behav Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 8-9 | 16 | 16-17 |
| Second Semester (Spring) |  |  |  |  |
| ART-122 | Three-Dimensional Design | 0 | 6 | 3 |
| ART*** | Art Studio Elective | 0 | 6 | 3 |
| ART*** | Art Studio Elective | 0 | 6 | 3 |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 6 | 18 | 15 |
| Third Semester (Fall) |  |  |  |  |
| ART-114 | Art History Survey I | 3 | 0 | 3 |
| ART*** | Art Studio Elective | 0 | 6 | 3 |
| ART*** | Art Studio Elective | 0 | 6 | 3 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Natural Science UGETC course | 2-4 | 0-3 | 4 |
|  | Credit Hours | 8-10 | 12-15 | 16 |
| Fourth Semester (Spring) |  |  |  |  |
| ART-115 | Art History Survey II | 3 | 0 | 3 |
| ART-214 | Portfolio and Resume | 0 | 2 | 1 |
| ART*** | Art Studio Elective | 0-1 | 4-6 | 3 |
| ART*** | Art Studio Elective | 0-1 | 4-6 | 3 |
| *** | Soc/Behav Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 6-8 | 10-14 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  | 60 |
| View Catalog Archives |  |  |  |  |
| Professor Lori Lorion, Visual Arts Coordinator 002A Kennedy Hall 910.695.3879 <br> lorionl@sandhills.edu |  |  |  |  |

## ASSOCIATE IN GENERAL EDUCATION

The Associate in General Education degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities. Although Associate in General Education is not a transfer degree, students who decide to continue their studies at a senior institution may receive transfer credit for some of the courses taken at Sandhills. Acceptance of courses for transfer credit will be evaluated on a course-by-course basis by the receiving institution.

## Program Requirements

## Courses

Semester Hours
English Composition. 6

ENG-111 and one of the following: COM-110, COM-120, COM-140, ENG-112 or ENG-114

Humanities/Fine Arts 3

Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 132, 171, 240, 241, 283)
Drama (DRA-111, 126)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 180, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 121, 122, 125, 126, 210)
Philosophy (PHI-215, 240)
Religion (REL-110, 211, 212, 221)
Social/Behavioral Sciences.............................................................................. 3
Select one course from the approved general education courses in the following areas:

Anthropology (ANT-210, 220, 221, 240)
Economics (ECO-151, 251, 252)

History (HIS-111, 112, 121, 122, 131, 132, 151, 221)

Political Science (POL-110, 120, 210, 220)
Psychology (PSY-118, 150, 230, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281)
Sociology (SOC-210, 213, 220, 225, 230, 234, 240, 242)
Natural Sciences/Mathematics........................................................................ 3-4
Select one course from the approved general education courses in the following areas. In addition, you must also place out of or successfully complete MAT-003 to demonstrate competence in fundamental mathematical skills.

Astronomy (AST-111 and 111A)
Biology (BIO-110, 111, 112, 120, 130, 140 and 140A, 163, 168, 169, 175, 275)
Chemistry (CHM-130 and 130A, 151, 152, 251, 252)
Computer Science (CIS-110, 115)
Geology (GEL-111)
Mathematics (MAT-121, 143, 152, 171)
Physics (PHY-110 and 110A, 131, 151, 152)
Science (SCI-110)
Other Required Hours................................................................................... 49-50
Other required hours include additional general education and professional courses.

ACA-115 or 122 ( 1 SHC ) is required at Sandhills Community College for college orientation.

A maximum of 7 SHC in health (HEA 112), physical education (any PED course), and college orientation and/or study skills (ACA-115 and 122) may be included as other required hours.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program 64-66

View Catalog Archives

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## ASSOCIATE IN GENERAL EDUCATION EMERGENCY MEDICAL SCIENCE

The Associate in General Education (AGE) degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Emergency Medical Science program of study will have completed all required general education and non-program specific courses prior to the application process for program entry. Students should refer to the Emergency Medical Science program webpage for specific program entry requirements.

Program Requirements

## Courses <br> Semester Hours

English Composition........................................................................................ 6
ENG-111 and one of the following: ENG-112 or 114
Humanities/Fine Arts 3

Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 171, 240, 283)
Communications (COM-140)
Drama (DRA-111, 120, 126, 130, 211, 212)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 210)
Philosophy (PHI-215, 240)
Religion (REL-110, 211, 212, 221)
$\qquad$
Social/Behavioral Sciences. 3

Select one course from the approved general education courses in the following areas:
Psychology (PSY-118, 150)
Sociology (SOC-210, 220, 225)
$\qquad$Natural Science.8
BIO-168 and BIO-169
Program Requirements. ..... 3
ACA-115, MED-120
Other Required Credits. ..... 41
Other required hours include additional general education and professionalcourses.
A maximum of 7 SHC in health (HEA 112), and physical education (any PED course)combined.
Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program ..... 64
View Catalog ArchivesAssociate Professor Ryan Teal, Emergency Medical Science Coordinator108 Kennedy Hall910.695.3768tealr@sandhills.edu
ASSOCIATE IN GENERAL EDUCATION MEDICAL LABORATORY TECHNICIAN
The Associate in General Education degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and
behavioral sciences, natural sciences and mathematics, and English composition.
Opportunities for the achievement of competence in reading, writing, oral
communication, fundamental mathematical skills, and the basic use of computers
will be provided.

Through these skills, students will have a sound base for lifelong learning.
Graduates are prepared for advancements within their fields of interest and
become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Medical Laboratory Technician program
of study will have completed all required general education and non-program
specific courses prior to the application process for program entry. Students
should refer to the Medical Laboratory Technician program webpage for specific
program entry requirements.

## Program Requirements

## Courses <br> Semester Hours

English Composition....................................................................................... 6
ENG-111 and one of the following: ENG-112 or 114
Humanities/Fine Arts. 3

Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 171, 240, 283)
Communications (COM-140)
Drama (DRA-111, 120, 126, 130, 211, 212)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 210)
Philosophy (PHI-215, 240)
Religion (REL-110, 211, 212, 221)
Social/Behavioral Sciences................................................................................... 3
Select one course from the approved general education courses in the following areas:

Anthropology (ANT-210, 220, 221, 240)
Economics (ECO-151, 251, 252)
History (HIS-111, 112, 121, 122, 131, 132, 151, 221)
Political Science (POL-110, 120, 210, 220)
Psychology (PSY-118, 150, 230, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281)
Sociology (SOC-210, 213, 220, 225, 230, 234, 240, 242)
Mathematics........................................................................................................ 3-4
Select one course from the approved general education courses in the following areas. In addition, you must also place out of or successfully complete MAT-003 to demonstrate competence in fundamental mathematical skills.

Mathematics (MAT-143, 152, 171)
Natural Science.
9-16

Select one group from each of the approved general education courses in the following areas.

Biology (BIO-163 or BIO-168 and BIO-169)
Chemistry (CHM-130 and CHM-130A or CHM-151 and CHM-152)
$\qquad$
ACA-115, MED-120
Other Required Credits. 37

Other required hours include additional general education and professional courses.

A maximum of 7 SHC in health (HEA 112), and physical education (any PED course) combined.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program. 64-72

View Catalog Archives
Instructor Aimi Vanden Oever, Medical Laboratory Technician Coordinator 164 Kennedy Hall
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## ASSOCIATE IN GENERAL EDUCATION RADIOGRAPHY

The Associate in General Education (AGE) degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Radiography program of study will have completed all required general education and non-program specific courses prior to the application process for program entry. Students should refer to the Radiography program webpage for specific program entry requirements.

## Program Requirements

$\qquad$

ENG-111 and ENG-112
$\qquad$Humanities/Fine Arts.3

Select one course from the approved general education courses in the following areas:

Art (ART-111)
Humanities (HUM-122, 150)
Music (MUS-110)
Philosophy (PHI-240)
Religion (REL-110)
Social/Behavioral Sciences.............................................................................. 3
Select one course from the approved general education courses in the following areas:

History (HIS-111, 112, 131, 132)
Psychology (PSY-118, 150)
Sociology (SOC-210, 220)
Mathematics...................................................................................................... 3
MAT-143
Natural Science. 12

Select all course from the approved general education courses in the following areas:

BIO-168 and BIO-169
PHY-110 and PHY-110A
Program Requirements.................................................................................. 3
ACA-115, MED-120
Other Required Credits. 34

Other required hours include additional general education and professional courses.

A maximum of 7 SHC in health (HEA 112), and physical education (any PED course) combined.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program

View Catalog Archives
Professor Robin Garner, Radiography Coordinator
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## ASSOCIATE IN GENERAL EDUCATION RESPIRATORY THERAPY

The Associate in General Education degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Respiratory Therapy program of study will have completed all required general education and non-program specific courses prior to the application process for program entry. Students should refer to the Respiratory Therapy program webpage for specific program entry requirements.

## Program Requirements

## Courses

Semester Hours
$\qquad$
ENG-111 and ENG-112
Humanities/Fine Arts 3

Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 171, 240, 283)
Communications (COM-140)
Drama (DRA-111, 120, 126, 130, 211, 212)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 210)
Philosophy (PHI-215, 240)

Religion (REL-110, 211, 212, 221)
Social/Behavioral Sciences..................................................................................... 3
Select one course from the approved general education courses in the following areas:

Anthropology (ANT-210, 220, 221, 240)
Economics (ECO-151, 251, 252)
History (HIS-111, 112, 121, 122, 131, 132, 151, 221)
Political Science (POL-110, 120, 210, 220)
Psychology (PSY-118, 150, 230, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281)
Sociology (SOC-210, 213, 220, 225, 230, 234, 240, 242)
Natural Science....................................................................................................... 16
Select all course from the approved general education courses in the following areas:

Biology (BIO-168, 169)
Chemistry (CHM-151, 152)
Program Requirements........................................................................................ 1
ACA-115
Other Required Credits...................................................................................... 35
Other required hours include additional general education and professional courses.

A maximum of 7 SHC in health (HEA 112), and physical education (any PED course) combined.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program......................................... 64
View Catalog Archives
Associate Professor TyRonda Pettigrew, Respiratory Therapy Coordinator 166 Kennedy Hall
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## ASSOCIATE IN GENERAL EDUCATION SURGICAL TECHNOLOGY

The Associate in General Education degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Surgical Technology program of study will have completed all required general education and non-program specific courses prior to the application process for program entry. Students should refer to the Surgical Technology program webpage for specific program entry requirements.

## Program Requirements

## Courses <br> Semester Hours

English Composition........................................................................................ 9
ENG-111, COM-231 and one of the following: ENG-112 or 114
Humanities/Fine Arts.............................................................................................. 3
Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 171, 240, 283)
Communications (COM-140)
Drama (DRA-111, 120, 126, 130, 211, 212)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 210)
Philosophy (PHI-215, 240)
Religion (REL-110, 211, 212, 221)
Social/Behavioral Sciences.............................................................................. 3
Select one course from the approved general education courses in the following areas:

Select one course from the approved general education courses in the following areas. In addition, you must also place out of or successfully complete MAT-003 to demonstrate competence in fundamental mathematical skills.

Astronomy (AST-111 and 111A)
Biology (BIO-110, 111, 112, 120, 130, 140 and 140A, 163, 168, 169, 175, 275)
Chemistry (CHM-130 and 130A, 151, 152, 251, 252)
Computer Science (CIS-110, 115)
Geology (GEL-111)
Mathematics (MAT-121, 143, 152, 171)
Physics (PHY-110 and 110A, 131, 151, 152)
Science (SCI-110)
Biology Requirements 8-12

Select one group from each of the approved general education courses in the following areas.

Biology (BIO-163 or BIO-168 and BIO-169)
Biology (BIO-175 or BIO-275)
Business Requirements................................................................................... 6
Select one group from each of the approved general education courses in the following areas.

Business (BUS-137 and BUS-255 or BUS-230)
Program Requirements................................................................................... 1
ACA-115
Other Required Credits. 31

Other required hours include additional general education and professional courses.

A maximum of 7 SHC in health (HEA 112), and physical education (any PED course) combined.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program

Associate Professor Jordan Sprouse, Surgical Technology Coordinator 161 Kennedy Hall 910.695.3918
sprousej@sandhills.edu

## ASSOCIATE IN GENERAL EDUCATION THERAPEAUTIC MASSAGE

The Associate in General Education degree is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their fields of interest and become better qualified for a wide range of employment opportunities.

Students who have completed the AGE - Therapeutic Massage program of study will have completed all required general education and non-program specific courses prior to the application process for program entry. Students should refer to the Therapeutic Massage program webpage for specific program entry requirements.

## Program Requirements

## Courses

Semester Hours
English Composition................................................................................................ 6
ENG-111 and one of the following: COM-110, COM-120, COM-231, ENG-112 or ENG-114
Humanities/Fine Arts 3

Select one course from the approved general education courses in the following areas:

Art (ART-111, 114, 115, 121, 131, 171, 240, 283)
Communications (COM-140)
Drama (DRA-111, 120, 126, 130, 211, 212)
Humanities (HUM-110, 115, 120, 122, 130, 150, 160, 170, 211, 212, 220, 230)
Literature (ENG-125, 131, 231, 232, 241, 242, 261, 262, 273)
Music (MUS-110, 111, 112, 210)
Philosophy (PHI-215, 240)

Religion (REL-110, 211, 212, 221)
Social/Behavioral Sciences.............................................................................. 3
Select one course from the approved general education courses in the following areas:

Psychology (PSY-118, 230, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281)
Sociology (SOC-210, 213, 220, 225, 230, 234, 240, 242)
Natural Science. 5-8

Select one group from each of the approved general education courses in the following areas.

Biology (BIO-163 or BIO-168 and BIO-169)
Business Requirement...................................................................................... 3
Select one group from the approved general education courses in the following areas.

Business (BUS-230 or BUS-139)
Physical Education Requirement..................................................................... 1
Select one from the approved general education courses in the following areas.
Physical Education (PED-111, 112, 113, 117, 118, 119, 120, 121, 122, 123, 125, 128, 129, 130, $131,135,137,138,142,143,145,147,149,152,153,154,157,160,161,162,163,169,170$, 173, 174, 181, 186, 187, 212, 217, 218, 219, 254

Program Requirements.................................................................................. 7
The following courses are required.
ACA-115, MED-120, PSY-150, WBL-111
Other Required Credits................................................................................. 36
Other required hours include additional general education and professional courses.

A maximum of 6 SHC in health (HEA 112) and physical education (any PED course) combined.

Any 100-level or higher curriculum course taught by the College.
Total Semester Hours Credit (SHC) in Program................................. 64-67
View Catalog Archives
Professor Samantha Allen, Therapeutic Massage Coordinator
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## ASSOCIATE IN SCIENCE

The Associate in Science degree is designed for students who wish to transfer to a university to earn a Bachelor of Science degree in one of the following fields: architecture; agriculture; biological and life sciences; business, management, and marketing; computer and information sciences; corrections and criminal justice; engineering; engineering technologies; health professions and clinical sciences; mathematics and statistics; parks, recreation, and fitness studies; physical sciences; science education; social sciences; and transportation and materials moving. Students who are interested in a career in dentistry, law, medicine, theology or ministry, optometry, pharmacy, physical therapy, or veterinary medicine are usually required or at least strongly encouraged to earn a bachelor's degree before applying to one of these graduate or professional degree programs.

The Associate in Science degree shall be granted for a planned program of study consisting of a minimum of 60 and a maximum of 61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use. More specifically, students foster a greater understanding of reading comprehension, communication, and critical thinking as student learning outcomes.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). To be eligible for the transfer of credits under the CAA, A.S. graduates must obtain a grade of "C" or better in all CAA courses and an overall GPA of at least 2.0 on a 4.0 scale. A.S. graduates who have met these criteria will receive at least 60 semester hours of academic credit upon admission to a university. A.S. transfer students are strongly encouraged to align their course work to the Baccalaureate Degree Plan (BDP) of their intended major at their intended university. Baccalaureate Degree Plans are available at www.northcarolina.edu. Courses may also transfer through bilateral agreements between institutions. Courses offered through bilateral agreements may not transfer to all receiving universities.

## Associate Degree Program

## Courses

English Composition (6 SHC) ..... 6
Two English composition courses are required:
ENG-111 and ENG-112
Humanities/Fine Arts (6 SHC) ..... 6
Select two courses. Those courses must be from two different discipline areas:

Communication (COM-120, 231)
Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (6 SHC)....................................................... 6
Select two courses. Those courses must be from two different discipline areas:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (8 SHC)............................................................................... 8
Select two courses from the following. One course must be a 200-level course:
MAT-171, 172, 263, 271, 272
Natural Sciences (8 SHC)........................................................................ 8
Select an 8 SHC two-course sequence from the following:
BIO-111 General Biology I (4 SHC) and BIO-112 General Biology II (4 SHC) or
CHM-151 General Chemistry I (4 SHC) and CHM-152 General Chemistry II (4 SHC) or PHY-151 College Physics I (4 SHC) and PHY-152 College Physics II (4 SHC) or PHY-251 General Physics I (4 SHC) and PHY-252 General Physics II (4 SHC)

Select an additional 11 SHC of courses from the list below. Those courses are classified as mathematics, natural sciences, or computer science general education courses from the Comprehensive Articulation Agreement. Some are UGETC courses. Students should select these courses based on their intended major and transfer university.

AST-111 and 111A

BIO-11O, 111, 112, 120, 130, 140 and 140A
CHM-151, 152
CIS-110, 115

GEL-111

MAT-143, 152, 171, 172, 263, 271, 272, 273
PHY-110 and 110A, 151, 152, 251, 252

## TOTAL GENERAL EDUCATION HOURS REQUIRED (45 SHC).... 45

## Note: If students have more than 45 credits in the General Education section, the extra credits can be applied to the Other Required Hours section.

OTHER REQUIRED HOURS (15 SHC)*...................................................... 15
Academic Transition (1 SHC)
The following course is required:
ACA-122 College Transfer Success............................................... 1
An additional 14 SHC of courses should be selected from the list below. Those courses are classified as pre-major, elective or general education courses within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. UGETC courses and Additional General Education Hours courses may also be used in this category, if not used elsewhere.

ACC-120, 121
ANT-210, 220, 221, 240
All ART Prefix Courses

ASL-111, 112, 211, 212
BIO-155, 163, 168, 169, 175, 271, 275
BUS-110, 115, 137
CHM-130 and 130A, 251, 252
CJC-111, 113, 121, 141, 212
COM-110, 140, 150
CSC-134, 139, 151
CTS-115

DFT-170
All DRA Prefix Courses
ECO-151
EDU-131, 144, 145, 216, 221
EGR-120, 150, 220

ENG-114, 125, 126, 131, 261, 262, 273
FRE-111, 112, 211, 212

HEA-112
HIS-121, 122, 151, 221, 236
HUM-110, 115, 120, 122, 130, 150, 160, 170, 180, 211, 212, 220, 230
MAT-285

ALL MUS Prefix Courses
ALL PED Prefix Courses

POL-110, 210, 220
PSY-230, 231, 237, 239, 241, 243, 249, 259, 263, 271, 275, 281
REL-11O, 211, 212, 221
SOC-213, 220, 225, 230, 234, 240, 242
SPA 111, 112, 161, 211, 212
TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM...... 60-61
*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

## Associate in Science Course Sequence Example

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-122 | College Transfer Success | 0 | 2 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MAT*** | Math UGETC course** |  |  | 4 |
| *** | BIO, CHM, or PHY I UGETC course |  |  | 4 |
| ** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 2 | 18 |
| Second Semester (Spring) |  |  |  |  |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| MAT*** | Math UGETC course** |  |  | 4 |
| *** | BIO, CHM, or PHY II UGETC course |  |  | 4 |
| *** | Hum/FA/Com UGETC course | 3 | 0 | 3 |
| *** | Soc/Beh Science UGETC course | 3 | 0 | 3 |
|  | Credit Hours | 9 | 0 | 17 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| Third Semester (Fall) |  |  |  |  |
| *** | Sci/Math Gen Ed courses or Other Required Hours courses |  |  | 13 |
|  | Credit Hours | 0 | 0 | 13 |
| Fourth Semester (Spring) |  |  |  |  |
| *** | Sci/Math Gen Ed courses or Other Required Hours courses |  |  | 12 |
|  | Credit Hours | 0 | 0 | 12 |
| Total Required Minimum Semester Hours Credit |  |  |  | 60 |

Note: Students are strongly encouraged to complete their UGETC requirements during their first two semesters at Sandhills.

View Catalog Archives
Professor Catherine Skura, University Studies Coordinator
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## ASSOCIATE IN SCIENCE IN TEACHER PREPARATION

The Associate in Science in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use.

The Associate in Science in Teacher Preparation is based on the Uniform Articulation Agreement for Teacher Preparation. This agreement enables North Carolina community college graduates of two-year Associate in Science in Teacher Preparation programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institution of North Carolina Independent Colleges and Universities to transfer into an educator preparation program with junior status. The Uniform Articulation for Teacher Preparation was founded on the Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA).

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

Students must meet individual institutional requirements and application deadlines for entrance into an Educator Preparation Program, including a minimum GPA and required testing benchmarks. Admission to an EPP leading to licensure requires passing and obtaining competitive scores on the Praxis exam. Admission into a specific EPP is not guaranteed.

## Associate Degree Program

## Courses <br> Semester Hours

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (31 SHC) 31
The Universal General Education Transfer Component (UGETC) includes study in the areas of humanities, fine arts, communication, social and behavioral sciences, natural sciences, mathematics, and English composition.

English Composition (6 SHC) 6

Two English composition courses are required:
ENG-111 and ENG-112
Humanities/Fine Arts (6 SHC) ............................................................. 6
Required Communication course:
Communication (COM-231)
Select one course:
Art (ART-111, 114, 115)

Drama (DRA-111)
Literature (ENG-231, 232, 241, 242)
Music (MUS-110, 112)
Philosophy (PHI-215, 240)
Social/Behavioral Sciences (3 SHC)....................................................... 3
Select one course:
Economics (ECO-251, 252)
History (HIS-111, 112, 131, 132)
Political Science (POL-120)
Psychology (PSY-150)
Sociology (SOC-210)
Mathematics (8 SHC)............................................................................... 8
Select two courses from the following. One course must be a 200-level course:
MAT-171, 172, 263, 271, 272
Natural Sciences (8 SHC)
8

Select an 8 SHC two-course sequence from the following:

BIO-111 General Biology I (4 SHC) and BIO-112 General Biology II (4 SHC) or
CHM-151 General Chemistry I (4 SHC) and CHM-152 General Chemistry II (4SHC) or PHY-151 College Physics I (4 SHC) and PHY-152 College Physics II (4 SHC) or PHY-251 General Physics I (4 SHC) and PHY-252 General Physics II (4 SHC)

ADDITIONAL GENERAL EDUCATION HOURS (14-15 SHC).... 14-15
Other Required General Education (3 SHC)...................................... 3
The following course is required:
SOC 225 Social Diversity................................................................. 3
Select an additional 11-12 SHC of courses from the list below. Those courses are classified as mathematics, natural sciences, or computer science general education courses from the Comprehensive Articulation Agreement. Some are UGETC courses. Students should select these courses based on their intended major and transfer university.

AST-111 and 111A
BIO-110, 111, 112, 120, 130, 140 and 140A
CHM-151, 152
CIS-110, 115
GEL-111
MAT-143, 152, 171, 172, 263, 271, 272, 273
PHY-110 and 110A, 151, 152, 251, 252
TOTAL GENERAL EDUCATION HOURS REQUIRED (45 SHC).... 45
OTHER REQUIRED HOURS (15 SHC)*.................................................... 15
Education (14 SHC)
The following courses are required:
EDU 187 Teaching and Learning for All........................................ 4
EDU 216 Foundations of Education................................................ 3
EDU 250 Teacher Licensure Preparation....................................... 3
EDU 279 Literacy Develop and Instruct......................................... 4
*Students who have completed Teacher Cadet or Teaching as a Profession courses in high school with a B or better may substitute that course for EDU 187 Teaching and Learning for All.

The following course is required:
ACA-122 College Transfer Success. $\qquad$ 1

TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM...... 60-61
*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

## Associate in Science in Teacher Preparation Course Sequence Example

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EDU-279 | Literacy Develop and Instruct | 3 | 3 | 4 |
| MAT*** | Math UGETC course** |  |  | 4 |
| SOC-225 | Social Diversity | 3 | 0 | 3 |
| *** | BIO, CHM, or PHY II UGETC co |  |  | 4 |


| Third Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| EDU-216 | Foundations of Education | 3 | 0 | 3 |
| ENG-112 | Writing/Research in the Disc | 3 | 0 | 3 |
| ${ }^{* * *}$ | Hum/FA UGETC course | 3 | 0 | 3 |
| ${ }^{* * *}$ | Soc/Beh Science UGETC course | 3 | 0 | 3 |
| ${ }^{* * *}$ | Additional Gen Ed courses |  |  | 4 |
|  | Credit Hours | $\mathbf{1 2}$ | 0 | 16 |


| Fourth Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| EDU-250 | Teacher Licensure Preparation | 3 | 0 | 3 |
| ${ }^{* * *}$ | Additional Gen Ed Courses |  |  | 7 |
|  | Credit Hours | 6 | 0 | 13 |
| Total Required Minimum Semester Hours Credit |  |  | 60 |  |

${ }^{* *}$ At least one math UGETC course must be a 200 -level course.
View Catalog Archives

Associate Professor Susan Sheets, Teacher Preparation Coordinator
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## AUTOMOTIVE SYSTEMS TECHNOLOGY

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Associate in Applied Science Degree Program

|  |  | Course <br> Wours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| TRN-180 | Basic Welding for Transp Credit Hours | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 4 | 3 |
|  |  | 8 | 13 | 13 |
| Third Semester (Summer) |  |  |  |  |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| TRN-140 | Transp Climate Control | 1 | 2 | 2 |
| TRN-140A | Transp Climate Cont Lab | 1 | 2 | 2 |
|  | Credit Hours | 5 | 4 | 7 |
| Fourth Semester (Fall) |  |  |  |  |
| AUT-116 | Engine Repair | 2 | 3 | 3 |
| AUT-116A | Engine Repair Lab | 0 | 3 | 1 |
| AUT-181 | Engine Performance 1 | 2 | 3 | 3 |
| AUT-183 | Engine Performance 2 | 2 | 6 | 4 |
| TRN-112 | Powertrain Maint/Light Repair | 2 | 6 | 4 |
|  | Credit Hours | 8 | 21 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| AUT-113 | Automotive Servicing I | 0 | 6 | 2 |
| AUT-231 | Man Trans/Axles/Drtrains | 2 | 3 | 3 |
| $\begin{array}{r} \text { COM-231 or } \\ \text { COM-120 } \end{array}$ | Public Speaking or Intro Interpersonal Com | 3 | 0 | 3 |
| PSY-118 | Interpersonal Psychology | 3 | 0 | 3 |
| *** | Restricted Elective | 0-3 | 0-20 | 2-4 |
|  | Credit Hours | 8-11 | 9-29 | 13-15 |
| Sixth Semester (Summer) |  |  |  |  |
| AUT-221 | Auto Transm/Transaxles | 2 | 3 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 5 | 3 | 6 |
| Total Required Minimum Semester Hours Credit |  |  |  | 69 |


| Restricted Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
| BUS-255 | Org Behavior in Business | 3 | 0 | 3 |
| LDD-112 | Intro Light-Duty Diesel | 2 | 2 | 3 |
| LDD-181 | Ldd Fuel Systems | 2 | 6 | 4 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |

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Associate Professor Charles Proulx, Automotive Systems Technology Coordinator 109 Sirotek Hall
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## AUTOMOTIVE SYSTEMS TECHNOLOGY

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Diploma Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| TRN-180 | Basic Welding for Transp | 1 | 4 | 3 |
|  | Credit Hours | 8 | 13 | 13 |
| Third Semester (Summer) |  |  |  |  |
| AUT-113 | Automotive Servicing I | 0 | 6 | 2 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| TRN-140 | Transp Climate Control | 1 | 2 | 2 |
| TRN-140A | Transp Climate Cont Lab | 1 | 2 | 2 |
|  | Credit Hours | 5 | 10 | 9 |
| Total Required Minimum Semester Hours Credit |  |  | 37 |  |

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## AUTOMOTIVE SYSTEMS TECHNOLOGY - AUTOMOTIVE MANAGEMENT

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
|  | Credit Hours | 9 | 4 | 11 |
| Second Semester (Spring) |  |  |  |  |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| AUM-111 | Managing Automotive Org | 3 | 0 | 3 |
|  | Credit Hours | 4 | 3 | 5 |
| Total Required Minimum Semester Hours Credit |  |  | 16 |  |

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## AUTOMOTIVE SYSTEMS TECHNOLOGY - C-TECH

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  | Course <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## AUTOMOTIVE SYSTEMS TECHNOLOGY - LIGHT-DUTY DIESELS \& EMERGING TECHNOLOGIES

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of
automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| LDD-112 | Intro Light-Duty Diesel | 2 | 2 | 3 |
| TRN-110 | Intro to Transport Tech | 1 | 2 | 2 |
| TRN-120 | Basic Transp Electricity | 4 | 3 | 5 |
|  | Credit Hours | 7 | 7 | 10 |
| Second Semester (Spring) |  |  |  |  |
| AUT-163 | Adv Auto Electricity | 2 | 3 | 3 |
| LDD-181 | Ldd Fuel Systems | 2 | 6 | 4 |
|  | Credit Hours | 4 | 9 | 7 |
| Total Required | Minimum Semester Hours Credit |  |  | 17 |

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## AVIATION MANAGEMENT

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, unmanned aircraft systems industries, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, unmanned aircraft systems, and instrument and commercial ground training, flight and simulator training, and entrepreneurship or business management training.

Graduates may earn a commercial pilot certificate with an instrument rating, specialize in aviation management or in unmanned air systems, and may find employment as commercial, corporate, and military pilots, fixed base operators and airport managers, as pilots or technicians in the unmanned aircraft systems industry, or as flight instructors, and flight dispatchers.

Students in the Aviation Management and Career Pilot Technology program will be required to fly simulator hours during the Air Navigation course and within the Flight-Private Pilot, -Instrument Pilot, -Commercial Pilot and -Certified Flight

Instructor courses toward their FAA certification which are required to receive credit for flight courses. There will be a per hour fee for simulator use that will be set by the department.

The Aviation Management track focuses on the skills and knowledge required for aviation related careers including those in general aviation, the aerospace industry and state and federal aviation organizations.

## Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Third Semester (Summer) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COM-120 or Intro Interpersonal Com or COM-231 Public Speaking or or |  |  |  |  |
| BUS-260 | Business Communication | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |
| Fourth Semester (Fall) |  |  |  |  |
| AER-114 | Aviation Management | 3 | 0 | 3 |
| AER-170 | Commercial Flight Theory | 3 | 0 | 3 |
| AER-211 | Air Traffic Control | 2 | 0 | 2 |
| AER-216 | Engines \& Systems | 2 | 2 | 3 |
| AER-218 | Human Factors in Aviation | 2 | 0 | 2 |
| *** | Aviation Elective | 1-3 | 0-3 | 1-3 |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Cours <br> Week | urs Per | Semester Hours |
|  | Credit Hours | 13-15 | 2-5 | 14-16 |
| Fifth Semester (Spring) |  |  |  |  |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| AER-215 | Flight Safety | 3 | 0 | 3 |
| AER-217 | Air Transportation | 3 | 0 | 3 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
| *** | Aviation Elective | 1-3 | 0-2 | 2-3 |
|  | Credit Hours | 13-15 | 2-4 | 15-16 |
| Total Required Minimum Semester Hours Credit |  |  |  | 68 |


| Aviation Electives: Please select two electives <br> from the following: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| AER-115 | Flight Simulator | 1 | 3 | 2 |
| AER-116 | Private Pilot Flight Simulato | 1 | 2 | 2 |
| AER-119 | Aircraft Structures | 2 | 0 | 2 |
| AER-210 | Flight Dynamics | 3 | 0 | 3 |
| AER-213 | Avionics | 2 | 0 | 2 |
| AER-220 | Airport Management | 2 | 0 | 2 |
| AER-280 | Instructor Pilot FIt Theory | 3 | 0 | 3 |
| UAS-110 | Intro to UAS Operations | 3 | 0 | 3 |
| UAS-115 | Small UAS Certification | 2 | 0 | 2 |

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## Associate Professor Keith Davies, Aviation Management and Professional Pilot Coordinator

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## BAKING AND PASTRY ARTS

This Baking and Pastry Arts Curriculum is designed to provide students with the skills and knowledge required for employment in the baking/pastry industry, including restaurants, hotels, independent bakeries/pastry shops, wholesale/retail markets, and high-volume bakeries, and/or further academic studies.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Course work includes specialty/artisanal breads, desserts/pastries, decorative work, high-volume production, and food marketing.

Graduates should qualify for entry-level positions, such as pastry/bakery assistant, area pastry chef and assistant pastry chef. American Culinary Federation certification may be available to graduates.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Second Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| BPA-150 | Artisan \& Specialty Bread | 1 | 6 | 4 |
| BPA-165 | Hot and Cold Desserts | 1 | 4 | 3 |
|  | Credit Hours | $\mathbf{2}$ | 10 | $\mathbf{7}$ |
| Third Semester (Summer) |  |  |  |  |
| BPA-130 | European Cakes and Tortes | 1 | 4 | 3 |
|  | Credit Hours | $\mathbf{1}$ | $\mathbf{4}$ | $\mathbf{3}$ |
| Total Required Minimum Semester Hours Credit |  |  | 16 |  |

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## BAKING AND PASTRY ARTS

This Baking and Pastry Arts Curriculum is designed to provide students with the skills and knowledge required for employment in the baking/pastry industry, including restaurants, hotels, independent bakeries/pastry shops, wholesale/retail markets, and high-volume bakeries, and/or further academic studies.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Course work includes specialty/artisanal breads, desserts/pastries, decorative work, high-volume production, and food marketing.

Graduates should qualify for entry-level positions, such as pastry/bakery assistant, area pastry chef and assistant pastry chef. American Culinary Federation certification may be available to graduates.

Associate in Applied Science Degree Program

|  | Course <br>  <br>  <br>  <br> Week | Class | Lab | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | 0 | 2 | Credit |  |
| ACA-115 | Success \& Study Skills | 2 | 0 | 2 |
| CUL-110 | Sanitation \& Safety |  |  |  |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| CUL-110A | Sanitation \& Safety Lab | 0 | 2 | 1 |
| CUL-135 | Food \& Beverage Service | 2 | 0 | 2 |
| CUL-135A | Food \& Beverage Serv Lab | 0 | 2 | 1 |
| CUL-140 | Culinary Skills I | 2 | 6 | 5 |
| CUL-160 | Baking I | 1 | 4 | 3 |
|  | Credit Hours | 7 | 16 | 15 |
| Second Semester (Spring) |  |  |  |  |
| BPA-150 | Artisan \& Specialty Bread | 1 | 6 | 4 |
| BPA-165 | Hot and Cold Desserts | 1 | 4 | 3 |
| CUL-112 | Nutrition for Foodservice | 3 | 0 | 3 |
| CUL-170 | Garde Manger I | 1 | 4 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
|  | Credit Hours | 9 | 14 | 16 |
| Third Semester (Summer) |  |  |  |  |
| BPA-130 | European Cakes and Tortes | 1 | 4 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 7 | 4 | 9 |
| Fourth Semester (Fall) |  |  |  |  |
| BPA-120 | Petit Fours \& Pastries | 1 | 4 | 3 |
| BPA-210 | Cake Design \& Decorating | 1 | 4 | 3 |
| BPA-250 | Dessert/Bread Production | 1 | 8 | 5 |
| MAT*** | MAT-110 or higher | 2-3 | 2 | 3-4 |
| WBL*** | WBL-111 or take WBL-132 in SPRING | 0 | 0-10 | 1-0 |
|  | Credit Hours | 5-6 | 18-28 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| BPA-220 | Confection Artistry | 1 | 4 | 3 |
| BPA-260 | Pastry \& Baking Marketing | 2 | 2 | 3 |
| CUL-120 | Purchasing | 2 | 0 | 2 |
| HRM-245 | Human Resource Mgmt-Hosp | 3 | 0 | 3 |
| WBL*** | WBL-131 (if WBL-111 taken) or WBL-132 | 0 | 10-20 | 1-2 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 11 | 16-26 | 15-16 |
| Total Required Minimum Semester Hours Credit |  |  |  | 70 |

View Catalog Archives
Professor Martin Brunner, Baking and Pastry Arts Coordinator

## BASIC LAW ENFORCEMNET TRAINING

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county or municipal governments, or with private enterprise.

This program utilizes State-Commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Students must successfully complete and pass all units of study mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

Student successfully completing a Basic Law Enforcement Training course, accredited by the North Carolina Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC-113 Juvenile Justice, CJC-120 Interviews and Interrogations, CJC-131 Criminal Law, CJC-132 Court Procedure and Evidence, CJC-221 Investigative Principles, and CJC-231 Constitutional Law toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination and completed Basic Law Enforcement Training since 1985.

## Certificate Program

|  | Course <br>  <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| CJC-110 | Class | Lab | Credit |

## BUSINESS ADMINISTRATION

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small businesses or industries.

Through careful selection of courses, both the Business Administration and Business Administration Hospitality Management Concentration degrees can be completed as an eLearning Online Degree Program.

## Special Options for students graduating with the A.A.S. in Business

Administration: The Department of Management and Business Technologies has articulation agreements with Fayetteville State University, UNC Pembroke, Methodist University, Pfeiffer University, and St. Andrews University. Students can earn their A.A.S. at Sandhills CC and then continue to earn a B.S.B.A.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| Fourth Semester (Fall) |  |  |  |  |
| BUS-115 | Business Law I | 3 | 0 | 3 |
| $\begin{aligned} & \text { ECO-151 or } \\ & \text { ECO- } 251 \\ & \text { or } \end{aligned}$ | Survey of Economics or Prin of Microeconomics or |  |  |  |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |
| MKT-120 | Principles of Marketing | 3 | 0 | 3 |
| *** | Technical Elective | 0-3 | 0-10 | 3 |
| *** | Technical Elective | 0-3 | 0-10 | 3 |
|  | Credit Hours | 9-15 | 0-20 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| BUS-225 | Business Finance | 2 | 2 | 3 |
| BUS-255 | Org Behavior in Business | 3 | 0 | 3 |
| BUS-260 | Business Communication | 3 | 0 | 3 |
| ECM-210 | Intro. to E-Commerce | 2 | 2 | 3 |
|  | Credit Hours | 11 | 7 | 14 |
| Total Required Minimum Semester Hours Credit |  |  |  | 65 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-151 | Acct Spreadsheet Appl | 1 | 3 | 2 |
| BAF-110 | Principles of Banking | 3 | 0 | 3 |
| BAS-120 | Intro to Analytics | 2 | 3 | 3 |
| BUS-125 | Personal Finance | 3 | 0 | 3 |
| BUS-139 | Entrepreneurship I | 3 | 0 | 3 |
| BUS-148 | Survey of Real Estate | 3 | 0 | 3 |
| BUS-151 | People Skills | 3 | 0 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |

*If taking ACC-151 or WBL-111, student must choose a 3rd technical elective.
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## BUSINESS ADMINISTRATION

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small businesses or industries.

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## Diploma Program

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| BUS-110 | Introduction to Business | 3 | 0 | 3 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MKT-120 | Principles of Marketing | 3 | 0 | 3 |
|  | Credit Hours | 14 | 6 | 17 |
| Second Semester (Spring) |  |  |  |  |
| $\begin{gathered} \text { ACC-121 or } \\ \text { BUS-121 } \end{gathered}$ | Prin of Managerial Accounting or Business Math | 2 | 2 | 3 |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| BUS-115 | Business Law I | 3 | 0 | 3 |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| $\begin{aligned} & \text { ECO-151 or } \\ & \text { ECO-251 } \\ & \text { or } \end{aligned}$ | Survey of Economics or Prin of Microeconomics or |  |  |  |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |


| *** |  | Course Hours Per Week |  | Semester <br> Hours |
| :---: | :---: | :---: | :---: | :---: |
|  | Technical Electives | 0-3 | 0-10 | 3 |
|  | Credit Hours | 10-13 | 5-15 | 17-18 |
| Third Semester (Summer) |  |  |  |  |
| ENG-112 or Writing/Research in the Disc orENG-114 $\quad$ Prof Research \& Reporting oror |  |  |  |  |
| COM-120 <br> or | Intro Interpersonal Com or |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
|  | Credit Hours | 3 | 0 | 3 |
| Total Required Minimum Semester Hours Credit |  |  |  | 37 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-151 | Acct Spreadsheet Appl | 1 | 3 | 2 |
| BAF-110 | Principles of Banking | 3 | 0 | 3 |
| BAS-120 | Intro to Analytics | 2 | 3 | 3 |
| BUS-125 | Personal Finance | 3 | 0 | 3 |
| BUS-139 | Entrepreneurship I | 3 | 0 | 3 |
| BUS-148 | Survey of Real Estate | 3 | 0 | 3 |
| BUS-151 | People Skills | 3 | 0 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| WBL-111 | Work-Based Learning | 0 | 10 | 1 |

If taking ACC-151 or WBL-111, student must choose a 2 nd technical elective.
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## BUSINESS ADMINISTRATION - BANKING AND FINANCE

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small businesses or industries.

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## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| BAF-110 | Principles of Banking | 3 | 0 | 3 |
| BUS-148 | Survey of Real Estate | 3 | 0 | 3 |
|  | Credit Hours | 9 | 4 | 11 |
| Second Semester (Spring) |  |  |  |  |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| BAS-120 | Intro to Analytics | 2 | 3 | 3 |
|  | Credit Hours | 3 | 6 | 5 |
| Total Required Minimum Semester Hours Credit |  |  | 16 |  |

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## BUSINESS ADMINISTRATION - ENTREPRENEURSHIP \& SMALL BUSINESS MANAGEMENT

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small businesses or industries.

Through careful selection of courses, both the Business Administration and Business Administration Hospitality Management Concentration degrees can be completed as an eLearning Online Degree Program.

Special Options for students graduating with the A.A.S. in Business
Administration: The Department of Management and Business Technologies has articulation agreements with Fayetteville State University, UNC Pembroke, Methodist University, Pfeiffer University, and St. Andrews University. Students can earn their A.A.S. at Sandhills CC and then continue to earn a B.S.B.A.

## Certificate Program

|  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## BUSINESS ADMINISTRATION - HOSPITALITY MANAGEMENT

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## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## BUSINESS ADMINISTRATION - HOSPITALITY MANAGMENT

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

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## Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| BUS-110 | Introduction to Business | 3 | 0 | 3 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
|  | Credit Hours | $\mathbf{1 1}$ | $\mathbf{6}$ | $\mathbf{1 4}$ |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BUS-121 | Business Math | 2 | 2 | 3 |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| $\begin{aligned} & \text { ENG-112 or } \\ & \text { ENG-114 } \\ & \text { or } \end{aligned}$ | Writing/Research in the Disc or Prof Research \& Reporting or |  |  |  |
| COM-120 or | Intro Interpersonal Com or |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| *** | Math/Natural Science Elective | 0-4 | 0-3 | 3-4 |
|  | Credit Hours | 11-15 | 2-5 | 15-16 |
| Third Semester (Summer) |  |  |  |  |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 7 | 3 | 8 |
| Fourth Semester (Fall) |  |  |  |  |
| BUS-115 | Business Law I | 3 | 0 | 3 |
| ECO-151 or | Survey of Economics or |  |  |  |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { ECO-251 } \\ & \text { or } \end{aligned}$ | Prin of Microeconomics or |  |  |  |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |
| HRM-220 | Cost Control-Food \& Bev | 3 | 0 | 3 |
| HRM-275 | Leadership-Hospitality | 3 | 0 | 3 |
| MKT-120 | Principles of Marketing | 3 | 0 | 3 |
|  | Credit Hours | 15 | 0 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| BUS-151 | People Skills | 3 | 0 | 3 |
| BUS-225 | Business Finance | 2 | 2 | 3 |
| HRM-230 | Club \& Resort Management | 3 | 0 | 3 |
| HRM-245 | Human Resource Mgmt-Hosp | 3 | 0 | 3 |
| *** | Technical Elective | 1-3 | 0-3 | 2 |
| *** | Technical Elective | 1-3 | 0-3 | 2 |
|  | Credit Hours | 13-17 | 2-8 | 16 |
| Total Required Minimum Semester Hours Credit |  |  |  | 68 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-140 | Payroll Accounting | 1 | 3 | 2 |
| ACC-150 | Accounting Software Appl | 1 | 3 | 2 |
| ACC-151 | Acct Spreadsheet Appl | 1 | 3 | 2 |
| BAS-120 | Intro to Analytics | 2 | 3 | 3 |
| BUS-125 | Personal Finance | 3 | 0 | 3 |
| BUS-139 | Entrepreneurship I | 3 | 0 | 3 |
| BUS-260 | Business Communication | 3 | 0 | 3 |

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## BUSINESS ADMINISTRATION - HUMAN RESOURCE

The Business Administration Curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small businesses or industries.

Through careful selection of courses, both the Business Administration and Business Administration Hospitality Management Concentration degrees can be completed as an eLearning Online Degree Program.

Special Options for students graduating with the A.A.S. in Business
Administration: The Department of Management and Business Technologies has articulation agreements with Fayetteville State University, UNC Pembroke, Methodist University, Pfeiffer University, and St. Andrews University. Students can earn their A.A.S. at Sandhills CC and then continue to earn a B.S.B.A.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## COLLISION REPAIR \& REFINISHING TECHNOLOGY

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structural analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

Diploma Program

|  |  | Course <br> Woeks | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Restricted Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| AUB-132 | Structural Damage II | 2 | 6 | 4 |
| AUB-150 | Automotive Detailing | 1 | 3 | 2 |
| AUC-112 | Auto Custom Fabrication | 2 | 4 | 4 |
| AUC-114 | Custom Fiberglass Skills | 2 | 4 | 4 |

## Associate Professor Brain Garner, Collision Repair \& Refinishing Technology Coordinator

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## COLLISION REPAIR \& REFINISHING TECHNOLOGY

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

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Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

Associate in Applied Science Degree Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| AUT-163 | Adv Auto Electricity | 2 | 3 | 3 |
| TRN-180 | Basic Welding for Transp | 1 | 4 | 3 |
|  | Credit Hours | 8 | 13 | 13 |
| Third Semester (Summer) |  |  |  |  |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| TRN-140 | Transp Climate Control | 1 | 2 | 2 |
| TRN-140A | Transp Climate Cont Lab | 1 | 2 | 2 |
|  | Credit Hours | 5 | 4 | 7 |
| Fourth Semester (Fall) |  |  |  |  |
| AUB-111 | Painting \& Refinishing I | 2 | 6 | 4 |
| AUB-121 | Non-Structural Damage I | 1 | 4 | 3 |
| AUB-162 | Autobody Estimating | 1 | 2 | 2 |
| $\begin{array}{r} \text { COM-231 or } \\ \text { COM-12O } \end{array}$ | Public Speaking or Intro Interpersonal Com | 3 | 0 | 3 |
| PSY-118 | Interpersonal Psychology | 3 | 0 | 3 |
|  | Credit Hours | 10 | 12 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| AUB-112 | Painting \& Refinishing II | 2 | 6 | 4 |
| AUB-122 | Non-Structural Damage II | 2 | 6 | 4 |
| AUB-131 | Structural Damage I | 2 | 4 | 4 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 9 | 16 | 15 |
| Sixth Semester (Summer) |  |  |  |  |
| AUB-136 | Plastics \& Adhesives | 1 | 4 | 3 |
| *** | Restricted Elective | 1-2 | 2-6 | 2-4 |
|  | Credit Hours | 2-3 | 6-10 | 5-7 |
| Total Required Minimum Semester Hours Credit 70 |  |  |  |  |


| Restricted Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| AUB-114 | Special Finishes | 1 | 2 | 2 |
| AUB-132 | Structural Damage II | 2 | 6 | 4 |
| AUB-150 | Automotive Detailing | 1 | 3 | 2 |
| AUC-112 | Auto Custom Fabrication | 2 | 4 | 4 |
| AUC-114 | Custom Fiberglass Skills | 2 | 4 | 4 |

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## Associate Professor Brian Garner, Collision Repair \& Refinishing Coordinator

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garnerd@sandhills.edu

## COLLISION REPAIR \& REFINISHING TECHNOLOGY - NONSTRUCTURAL REPAIR

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structural analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: |
| First Semester (Fall) | Class | Lab | Credit |
| ACA-115 Success \& Study Skills | O | 2 | 1 |
| AUB-121 Non-Structural Damage I | 1 | 4 | 3 |
| Credit Hours | 1 | 6 | 4 |
| Second Semester (Spring) |  |  |  |
| AUB-122 Non-Structural Damage II | 2 | 6 | 4 |
| AUB-131 Structural Damage I | 2 | 4 | 4 |
| Credit Hours | 4 | 10 | 8 |
| Third Semester (Summer) |  |  |  |
| AUB-136 Plastics \& Adhesives | 1 | 4 | 3 |
| Credit Hours | 1 | 4 | 3 |
| Total Required Minimum Semester Hours Credit |  |  | 15 |

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## COLLISION REPAIR \& REFINISHING TECHNOLOGY PAINT AND REFINISHING

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structural analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| AUB-111 | Painting \& Refinishing I | 2 | 6 | 4 |
| AUB-121 | Non-Structural Damage I | 1 | 4 | 3 |
| AUB-162 | Autobody Estimating | 1 | 2 | 2 |
|  | Credit Hours | 4 | 14 | 10 |
| Second Semester (Spring) |  |  |  |  |
| AUB-112 | Painting \& Refinishing II | 2 | 6 | 4 |
|  | Credit Hours | 2 | 6 | 4 |
| Total Required Minimum Semester Hours Credit |  |  |  | 14 |

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## COLLISION REPAIR \& REFINISHING TECHNOLOGY STRUCTURAL REPAIR

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structural analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  |  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| AUT-141 | Suspension \& Steering Sys | 2 | 3 | 3 |
| AUT-141A | Suspension \& Steering Lab | 0 | 3 | 1 |
|  | Credit Hours | $\mathbf{2}$ | $\mathbf{8}$ | 5 |
| Second Semester (Spring) |  |  |  |  |
| AUB-131 | Structural Damage I | 2 | 4 | 4 |
| TRN-180 | Basic Welding for Transp | 1 | 4 | 3 |
|  | Credit Hours | $\mathbf{3}$ | $\mathbf{8}$ | $\mathbf{7}$ |


|  | Course Hours Per Week | Semeste <br> Hours |
| :---: | :---: | :---: |
| Third Semester (Summer) |  |  |
| AUB-132 Structural Damage II | 26 | 4 |
| Credit Hours | 26 | 4 |
| Total Required Minimum Semester Hours Credit |  | 16 |
| View Catalog Archives |  |  |
| Associate Professor Brian Garner, Collision Repair Coordinator <br> 112 Sirotek Hall <br> 910.695.3887 <br> garnerd@sandhills.edu | \& Refinishing Techn |  |

## COLLISION REPAIR AND REFINISHING TECHNOLOGY AUTOMOTIVE FABRICATION

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structural analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| AUB-111 | Painting \& Refinishing 1 | 2 | 6 | 4 |


|  |  | Course Hours Per | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Week |  | 2 |
| AUB-114 | Special Finishes | 1 | 2 | 2 |
| AUC-112 | Auto Custom Fabrication | 2 | 4 | 4 |
| AUC-114 | Custom Fiberglass Skills | 2 | 4 | 4 |
|  | Credit Hours | 7 | 18 | 15 |
| Total Required Minimum Semester Hours Credit |  |  | 15 |  |

View Catalog Archives

## Associate Professor Brian Garner, Collision Repair \& Refinishing Technology Coordinator

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## COMPUTED TOMOGRAPHY IMAGING TECHNOLOGY

The Computed Tomography Imaging Technology curriculum prepares the individual
to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. Individuals entering this curriculum must be registered or registry- eligible radiologic technologist, radiation therapist, or nuclear medicine technologist.

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography Imaging examinations. They may find employment in facilities which perform these imaging procedures.

## Certificate Program

|  | Course Hours Per <br> Week |  | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Clinic | Credit |  |
| CAT-211 | CT Procedures | 4 | 0 |  | 4 |
| CAT-225 | CT Clinical Practicum | 0 | 0 | 15 | 5 |
|  | Credit Hours | 4 | 0 | 15 | 9 |
| Second Semester (Spring) |  |  |  |  |  |
| CAT-210 | CT Physics \& Equipment | 3 | 0 |  | 3 |
| CAT-226 | CT Clinical Practicum | 0 | 0 | 18 | 6 |
|  | Credit Hours | 3 | 0 | 18 | 9 |
| Total Required Minimum Semester Hours Credit |  |  |  | 18 |  |

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## COMPUTER ENGINEERING TECHNOLOGY - GENERALIST

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |


| Technical Electives: Please choose one: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| NOS-120 | Linux/UNIX Single User | 2 | 2 | 3 |
| NOS-130 | Windows Single User | 2 | 2 | 3 |

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## COMPUTER ENGINEERING TECHNOLOGY - HARDWARE AND SOFTWARE SUPPORT

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| ELC-131 | Circuit Analysis I | 3 | 3 | 4 |
| NET-125 | Introduction to Networks | 1 | 4 | 3 |
| SEC-110 | Security Concepts | 2 | 2 | 3 |
|  | Credit Hours | 8 | 13 | 14 |
| Second Semester (Spring) |  |  |  |  |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| ELN-131 | Analog Electronics I | 3 | 3 | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Course Hours Per Week |  | Semester Hours |
| MAT*** | MAT-121 or MAT-171 | 2-3 | 2 | 3-4 |
| NET-126 | Switching and Routing | 1 | 4 | 3 |
|  | Credit Hours | 11-12 | 11 | 16-17 |
| Third Semester (Summer) |  |  |  |  |
| ELN-133 | Digital Electronics | 3 | 3 | 4 |
| NOS-120 | Linux/UNIX Single User | 2 | 2 | 3 |
| PHY-131 or | Physics-Mechanics or |  |  |  |
| PHY-151 | College Physics I | 3 | 2 | 4 |
|  | Credit Hours | 8 | 7 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| ENG-112 or | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| NOS-130 | Windows Single User | 2 | 2 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 10 | 5 | 12 |
| Fifth Semester (Spring) |  |  |  |  |
| CET-211 | Computer Upgrade/Repair II | 2 | 3 | 3 |
| ELN-232 | Intro to Microprocessors | 3 | 3 | 4 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 8-10 | 8-36 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  | 66 |


| Technical <br> following: | Electives: Please select one of the | Class | Lab | Credit |
| :--- | :--- | :--- | :--- | :--- |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| NOS-230 | Windows Administration I | 2 | 2 | 3 |


| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| :---: | :---: | :---: | :---: | :---: |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## COMPUTER ENGINEERING TECHNOLOGY - HARDWARE AND SOFTWARE SUPPORT

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |

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## COMPUTER ENGINEERING TECHNOLOGY - MEDICAL EQUIPMENT SUPPORT

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

Associate in Applied Science Degree Program

|  |  | Course <br>  <br>  <br>  <br> Week | Class | Lab |
| :--- | :--- | :--- | :--- | :--- |


| Second | Semester (Spring) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| BMT-111 | Intro to Biomed Field | 2 | 0 | 2 |
| ELN-131 | Analog Electronics I | 3 | 3 | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MAT $^{* * *}$ | MAT-121 or MAT-171 | $2-3$ | 2 | $3-4$ |
| $* * *$ | Humanities/Fine Arts Elective | 3 | 0 | 3 |


|  |  | Course <br> Week |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Hours Per |  |
|  | Credit Hours | 13-14 | Semester |


| Technical Electives: Please select one of the <br> following: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| NET-126 | Switching and Routing | 1 | 4 | 3 |
| NOS-230 | Windows Administration I | 2 | 2 | 3 |


| If you choose WBL as a Technical Elective, you must complete 3 Credit Hours |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| from the classes below. |  |  |  |  |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## COMPUTER ENGINEERING TECHNOLOGY NETWORKING

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

Associate in Applied Science Degree Program

|  |  | Course <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| ELN-133 | Digital Electronics | 3 | 3 | 4 |
| NOS-120 | Linux/UNIX Single User | 2 | 2 | 3 |
| $\begin{array}{r} \text { PHY-131 or } \\ \text { PHY-151 } \end{array}$ | Physics-Mechanics or College Physics I | 3 | 2 | 4 |
|  | Credit Hours | 8 | 7 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| CTI-140 | Virtualization Concepts | 1 | 4 | 3 |
| ENG-112 or ENG-114 | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| NET-225 | Enterprise Networking | 1 | 4 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 10 | 11 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| CET-211 | Computer Upgrade/Repair II | 2 | 3 | 3 |
| ELN-232 | Intro to Microprocessors | 3 | 3 | 4 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 8-10 | 8-36 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  | 66 |


| Technical Electives: Please selct one of the <br> following: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| NOS-130 | Windows Single User | 2 | 2 | 3 |
| NOS-230 | Windows Administration I | 2 | 2 | 3 |

If you choose WBL as a Technical Elective, you must complete 3 Credit Hours
from the classes below.

| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## COMPUTER ENGINEERING TECHNOLOGY NETWORKING

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

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## COMPUTER ENGINEERING TECHNOLOGY - SECURITY

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| NET-125 | Introduction to Networks | 1 | 4 | 3 |
| SEC-110 | Security Concepts | 2 | 2 | 3 |
|  | Credit Hours | $\mathbf{3}$ | $\mathbf{8}$ | $\mathbf{7}$ |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NET-126 | Switching and Routing | 1 | 4 | 3 |
| SEC-160 | Security Administration I | 2 | 2 | 3 |
|  | Credit Hours | 3 | 6 | 6 |
| Total Required Minimum Semester Hours Credit |  |  |  | 13 |
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## COMPUTER ENGINEERING TECHNOLOGY - SECURITY

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Associate in Applied Science Degree Program

|  |  | Course <br>  <br>  <br>  <br> Week | Class | Lab |
| :--- | :--- | :--- | :--- | :--- |


| Second | Semester (Spring) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ELN-131 | Analog Electronics I | 3 | 3 | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MAT** $^{\text {M }}$ | MAT-121 or MAT-171 | $2-3$ | 2 | $3-4$ |
| NET-126 | Switching and Routing | 1 | 4 | 3 |
|  | Credit Hours | $9-10$ | 9 | $13-14$ |
| Third Semester (Summer) |  |  |  |  |
| ELN-133 | Digital Electronics | 3 | 3 | 4 |
| NOS-120 | Linux/UNIX Single User | 2 | 2 | 3 |
| PHY-131 or | Physics-Mechanics or |  |  |  |


| PHY-151 | College Physics ICredit Hours | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3 | 2 | 4 |
|  |  | 8 | 7 | 11 |
| Fourth Semester (Fall) |  |  |  |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| ENG-112 or ENG-114 | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| SEC-210 | Intrusion Detection | 2 | 2 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 13 | 5 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| CET-211 | Computer Upgrade/Repair II | 2 | 3 | 3 |
| ELN-232 | Intro to Microprocessors | 3 | 3 | 4 |
| SEC-160 | Security Administration I | 2 | 2 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 7-9 | 10-38 | 13 |
| Total Requi | d Minimum Semester Hours Credit |  |  | 66 |


| Technical Electives: Please select one of the <br> following: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| NOS-130 | Windows Single User | 2 | 2 | 3 |
| NOS-230 | Windows Administration I | 2 | 2 | 3 |

If you choose WBL as a Technical Elective, you must complete 3 Credit Hours
from the classes below.

| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## COMPUTER ENGINEERING TECHNOLOGY - SUPPORT PROFESSIONAL

Pathway Description: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computercontrolled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| NET-125 | Introduction to Networks | 1 | 4 | 3 |
| SEC-110 | Security Concepts | 2 | 2 | 3 |
|  | Credit Hours | 5 | 9 | 9 |
| Second Semester (Spring) |  |  |  |  |
| CET-211 | Computer Upgrade/Repair II | 2 | 3 | 3 |
| NET-126 | Switching and Routing | 1 | 4 | 3 |
| SEC-160 | Security Administration I | 2 | 2 | 3 |
|  | Credit Hours | 5 | 9 | 9 |
| Total Required Minimum Semester Hours Credit |  |  | 18 |  |

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## COSMETOLOGY

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/ computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

## Diploma Program

|  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: |
| First Semester (Fall) | Class | Lab | Credit |
| COS-111 Cosmetology Concepts I | 4 | 0 | 4 |
| COS-112 Salon I | 0 | 24 | 8 |
| PSY-118 or Interpersonal Psychology or PSY-150 General Psychology | 3 | 0 | 3 |
| Credit Hours | 7 | 24 | 15 |
| Second Semester (Spring) |  |  |  |
| COS-113 Cosmetology Concepts II | 4 | 0 | 4 |
| COS-114 Salon II | 0 | 24 | 8 |
| ENG-111 Writing and Inquiry | 3 | 0 | 3 |
| Credit Hours | 7 | 24 | 15 |
| Third Semester (Summer) |  |  |  |
| COS-115 Cosmetology Concepts III | 4 | 0 | 4 |
| COS-116 Salon III | 0 | 12 | 4 |
| Credit Hours | 4 | 12 | 8 |
| Fourth Semester (Fall) |  |  |  |
| *** COS Elective | 1-2 | 3-21 | 2-9 |
| Credit Hours | 1-2 | 3-21 | 2-9 |
| Total Required Minimum Semester Hours Credit |  |  | 40 |
| COS Elective: Take 1 of the following options | Class | Lab | Credit |
| COS-223 Contemp Hair Coloring | 1 | 3 | 2 |
| COS-117 Cosmetology Concepts IV | 2 | 0 | 2 |
| COS-118 Salon IV | 0 | 21 | 7 |

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## COSMETOLOGY

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/ computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

## Certificate Program

|  | Course <br>  <br>  <br>  <br> Week | Semester Per <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## COSMETOLOGY

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/ computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

## Associate in Applied Science Degree Program

|  |  | Course <br>  <br>  <br>  <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| BUS-137 <br> CIS-110 or <br> CIS-111 | Principles of Management <br> Introduction to Computers or <br> Basic PC Literacy | 3 | 0 |

The Criminal Justice Technology Curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Student successfully completing a Basic Law Enforcement Training course, accredited by the North Carolina Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC-113 Juvenile Justice, CJC-120 Interviews and Interrogations, CJC-131 Criminal Law, CJC-132 Court Procedure and Evidence, CJC-221 Investigative Principles, and CJC-231 Constitutional Law toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination and completed Basic Law Enforcement Training since 1985.

Students successfully completing the North Carolina Department of Public Safety Basic Correctional Officer Training course, accredited by the North Carolina Justice Education and Training Standards Commission, will receive credit for CJC-132 Court Procedure and Evidence, CJC-141 Corrections, and CJC-232 Civil Liability.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CJC-111 | Intro to Criminal Justice | 3 | 0 | 3 |
| CJC-112 | Criminology | 3 | 0 | 3 |
| CJC-113 | Juvenile Justice | 3 | 0 | 3 |
| ENG-111 | Writing and Inquiry | $\mathbf{3}$ | 0 | 3 |
| PSY-150 | General Psychology | $\mathbf{3}$ | 0 | 3 |
|  | Credit Hours | $\mathbf{1 5}$ | $\mathbf{2}$ | $\mathbf{1 6}$ |


| Second Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CIS*** $^{*}$ | CIS-11O or CIS-111 | $1-2$ | 2 | $2-3$ |
| CJC-120 | Interviews/Interrogations | 1 | 2 | 2 |
| CJC-121 | Law Enforcement Operations | 3 | 0 | 3 |
| CJC-131 | Criminal Law | 3 | 0 | 3 |
| CJC-132 | Court Procedure \& Evidence | 3 | 0 | 3 |
|  | Credit Hours | $11-12$ | 4 | $13-14$ |


| Third Semester (Summer) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CJC-212 | Ethics \& Comm Relations | 3 | 0 | 3 |
| CJC-232 | Civil Liability | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CJC-221 | Investigative Principles | 3 | 2 | 4 |
| CJC-225 | Crisis Intervention | 3 | 0 | 3 |
| CJC-231 | Constitutional Law | 3 | 0 | 3 |
| ENG-112 or | Writing/Research in the Disc or |  |  |  |
| ENG-114 | Prof Research \& Reporting | 3 | 0 | 3 |
| PSY-281 | Abnormal Psychology | 3 | 0 | 3 |
|  | Credit Hours | 15 | $\mathbf{2}$ | $\mathbf{1 6}$ |


| Fifth Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CJC-141 | Corrections | 3 | 0 | 3 |
| CJC-241 | Community-Based Corrections | 3 | 0 | 3 |
| MAT $^{* * *}$ | MAT-143 or higher | $2-3$ | 2 | $3-4$ |
| PSY-231 | Forensic Psychology | 3 | 0 | 3 |
| $* * *$ | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| $* * *$ | Elective(s) | $1-3$ | $0-10$ | $2-3$ |
|  | Credit Hours | $15-18$ | $2-12$ | $17-19$ |
| Total Required Minimum Semester Hours Credit |  |  | 68 |  |


|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Electives: Choose a minimum of two (2) CREDITS <br> from the following courses. | Class | Lab | Credit |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 3 |
| SOC-213 | Sociology of the Family | 3 | 0 | 3 |
| SOC-220 | Social Problems | 3 | 0 | 3 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |

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## CRIMINAL JUSTICE TECHNOLOGY

The Criminal Justice Technology Curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Student successfully completing a Basic Law Enforcement Training course, accredited by the North Carolina Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC-113 Juvenile Justice, CJC-120 Interviews and Interrogations, CJC-131 Criminal Law, CJC-132 Court Procedure and Evidence, CJC-221 Investigative Principles, and CJC-231 Constitutional Law toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination and completed Basic Law Enforcement Training since 1985.

Students successfully completing the North Carolina Department of Public Safety Basic Correctional Officer Training course, accredited by the North Carolina Justice Education and Training Standards Commission, will receive credit for CJC-132 Court Procedure and Evidence, CJC-141 Corrections, and CJC-232 Civil Liability.

## Certificate Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


| Second Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CJC-121 | Law Enforcement Operations | 3 | 0 | 3 |
| CJC-131 | Criminal Law | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |

Total Required Minimum Semester Hours Credit 13
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Professor David Reece, Criminal Justice Technology Coordinator
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## CRIMINAL JUSTICE TECHNOLOGY - FORENSIC SCIENCE

Forensic Science is a concentration under the curriculum of Criminal Justice Technology, which focuses on the application of the physical, biomedical, and social sciences to the analysis and evaluation of physical evidence, human testimony and criminal suspects. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.

Student successfully completing a Basic Law Enforcement Training course, accredited by the North Carolina Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC-113 Juvenile Justice, CJC-120 Interviews and Interrogations, CJC-131 Criminal Law, CJC-132 Court Procedure and Evidence, CJC-221 Investigative Principles, and CJC-231 Constitutional Law toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination and completed Basic Law Enforcement Training since 1985.

Students successfully completing the North Carolina Department of Public Safety Basic Correctional Officer Training course, accredited by the North Carolina Justice Education and Training Standards Commission, will receive credit for CJC-132 Court Procedure and Evidence.

## Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## CRIMINAL JUSTICE TECHNOLOGY - FORENSIC SCIENCE

Forensic Science is a concentration under the curriculum of Criminal Justice Technology, which focuses on the application of the physical, biomedical, and social sciences to the analysis and evaluation of physical evidence, human testimony and criminal suspects. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.

Student successfully completing a Basic Law Enforcement Training course, accredited by the North Carolina Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards

Commission will receive credit for CJC-113 Juvenile Justice, CJC-120 Interviews and Interrogations, CJC-131 Criminal Law, CJC-132 Court Procedure and Evidence, CJC-221 Investigative Principles, and CJC-231 Constitutional Law toward the Associate in Applied Science degree in Criminal Justice Technology. Students must have successfully passed the Commissions' comprehensive certification examination and completed Basic Law Enforcement Training since 1985.

Students successfully completing the North Carolina Department of Public Safety Basic Correctional Officer Training course, accredited by the North Carolina Justice Education and Training Standards Commission, will receive credit for CJC-132 Court Procedure and Evidence.

Associate in Applied Science Degree Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| Fifth Semester (Spring) |  |  |  |  |
| CHM-151 | General Chemistry I | 3 | 3 | 4 |
| CJC-120 | Interviews/Interrogations | 1 | 2 | 2 |
| CJC-132 | Court Procedure \& Evidence | 3 | 0 | 3 |
| CJC-222 | Criminalistics | 3 | 0 | 3 |
| CJC-246 | Adv. Friction Ridge Analy | 2 | 3 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 15 | 8 | 18 |
| Total Required Minimum Semester Hours Credit |  |  |  | 74 |
| View Catalog Archives |  |  |  |  |
| Professor David Reece, Criminal Justice Technology Coordinator <br> 230 Van Dusen Hall <br> 910.695.3931 <br> reeced@sandhills.edu |  |  |  |  |

## CULINARY ARTS

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full-service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing, wine appreciation, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

## Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week |  | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CUL-110 | Sanitation \& Safety | 2 | 0 | 2 |
| CUL-110A | Sanitation \& Safety Lab | 0 | 2 | 1 |
| CUL-140 | Culinary Skills I | 2 | 6 | 5 |
| CUL-160 | Baking I | 1 | 4 | 3 |
| MAT $^{* * *}$ | MAT-110 or higher | $2-3$ | 2 | $3-4$ |


|  | Credit Hours | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 7-8 | 16 | 15-16 |
| Second Semester (Spring) |  |  |  |  |
| CUL-135 | Food \& Beverage Service | 2 | 0 | 2 |
| CUL-135A | Food \& Beverage Serv Lab | 0 | 2 | 1 |
| CUL-240 | Culinary Skills II | 1 | 8 | 5 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Technical Elective | 1-3 | 0-6 | 2-4 |
|  | Credit Hours | 10-12 | 10-16 | 16-18 |
| Third Semester (Summer) |  |  |  |  |
| CUL-130 | Menu Design | 2 | 0 | 2 |
| CUL-170 | Garde Manger I | 1 | 4 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 6 | 4 | 8 |
| Fourth Semester (Fall) |  |  |  |  |
| CUL-214 | Wine Appreciation | 1 | 2 | 2 |
| CUL-260 | Baking II | 1 | 4 | 3 |
| CUL-283 | Farm-To-Table | 2 | 6 | 5 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| WBL*** | WBL-111 or take WBL-112 in Spring | 0 | 0-10 | 1-0 |
|  | Credit Hours | 7 | 12-22 | 14-13 |
| Fifth Semester (Spring) |  |  |  |  |
| CUL-112 | Nutrition for Foodservice | 3 | 0 | 3 |
| CUL-120 | Purchasing | 2 | 0 | 2 |
| CUL-230 | Global Cuisines | 1 | 8 | 5 |
| HRM-245 | Human Resource Mgmt-Hosp | 3 | 0 | 3 |
| WBL*** | WBL-121 (if WBL-111 taken) or WBL-112 | 0 | 10-20 | 1-2 |
|  | Credit Hours | 9 | 18-28 | 14-15 |
| Total Requ | d Minimum Semester Hours Credit |  |  | 67 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-115 | College Accounting | 3 | 2 | 4 |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| BPA-150 | Artisan \& Specialty Bread | 1 | 6 | 4 |
| BUS-115 | Business Law I | 3 | 0 | 3 |
| BUS-121 | Business Math | 2 | 2 | 3 |
| BUS-139 | Entrepreneurship 1 | 3 | 0 | 3 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| HOR-142 | Fruit \& Vegetable Prod | 1 | 2 | 2 |
| View Catalog Archives |  |  |  |  |
| Associate Professor Erin Durkee, Culinary Arts Coordinato <br> 105 Little Hall <br> 910.246.4941 <br> durkeeer@sandhills.edu |  |  |  |  |
| CULINARY ARTS |  |  |  |  |

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full-service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing, wine appreciation, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| CUL-110 | Sanitation \& Safety | 2 | 0 | 2 |
| CUL-140 | Culinary Skills I | 2 | 6 | 5 |
| CUL-170 | Garde Manger I | 1 | 4 | 3 |
|  | Credit Hours | 5 | 10 | 10 |
| Second Semester (Spring) |  |  |  |  |
| CUL-160 | Baking I | 1 | 4 | 3 |
| CUL-240 | Culinary Skills II | 1 | 8 | 5 |
|  | Credit Hours | $\mathbf{2}$ | 12 | 8 |
| Total Required Minimum Semester Hours Credit |  |  | 18 |  |

View Catalog Archives
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## CULINARY ARTS - RESTAURANT MANAGEMENT

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full-service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing, wine appreciation, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| CUL-110 | Sanitation \& Safety | 2 | 0 | 2 |
| CUL-110A | Sanitation \& Safety Lab | 0 | 2 | 1 |
| CUL-135 | Food \& Beverage Service | 2 | 0 | 2 |
| CUL-135A | Food \& Beverage Serv Lab | 0 | 2 | 1 |
| CUL-214 | Wine Appreciation | 1 | 2 | 2 |
|  | Credit Hours | 5 | 6 | 8 |
| Second Semester (Spring) |  | 0 | 3 |  |
| CUL-112 | Nutrition for Foodservice | 3 | 0 | 2 |
| CUL-120 | Purchasing | 2 | 0 | 3 |
| HRM-245 | Human Resource Mgmt-Hosp | 3 | 0 | 8 |
|  | Credit Hours | 8 |  | 16 |

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## EARLY CHILDHOOD EDUCATION

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will
combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| EDU-119 | Intro to Early Child Educ | 4 | 0 | 4 |
| EDU-144 | Child Development I | 3 | 0 | 3 |
| EDU-151 | Creative Activities | 3 | 0 | 3 |
| EDU-157 | Active Play | 2 | 2 | 3 |
|  | Credit Hours | $\mathbf{1 2}$ | $\mathbf{4}$ | $\mathbf{1 4}$ |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EDU-145 | Child Development II | 3 | 0 | 3 |
| EDU-146 | Child Guidance | 3 | 0 | 3 |
| EDU-153 | Health, Safety and Nutrition | 3 | 0 | 3 |
| EDU-234 | Infants, Toddlers, and Twos | 3 | 0 | 3 |
| EDU-251 | Exploration Activities | 3 | 0 | 3 |
|  | Credit Hours | 15 | 0 | 15 |
| Third Semester (Summer) |  |  |  |  |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| EDU*** | EDU Elective | 1-3 | 0-3 | 2-3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 7-9 | 0-3 | 8-9 |
| Fourth Semester (Fall) |  |  |  |  |
| EDU-131 | Child, Family, and Community | 3 | 0 | 3 |
| EDU-235 | School-Age Develop \& Programs | 3 | 0 | 3 |
| EDU-259 | Curriculum Planning | 3 | 0 | 3 |
| EDU-280 | Language/Literacy Experiences | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 15 | 0 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| EDU-221 | Children With Exceptionalities | 3 | 0 | 3 |


|  |  | Course |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Hours Per | Semester |  |
| EDU-284 | Early Child Capstone Prac | 1 | 9 | 4 |
| Hours |  |  |  |  |


| EDU Elective: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| EDU-114 | Intro to Family Childcare | 3 | 0 | 3 |
| EDU-184 | Early Child Intro Pract | 1 | 3 | 2 |
| EDU-271 | Educational Technology | 2 | 2 | 3 |
| EDU-275 | Effective Teach Train | 2 | 0 | 2 |

View Catalog Archives
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## EARLY CHILDHOOD EDUCATION - ADMINISTRATION

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

## Certificate Program

|  | Course <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |
| EDU-119 | Intro to Early Child Educ | 4 | 0 |
|  | Credit Hours | 4 | 0 |


|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| Credit Hours | 6 | 0 | 6 |

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |


|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| EDU-146 | Child Guidance | 3 | 0 | 3 |
| EDU-153 | Health, Safety and Nutrition | 3 | 0 | 3 |
| EDU-234 | Infants, Toddlers, and Twos | 3 | 0 | 3 |
| MAT-143 | Quantitative Literacy | 2 | 2 | 3 |
|  | Credit Hours | $\mathbf{1 4}$ | $\mathbf{2}$ | 15 |


| Third Semester (Summer) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| BIO-110 or | Principles of Biology or |  |  |  |
| BIO-111 | $\quad$ General Biology I |  |  |  |
| ENG-111 | Writing and Inquiry | 3 | 3 | 4 |
| ${ }_{* * *}$ | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 9 | 0 | 3 |
|  |  |  | 3 | 10 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| EDU-131 | Child, Family, and Community | 3 | 0 | 3 |
| EDU-216 | Foundations of Education | 3 | 0 | 3 |
| EDU-280 | Language/Literacy Experiences | 3 | 0 | 3 |
| ENG-112 or | Writing/Research in the Disc or |  |  |  |
| ENG-114 Prof Research \& Reporting | 3 | 0 | 3 |  |
|  | Natural Science Elective | $2-4$ | $0-3$ | 4 |
|  | Credit Hours | $14-16$ | $0-3$ | 16 |
| Fifth Semester (Spring) |  |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| EDU-221 | Children With Exceptionalities | 3 | 0 | 3 |
| EDU-250 | Teacher Licensure Preparation | 3 | 0 | 3 |
| EDU-284 | Early Child Capstone Prac | 1 | 9 | 4 |
|  | Credit Hours | 10 | 9 | 13 |
| Total Required Minimum Semester Hours Credit |  |  | 71 |  |


| Social/Behavioral Science Elective list: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ECO-251 | Prin of Microeconomics | 3 | 0 | 3 |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |
| HIS-111 | World Civilizations I | 3 | 0 | 3 |
| HIS-112 | World Civilizations II | 3 | 0 | 3 |
| HIS-131 | American History I | 3 | 0 | 3 |
| HIS-132 | American History II | 3 | 0 | 3 |
| POL-120 | American Government | 3 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 3 |
| Natural Science Elective list: |  |  |  |  |
| AST*** | AST-111 and AST-111A | 3 | 2 | 4 |
| CHM-151 | General Chemistry I | 3 | 3 | 4 |


|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| GEL-111 | Geology | 3 | 2 | 4 |
| PHY*** | PHY-110 and PHY-110A | 3 | 2 | 4 |
| Humanities/Fine Arts Elective list: |  |  |  |  |
| ART-111 | Art Appreciation | 3 | 0 | 3 |
| ART-114 | Art History Survey I | 3 | 0 | 3 |
| ART-115 | Art History Survey II | 3 | 0 | 3 |
| MUS-110 | Music Appreciation | 3 | 0 | 3 |
| MUS-112 | Introduction to Jazz | 3 | 0 | 3 |
| PHI-215 | Philosophical Issues | 3 | 0 | 3 |
| PHI-240 | Introduction to Ethics | 3 | 0 | 3 |

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## EARLY CHILDHOOD EDUCATION - INFANT/TODDLER CARE

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

## Certificate Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |


|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| Second Semester (Spring) |  |  |  |
| EDU-146 $\quad$ Child Guidance | 3 | 0 | 3 |
| EDU-234 $\quad$ Infants, Toddlers, and Twos | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 |

## EARLY CHILDHOOD EDUCATION - NON-TEACHING LICENSURE TRANSFER

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| EDU-119 | Intro to Early Child Educ | 4 | 0 | 4 |
| EDU-144 | Child Development I | 3 | 0 | 3 |
| EDU-151 | Creative Activities | 3 | 0 | 3 |
| $* * *$ | Social/Behavioral Science Elective | 3 | 0 | 3 |
|  | Credit Hours | 13 | 2 | 14 |
| Second Semester (Spring) |  |  |  |  |
| EDU-145 | Child Development II | 3 | 0 | 3 |
| EDU-146 | Child Guidance | 3 | 0 | 3 |
| EDU-153 | Health, Safety and Nutrition | 3 | 0 | 3 |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Course Hours Per Week |  | Semester Hours |
| EDU-234 | Infants, Toddlers, and Twos | 3 | 0 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MAT-143 | Quantitative Literacy | 2 | 2 | 3 |
|  | Credit Hours | 17 | 2 | 18 |
| Third Semester (Summer) |  |  |  |  |
| $\begin{aligned} & \text { BIO-110 or } \\ & \quad \text { BIO-111 } \\ & \text { EDU-261 } \\ & \text { EDU-262 } \end{aligned}$ | Principles of Biology or General Biology I | 3 | 3 | 4 |
|  | Early Childhood Admin I | 3 | 0 | 3 |
|  | Early Childhood Admin II | 3 | 0 | 3 |
|  | Credit Hours | 9 | 3 | 10 |
| Fourth Semester (Fall) |  |  |  |  |
| EDU-131 | Child, Family, and Community | 3 | 0 | 3 |
| EDU-280 | Language/Literacy Experiences | 3 | 0 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Natural Science Elective | 2-4 | 0-3 | 4 |
|  | Credit Hours | 14-16 | 0-3 | 16 |
| Fifth Semester (Spring) |  |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| EDU-221 | Children With Exceptionalities | 3 | 0 | 3 |
| EDU-284 | Early Child Capstone Prac | 1 | 9 | 4 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
|  | Credit Hours | 10 | 9 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  | 71 |


| Social/Behavioral Science Elective list: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ECO-251 | Prin of Microeconomics | 3 | 0 | 3 |
| ECO-252 | Prin of Macroeconomics | 3 | 0 | 3 |
| HIS-111 | World Civilizations I | 3 | 0 | 3 |
| HIS-112 | World Civilizations II | 3 | 0 | 3 |
| HIS-131 | American History I | 3 | 0 | 3 |
| HIS-132 | American History II | 3 | 0 | 3 |
| POL-120 | American Government | 3 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 3 |


| Natural Science Elective list: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| AST*** $^{l}$ | AST-111 and AST-111A | 3 | 2 | 4 |
| CHM-151 | General Chemistry I | 3 | 3 | 4 |
| GEL-111 | Geology | 3 | 2 | 4 |


| PHY*** | PHY-110 and PHY-110A | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 3 | 2 | 4 |
| Humanities/Fine Arts Elective list: |  |  |  |  |
| ART-111 | Art Appreciation | 3 | 0 | 3 |
| ART-114 | Art History Survey I | 3 | 0 | 3 |
| ART-115 | Art History Survey II | 3 | 0 | 3 |
| MUS-110 | Music Appreciation | 3 | 0 | 3 |
| MUS-112 | Introduction to Jazz | 3 | 0 | 3 |
| PHI-215 | Philosophical Issues | 3 | 0 | 3 |
| PHI-240 | Introduction to Ethics | 3 | 0 | 3 |
| View Catalog Archives |  |  |  |  |
| Professor Susan Wright, Early Childhood Education Coordinator <br> 231 Van Dusen Hall <br> 910.246.5360 <br> wrightsu@sandhills.edu |  |  |  |  |
| EARLY CHILDHOOD EDUCATION - PRESCHOOL |  |  |  |  |

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development, physical/nutritional needs of children, care and guidance of children, and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/ emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and childcare programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| EDU-119 | Intro to Early Child Educ | 4 | 0 | 4 |
| EDU-131 | Child, Family, and Community | 3 | 0 | 3 |
|  | Credit Hours | $\mathbf{7}$ | $\mathbf{2}$ | $\mathbf{8}$ |
| Second Semester (Spring) |  |  |  |  |
| EDU-145 | Child Development II | 3 | 0 | 3 |
| EDU-146 | Child Guidance | 3 | 0 | 3 |


|  | Course |  |
| :--- | :--- | :--- | :--- |
|  | Hours Per | Semester |

## EMERGENCY MEDICAL SCIENCE

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence-based practice under medical oversight and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

The Emergency Medical Services - Paramedic program at Sandhills Community College is accredited by the Commission of Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee of Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CoAEMSP:

## Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week |  | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Clinic | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 |  |
| BIO-168 | Anatomy and Physiology I | 3 | 3 | 1 |
| EMS-110 | EMT | 6 | 6 | 3 |


|  | Credit Hours | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 11 | 11 | 3 | 16 |
| Second Semester (Spring) |  |  |  |  |  |
| BIO-169 | Anatomy and Physiology II | 3 | 3 |  | 4 |
| EMS-122 | EMS Clinical Practicum I | 0 | 0 | 3 | 1 |
| EMS-130 | Pharmacology | 3 | 3 |  | 4 |
| EMS-131 | Advanced Airway Management | 1 | 2 |  | 2 |
| EMS-160 | Cardiology I | 2 | 3 |  | 3 |
| EMS-210 | Adv. Patient Assessment | 1 | 3 |  | 2 |
| ENG-111 | Writing and Inquiry | 3 | 0 |  | 3 |
|  | Credit Hours | 13 | 14 | 3 | 19 |
| Third Semester (Summer) |  |  |  |  |  |
| EMS-220 | Cardiology II | 2 | 3 |  | 3 |
| EMS-221 | EMS Clinical Practicum II | 0 | 0 | 6 | 2 |
| EMS-260 | Trauma Emergencies | 1 | 3 |  | 2 |
|  | Credit Hours | 3 | 6 | 6 | 7 |
| Fourth Semester (Fall) |  |  |  |  |  |
| EMS-231 | EMS Clinical Pract III | 0 | 0 | 9 | 3 |
| EMS-240 | Patients W/ Special Challenges | 1 | 2 |  | 2 |
| EMS-250 | Medical Emergencies | 3 | 3 |  | 4 |
| EMS-270 | Life Span Emergencies | 3 | 3 |  | 4 |
| ENG-112 or ENG-114 | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 |  | 3 |
|  | Credit Hours | 10 | 8 | 9 | 16 |
| Fifth Semester (Spring) |  |  |  |  |  |
| EMS-241 | EMS Clinical Practicum IV | 0 | 0 | 12 | 4 |
| EMS-285 | EMS Capstone | 1 | 3 |  | 2 |
| EMS*** | EMS Elective | 1-2 | 2-3 |  | 2-3 |
| *** | Humanities/Fine Arts Elective | 3 | 3 |  | 3 |
| *** | Social/Behavioral Science Elective** | 3 | 0 |  | 3 |
|  | Credit Hours | 8-9 | 8-9 | 12 | 14-15 |
| Total Required Minimum Semester Hours Credit 72 |  |  |  |  |  |


| Select one of the following for Social/Behavioral <br> Science Elective: | Class | Lab | Clinic | Credit |
| :--- | :--- | :--- | :--- | :--- |
| PSY-118 | Interpersonal Psychology | 3 | 0 | 3 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 3 |
| SOC-220 | Social Problems | 3 | 0 | 3 |
| SOC-225 | Social Diversity | 3 | 0 | 3 |


|  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| Select one of the following for EMS Elective: |  |  |


| Select one of the following for EMS Elective: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| EMS-115 | Defense Tactics for EMS | 1 | 3 | 2 |
| EMS-125 | EMS Instructor Methodology | 2 | 2 | 3 |
| EMS-140 | Rescue Scene Management | 1 | 3 | 2 |
| EMS-150 | Emergency Vehicles \& EMS Comm | 1 | 3 | 2 |
| EMS-235 | EMS Management | 2 | 0 | 2 |
| EMS-243 | Wilderness EMT | 1 | 2 | 2 |

Note: Other courses from the Social/Behavioral Science offerings may be approved pending review by the Vice President of Instruction.

View Catalog Archives

## Associate Professor Ryan Teal, Emergency Medical Science Coordinator

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tealr@sandhills.edu

## Associate Professor Stefanie Williams, Emergency Medical Science Clinical Coordinator <br> 109 Kennedy Hall <br> 910.695.3936 <br> williamss@sandhills.edu

## EMERGENCY MEDICAL SCIENCE

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence-based practice under medical oversight and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

The Emergency Medical Services - Paramedic program at Sandhills Community College is accredited by the Commission of Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee of Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

To contact CoAEMSP:

## Diploma Program

|  |  | Course <br> Week |  | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Clinic | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 |  | 1 |
| BIO-163 | Basic Anat \& Physiology | 4 | 2 |  | 5 |
| EMS-110 | EMT | 6 | 6 | 3 | 9 |
| MED-120 | Survey of Med Terminology | 2 | 0 |  | 2 |
|  | Credit Hours | $\mathbf{1 2}$ | $\mathbf{1 0}$ | $\mathbf{3}$ | $\mathbf{1 7}$ |


| Second Semester (Spring) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EMS-122 | EMS Clinical Practicum I | 0 | 0 | 3 | 1 |
| EMS-130 | Pharmacology | 3 | 3 |  | 4 |
| EMS-131 | Advanced Airway Management | 1 | 2 |  | 2 |
| EMS-160 | Cardiology I | 2 | 3 |  | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 |  | 3 |
|  | Credit Hours | 9 | 8 | 3 | 13 |
| Third Semester (Summer) |  |  |  |  |  |
| EMS-210 | Adv. Patient Assessment | 1 | 3 |  | 2 |
| EMS-220 | Cardiology II | 2 | 3 |  | 3 |
| EMS-221 | EMS Clinical Practicum II | 0 | 0 | 6 | 2 |
| EMS-260 | Trauma Emergencies | 1 | 3 |  | 2 |
|  | Credit Hours | 4 | 9 | 6 | 9 |
| Fourth Semester (Fall) |  |  |  |  |  |
| EMS-231 | EMS Clinical Pract III | 0 | 0 | 9 | 3 |
| EMS-240 | Patients W/ Special Challenges | 1 | 2 |  | 2 |
| EMS-250 | Medical Emergencies | 3 | 3 |  | 4 |
| EMS-270 | Life Span Emergencies | 3 | 3 |  | 4 |
|  | Credit Hours | 7 | 8 | 9 | 13 |
| Fifth Semester (Spring) |  |  |  |  |  |
| EMS-140 | Rescue Scene Management | 1 | 3 |  | 2 |


|  | Course |  |  | Wours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 0 | 0 | 12 | 4 |
| EMS-241 | EMS Clinical Practicum IV | 0 | 3 |  | 2 |
| EMS-285 | EMS Capstone | 1 | 3 | 12 | $\mathbf{8}$ |
|  | Credit Hours | $\mathbf{2}$ | 6 | 12 | 60 |

View Catalog Archives

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Associate Professor Ryan Teal, Emergency Medical Science Coordinator 108 Kennedy Hall 910.695.3768
tealr@sandhills.edu
```


## Associate Professor Stefanie Williams, Emergency Medical Science Clinical Coordinator <br> 109 Kennedy Hall <br> 910.695.3936 <br> williamss@sandhills.edu

## FIRE PROTECTION TECHNOLOGY

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


|  |  | Course Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Week |  |

## FIRE PROTECTION TECHNOLOGY - FIRE INSPECTION

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting
industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

## Certificate Program

|  | Course <br>  <br>  <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## FIRE PROTECTION TECHNOLOGY - FIRE MANAGEMENT

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Spring) | Class | Lab | Credit |

View Catalog Archives
Instructor Floyd Fritz, Fire Protection Technology Coordinator
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910.695.3897
fritzf@sandhills.edu

## HEALTH INFORMATION TECHNOLOGY

The Health Information Technology Curriculum is designed to provide individuals with the technical knowledge and skills to process, analyze, maintain, and report health information data in compliance with legal, accreditation, licensure and certification standards.

Course work includes diagnosis and procedure coding/classification systems, privacy and security strategies, health informatics, data analytics and use, revenue cycle management, regulatory compliance, and organizational leadership.

Graduates of this program may be eligible to write the national certification exam to become a Registered Health Information Technician (RHIT). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities.

This program is an NCCCS partner program delivered under an Instructional Service Agreement that allows SCC to offer general education courses related to degree completion, but Pitt Community College awards the degree.

Because the use of computers is integral to this curriculum, some courses are delivered in an online hybrid format.

## Pitt CC/Sandhills CC Partner Program

Pitt Community College (PCC) has entered into a unique learning partnership with SCC to provide SCC students the opportunity to complete up to 34 credit
hours at SCC to be used toward completion of the 71-hour A.A.S. in the PCC Health Information Technology program.

Students accepted into this program can explore two options:

1. Complete the 34 hours of general requirements prior to application to the program, or
2. Complete some or all of those courses at SCC while concurrently enrolled in the PCC program online.
PLEASE NOTE: Entry into the HIT program is contingent upon PCC requirements and acceptance. Application to the program must be made with PCC.

The Health Information Technology Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Associate in Applied Science Degree Program

| SCC Courses |  | PCC Courses |  |
| :--- | :--- | :--- | :--- |
| Course Prefix, <br> Number, and Title | Credit Hours | Course Prefix, <br> Number, and Title | Credit Hours |
| ACA-115 Success <br> \& Study Skills <br> (Substitute for <br> ACA-111) | 1 | CTS-130 <br> Spreadsheet | 3 |
| BIO-163 Basic <br>  <br> Physiology (5) or <br> BIO-168 Anatomy <br> \& Physiology I <br> (4) and BIO-169 <br>  <br> Physiology II (4) | $5-8$ | HIT-110 Intro to <br> Healthcare HIM | 3 |
| CIS-110 <br> Introduction to <br> Computers | 3 | HIT-112 Health <br> Law \& Ethics | 3 |
|  <br> Inquiry | 3 | HIT-114 Health <br> Data Sys/ <br> Standards | 3 |
| ENG-112 Writing/ <br> Research in the <br> Disc | 3 | HIT-124 Prof <br> Practice Exp II | 1 |
| HUM-115 Critical <br> Thinking <br> or PHI-240 <br> Introduction to <br> Ethics | 3 | HIT-211 Diagnosis <br>  <br> Reporting | 3 |

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| MAT-152 <br> Statistical <br> Methods I | 4 | HIT-213 INPT <br>  <br> Reporting | 2 |
| :--- | :--- | :--- | :--- |
| MED-121 Medical <br> Terminology I | 3 | HIT-214 OP <br> Procedure <br> Coding/Reporting | 2 |
| MED-122 Medical <br> Terminology II | 3 | HIT-215 <br> Revenue Cycle <br> Management | 2 |
| PSY-150 General <br> Psychology | 3 |  <br> Data Analysis | 3 |
|  |  | HIT-218 <br> Management <br> Principles in HIT | 3 |
|  |  | HIT-220 <br> Electronic Health <br> Records | 2 |
|  |  | HIT-224 Prof <br> Practice Exp IV | 2 |
|  | 31 | HIT-225 <br> Healthcare <br> Informatics | 3 |
|  |  | HIT-226 <br> Pathophysiology <br> \& Pharmacology | 3 |
|  | HIT-280 HIM <br> Capstone | 2 |  |
|  | HSC-110* <br> Orientation to <br> Health Careers | 1 |  |
|  |  | 41 |  |

*Course is encouraged but not required.
View Catalog Archives
Professor Nevius Toney, Health Information Technology Coordinator
212B Stone Hall
910.695.3752
toneyn@sandhills.edu

## HEALTH AND FITNESS SCIENCE

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks \& Recreation Departments and other organizations implementing exercise \& fitness programs.

Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| BIO-155 | Nutrition | 3 | 0 | 3 |
| ENG-114 or COM-231 or | Prof Research \& Reporting or Public Speaking or |  |  |  |
| COM-120 | Intro Interpersonal Com | 3 | 0 | 3 |
| HFS-116 | Pvnt \& Care Exer Injuries | 2 | 2 | 3 |
| HFS-118 | Fitness Facility Mgmt | 4 | 0 | 4 |
| MAT*** | MAT-143 or higher | 2-3 | 2 | 3-4 |
| PED-118 | Weight Training II | 0 | 3 | 1 |
|  | Credit Hours | 14-15 | 7 | 17-18 |
| Third Semester (Summer) |  |  |  |  |
| HEA-112 | First Aid \& CPR | 1 | 2 | 2 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
| *** | Humanities/Fine Arts ELective | 3 | 0 | 3 |
|  | Credit Hours | 7 | 2 | 8 |
| Fourth Semester (Fall) |  |  |  |  |
| BIO-168 | Anatomy and Physiology I | 3 | 3 | 4 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| BUS-139 or BUS-230 or | Entrepreneurship I or Small Business Management or |  |  |  |
| BUS-137 | Principles of Management | 3 | 0 | 3 |
| HFS-212 | Exercise Programming | 2 | 2 | 3 |
| HFS-218 | Lifestyle Chng \& Wellness | 3 | 2 | 4 |
| PED-113 | Aerobics I | 0 | 3 | 1 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
|  | Credit Hours | 12 | 20 | 17 |
| Fifth Semester (Spring) |  |  |  |  |
| BIO-169 | Anatomy and Physiology II | 3 | 3 | 4 |
| HFS-120 | Group Exer Instruction | 2 | 2 | 3 |
| HFS-210 | Personal Training | 2 | 2 | 3 |
| HFS-214 | Health and Fitness Law | 3 | 0 | 3 |
| $\begin{gathered} \text { PED-122 or } \\ \text { PED-217 } \end{gathered}$ | Yoga I or Pilates | 0 | 2 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
|  | Credit Hours | 10 | 19 | 15 |
| Total Required Minimum Semester Hours Credit |  |  |  | 72 |
| View Catalog Archives |  |  |  |  |
| Professor Shelby Basinger, Health and Fitness Science Coordinator <br> 109 Blue Hall <br> 910.246.4961 <br> basingers@sandhills.edu |  |  |  |  |

## HEALTH AND FITNESS SCIENCE

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks \& Recreation Departments and other organizations implementing exercise \& fitness programs.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

## INFORMATION TECHNOLOGY - APPLE SWIFT PROGRAMMING

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  | Course Hours Per <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| First Semester (Summer) | Class | Lab | Credit |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 |


| WEB-151 |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  | Mobile Application Dev I | 2 | 3 | 3 |
|  | Credit Hours | 4 | 6 | 6 |
| Second Semester (Fall) |  |  |  |  |
| CSC-118 | Swift Programming I | 2 | 3 | 3 |
|  | Credit Hours | 2 | 3 | 3 |
| Third Semester (Spring) |  |  |  |  |
| CSC-218 | Swift Programming II | 2 | 3 | 3 |
|  | Credit Hours | 2 | 3 | 3 |
| Total Required Minimum Semester Hours Credit |  |  |  | 12 |
| View Catalog Archives |  |  |  |  |
| Professor Johna Parker, IT - Apple Swift Programming Coordinator 159 Little Hall 910.695.3967 parkerj@sandhills.edu |  |  |  |  |

## INFORMATION TECHNOLOGY - COMPUTER DATABASE

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| DBA-120 | Database Programming I | 2 | 2 | 3 |
|  | Credit Hours | 4 | 5 | 6 |
| Second Semester (Spring) |  |  |  |  |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Course Hours Per Week |  | Semester Hours |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| DBA-221 | SQL Server DB Prog II | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |
| Third Semester (Summer) |  |  |  |  |
| WEB-115 | Web Markup and Scripting | 2 | 3 | 3 |
|  | Credit Hours | 2 | 3 | 3 |
| Total Required Minimum Semester Hours Credit |  |  |  | 15 |
| View Catalog Archives |  |  |  |  |
| Professor Johna Parker, IT - Computer Database Coordinator <br> 159 Little Hall <br> 910.695.3967 <br> parkerj@sandhills.edu |  |  |  |  |
| INFORMATION TECHNOLOGY - COMPUTER PROGRAMMING AND DEVELOPMENT |  |  |  |  |

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CTI-120 | Network \& Sec Foundation | 2 | 2 | 3 |
| DME-110 | Intro to Digital Media | 2 | 2 | 3 |


| ENG-111 |  | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: |
|  | Writing and Inquiry | 3 | 0 | 3 |
|  | Credit Hours | 11 | 11 | 16 |
| Second Semester (Spring) |  |  |  |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| CSC-153 | C\# Programming | 2 | 3 | 3 |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| CTS-115 | Info Sys Business Concepts | 3 | 0 | 3 |
| ENG-112 or ENG-114 | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
|  | Credit Hours | 12 | 8 | 15 |
| Third Semester (Summer) |  |  |  |  |
| MAT*** | MAT-121 or MAT-143 or MAT-171 | 2-3 | 2 | 3-4 |
| WEB-115 | Web Markup and Scripting | 2 | 3 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 4-7 | 7-35 | 9-10 |
| Fourth Semester (Fall) |  |  |  |  |
| CSC-253 | Advanced C\# Programming | 2 | 3 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 3 |
| DBA-120 | Database Programming I | 2 | 2 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 9-11 | 10-38 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| CSC-289 | Programming Capstone Project | 1 | 4 | 3 |
| DBA-221 | SQL Server DB Prog II | 2 | 2 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 6-8 | 8-36 | 12 |
| Total Required Minimum Semester Hours Credit 67 |  |  |  |  |


| Technical Electives: Please select three courses <br> from the following. | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| CSC-118 | Swift Programming I | 2 | 3 | 3 |
| CSC-134 | C++ Programming | 2 | 3 | 3 |
| CSC-139 | Visual BASIC Programming | 2 | 3 | 3 |
| CSC-151 | JAVA Programming | 2 | 3 | 3 |
| CSC-218 | Swift Programming II | 2 | 3 | 3 |
| NOS-230 | Windows Administration I | 2 | 2 | 3 |
| SGD-113 | SGD Programming I | 2 | 3 | 3 |


| WEB-151 | Mobile Application Dev I | 2 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| WEB-182 | PHP Programming | 2 | 3 | 3 |
| WEB-210 | Web Design | 2 | 3 | 3 |


| If you choose WBL as one Technical Elective, you must complete 3 Credit Hou from the classes below. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## INFORMATION TECHNOLOGY - DIGITAL MEDIA PRODUCTION

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Associate in Applied Science Degree Program

|  | Course |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Week | Labrs Per | Semester <br> Hours |  |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |


|  |  | Course Hours Per | Semester |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Week |  | Hours |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CTI-120 | Network \& Sec Foundation | 2 | 2 | 3 |
| DME-110 | Intro to Digital Media | 2 | 2 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
|  | Credit Hours | $\mathbf{1 1}$ | 11 | 16 |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| CTS-115 | Info Sys Business Concepts | 3 | 0 | 3 |
| $\begin{aligned} & \text { ENG-112 or } \\ & \text { ENG-114 } \\ & \text { or } \end{aligned}$ | Writing/Research in the Disc or Prof Research \& Reporting or |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| MAT*** | MAT-121 or MAT-143 or MAT-171 | 2-3 | 2 | 3-4 |
|  | Credit Hours | 12-13 | 7 | 15-16 |
| Third Semester (Summer) |  |  |  |  |
| DME-115 | Graphic Design Tools | 2 | 2 | 3 |
| DME-120 | Intro to Multimedia Appl | 2 | 2 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 7 | 4 | 9 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| DME-130 | Digital Animation I | 2 | 2 | 3 |
| GRA-151 | Computer Graphics I | 1 | 3 | 2 |
| WEB-140 | Web Development Tools | 2 | 3 | 3 |
| WEB-210 | Web Design | 2 | 3 | 3 |
| ${ }^{* * *}$ | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 10 | 11 | 14 |
|  |  |  |  |  |
| Fifth Semester (Spring) | 2 | 2 | 3 |  |
| DME-285 | Systems Project | 2 | 3 | 3 |
| WEB-214 | Social Media | 2 | 3 | 3 |
| WEB-225 | Content Management Sys | $0-2$ | $2-30$ | 3 |
| $* * *$ | Technical Elective | $6-8$ | $10-38$ | 12 |
|  | Credit Hours |  |  | 66 |


| Technical Electives: Please select one course from <br> the following. | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| DME-215 | Adv Graphic Design Tools | 2 | 3 | 3 |
| GRD-167 | Photographic Imaging I | 1 | 4 | 3 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| WEB-115 | Web Markup and Scripting | 2 | 3 | 3 |
| WEB-182 | PHP Programming | 2 | 3 | 3 |
| If you choose WBL as one Technical Elective, you must complete 3 Credit Hours from the classes below. |  |  |  |  |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |
| View Catalog Archives |  |  |  |  |
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## INFORMATION TECHNOLOGY - DIGITAL MEDIA PRODUCTION

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  |  | Course <br> Week | Caurs Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Summer) | Class | Lab | Credit |  |
| DME-115 | Graphic Design Tools | 2 | 2 | 3 |
| DME-120 | Intro to Multimedia Appl | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |


|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| Second Semester (Fall) | 1 | 3 | 2 |  |
| GRA-151 | Computer Graphics I | 2 | 3 | 3 |
| WEB-210 | Web Design | 3 | 6 | 5 |
|  | Credit Hours |  |  |  |
| Third Semester (Spring) | 2 | 3 | 3 |  |
| WEB-214 | Social Media | 2 | 3 | 3 |
| WEB-225 | Content Management Sys | Credit Hours | 4 | 6 |

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## INFORMATION TECHNOLOGY - GAMING \& SIMULATION

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

Associate in Applied Science Degree Program

|  | Course | Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CTI-120 | Network \& Sec Foundation | 2 | 2 | 3 |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Course Hours Per Week |  | Semester Hours |
| DME-110 | Intro to Digital Media | 2 | 2 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
|  | Credit Hours | 11 | 11 | 16 |
| Second Semester (Spring) |  |  |  |  |
| CET-111 | Computer Upgrade/Repair I | 2 | 3 | 3 |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| CTS-115 | Info Sys Business Concepts | 3 | 0 | 3 |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| MAT*** | MAT-121 or MAT-143 or MAT-171 | 2-3 | 2 | 3-4 |
|  | Credit Hours | 12-13 | 7 | 15-16 |
| Third Semester (Summer) |  |  |  |  |
| SGD-112 | SGD Design I | 2 | 3 | 3 |
| SGD-114 | SGD 3D Modeling I | 2 | 3 | 3 |
| SGD-174 | SGD Level Design I | 2 | 3 | 3 |
|  | Credit Hours | 6 | 9 | 9 |
| Fourth Semester (Fall) |  |  |  |  |
| SGD-113 | SGD Programming I | 2 | 3 | 3 |
| SGD-212 | SGD Design II | 2 | 3 | 3 |
| SGD-214 | SGD 3D Modeling II | 2 | 3 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Technical Elective | 0-2 | 2-30 | 3 |
|  | Credit Hours | 9-11 | 11-39 | 15 |
| Fifth Semester (Spring) |  |  |  |  |
| CSC-153 | C\# Programming | 2 | 3 | 3 |
| SGD-162 | SGD 3D Animation I | 2 | 3 | 3 |
| SGD-289 | SGD Project | 2 | 3 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 9 | 9 | 12 |
| Total Requi | d Minimum Semester Hours Credit |  |  | 67 |


| Technical Electives: Please select one course from the following. |  | Class | Lab | Credit |
| :---: | :---: | :---: | :---: | :---: |
| CSC-134 | C++ Programming | 2 | 3 | 3 |
| CSC-139 | Visual BASIC Programming | 2 | 3 | 3 |
| CSC-253 | Advanced C\# Programming | 2 | 3 | 3 |
| DME-120 | Intro to Multimedia Appl | 2 | 2 | 3 |
| DME-140 | Intro to Audio/Video Media | 2 | 3 | 3 |
| WEB-115 | Web Markup and Scripting | 2 | 3 | 3 |


|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| WEB-182 | PHP Programming | 2 | 3 | 3 |

If you choose WBL as one Technical Elective, you must complete 3 Credit Hours

| from the classes below. |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
| WBL-112 | Work-Based Learning I | 0 | 20 | 2 |
| WBL-113 | Work-Based Learning I | 0 | 30 | 3 |
| WBL-115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
| WBL-122 | Work-Based Learning II | 0 | 20 | 2 |

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## INFORMATION TECHNOLOGY - GAMING \& SIMULATION

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Summer) | Class | Lab | Credit |  |
| SGD-112 | SGD Design I | 2 | 3 | 3 |
| SGD-114 | SGD 3D Modeling I | 2 | 3 | 3 |
| SGD-174 | SGD Level Design I | 2 | 3 | 3 |
|  | Credit Hours | 6 | 9 | 9 |


|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| Second Semester (Fall) |  |  |  |
| SGD-212 | SGD Design II | 2 | 3 |
| SGD-214 | SGD 3D Modeling II | 2 | 3 |
| Credit Hours | 4 | 6 | 3 |
| Total Required Minimum Semester Hours Credit |  | 6 |  |
| View Catalog Archives |  | 15 |  |
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## INFORMATION TECHNOLOGY - GENERALIST

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CTI-120 | Network \& Sec Foundation | 2 | 2 | 3 |
| DME-110 | Intro to Digital Media | 2 | 2 | 3 |
|  | Credit Hours | 8 | 9 | 12 |


| Second Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CTI-110 | Web, Pgm, \& Db Foundation | 2 | 2 | 3 |
| CTS-115 | Info Sys Business Concepts | 3 | 0 | 3 |

$\left.\begin{array}{lll} & \begin{array}{l}\text { Course Hours Per } \\ \text { Credit Hours }\end{array} & \begin{array}{l}\text { Semester } \\ \text { Week }\end{array} \\ \text { Total Required Minimum Semester Hours Credit }\end{array}\right)$

## INFORMATION TECHNOLOGY - PROGRAMMING C\#

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/ or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Spring) | Class | Lab | Credit |  |
| CIS-115 | Intro to Prog \& Logic | 2 | 3 | 3 |
| CSC-153 | C\# Programming | 2 | 3 | 3 |
|  | Credit Hours | 4 | 6 | 6 |
| Second Semester (Summer) | 2 | 2 | 3 |  |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
|  | Credit Hours |  |  |  |
| Third Semester (Fall) | 2 | 3 | 3 |  |
| CSC-253 | Advanced C\# Programming | 2 | 3 | 3 |
|  | Credit Hours | 2 |  | 12 |

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## LANDSCAPE GARDENING

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| HOR-160 | Plant Materials I | 2 | 2 | 3 |
| LSG-111 | Basic Landscape Technique | 2 | 0 | 2 |
| LSG-121 | Fall Gardening Lab | 0 | 6 | 2 |
| MAT*** | MAT-110 or higher | $2-3$ | 2 | $3-4$ |
|  | Credit Hours | $9-10$ | 12 | $14-15$ |
| Second Semester (Spring) |  |  |  |  |
| HOR-134 | Greenhouse Operations | 2 | 2 | 3 |
| HOR-161 | Plant Materials II | 2 | 2 | 3 |
| HOR-257 | Arboriculture Practices | 1 | 3 | 2 |
| LSG-122 | Spring Gardening Lab | 0 | 6 | 2 |
| TRF-110 | Intro Turfgrass Cult \& ID | 3 | 2 | 4 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |


|  | Credit Hours | Course Hours Per Week |  | Semester <br> Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 8 | 25 | 15 |
| Third Semester (Summer) |  |  |  |  |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| HOR-142 | Fruit \& Vegetable Prod | 1 | 2 | 2 |
| HOR-265 | Advanced Plant Materials | 1 | 2 | 2 |
| LSG-123 | Summer Gardening Lab | 0 | 6 | 2 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 8 | 10 | 12 |
| Fourth Semester (Fall) |  |  |  |  |
| HOR-112 | Landscape Design I | 2 | 3 | 3 |
| HOR-168 | Plant Propagation | 2 | 2 | 3 |
| HOR-235 | Greenhouse Production | 2 | 2 | 3 |
| LSG-231 | Landscape Supervision | 2 | 6 | 4 |
| WBL-121 | Work-Based Learning II | 0 | 10 | 1 |
|  | Credit Hours | 8 | 23 | 14 |
| Fifth Semester (Spring) |  |  |  |  |
| HOR-114 | Landscape Construction | 2 | 2 | 3 |
| HOR-164 | Hort Pest Management | 2 | 2 | 3 |
| HOR-215 | Landscape Irrigation | 2 | 2 | 3 |
| LSG-244 | Advanced Issues/LSG | 2 | 0 | 2 |
| *** | Social/Behavioral Science Elective | 3 | 0 | 3 |
| *** | Technical Elective | 0-3 | 0-10 | 1-3 |
|  | Credit Hours | 11-14 | 6-16 | 15-17 |
| Sixth Semester (Summer) |  |  |  |  |
| WBL-212 | Work-Based Learning IV | 0 | 20 | 2 |
|  | Credit Hours | 0 | 20 | 2 |
| Total Required Minimum Semester Hours Credit |  |  |  | 72 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| DFT-119 | Basic CAD | 1 | 2 | 2 |
| GIS-111 | Introduction to GIS | 2 | 2 | 3 |
| HOR-213 | Landscape Design II | 2 | 2 | 3 |
| HOR-225 | Nursery Production | 2 | 2 | 3 |
| SST-140 | Green BIdg \& Design Concepts | 3 | 0 | 3 |
| WBL-131 | Work-Based Learning III | 0 | 10 | 1 |

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## LANDSCAPE GARDENING

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

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## LANDSCAPE GARDENING - GREENHOUSE GROWER

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |

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## LANDSCAPE GARDENING - LANDSCAPE CONSTRUCTION

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

## Certificate Program

|  |  | Course Hours Per <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |


|  | Course Hours Per <br> Credit Hours <br> Week | Semester <br> Hours |
| :--- | :--- | :--- |
| Total Required Minimum Semester Hours Credit |  | $\mathbf{3}$ |
| View Catalog Archives |  | 18 |
| Associate Professor Hilarie Blevins, Landscape Gardening Coordinator |  |  |
| 209 Steed Hall |  |  |
| 910.695 .3885 |  |  |
| blevinsh@sandhills.edu |  |  |

## LANDSCAPE GARDENING - LANDSCAPE DESIGN

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| HOR-160 | Plant Materials I | 2 | 2 | 3 |
| LSG-111 | Basic Landscape Technique | 2 | 0 | 2 |
| MAT $^{* * *}$ | MAT-110 or higher | $2-3$ | 2 | $3-4$ |
|  | Credit Hours | $6-7$ | 6 | $9-10$ |
| Second Semester (Spring) |  |  |  |  |
| HOR-114 | Landscape Construction | 2 | 2 | 3 |
| HOR-161 | Plant Materials II | 2 | 2 | 3 |


| Credit Hours |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 4 | 4 | 6 |
| Third Semester (Fall) |  |  |  |  |
| HOR-112 | Landscape Design I | 2 | 3 | 3 |
|  | Credit Hours | 2 | 3 | 3 |
| Total Required Minimum Semester Hours Credit |  |  |  | 18 |
| View Catalog Archives |  |  |  |  |
| Associate Professor Hilarie Blevins, Landscape Gardening Coordinator <br> 209 Steed Hall <br> 910.695.3885 <br> blevinsh@sandhills.edu |  |  |  |  |

## LANDSCAPE GARDENING - TURFGRASS MANAGEMENT

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Turfgrass Management Technology: A program that focuses on turfgrasses and related groundcover plants and prepares individuals to develop ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| HOR-160 | Plant Materials I | 2 | 2 | 3 |
| LSG-111 | Basic Landscape Technique | 2 | 0 | 2 |
| LSG-121 | Fall Gardening Lab | 0 | 6 | 2 |
| MAT $^{* * *}$ | MAT-110 or higher | $2-3$ | 2 | $3-4$ |


| WBL-110 |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  | World of Work | 1 | 0 | 1 |
|  | Credit Hours | 10-11 | 12 | 15-16 |
| Second Semester (Spring) |  |  |  |  |
| HOR-166 | Soils \& Fertilizers | 2 | 2 | 3 |
| HOR-257 | Arboriculture Practices | 1 | 3 | 2 |
| LSG-122 | Spring Gardening Lab | 0 | 6 | 2 |
| TRF-110 | Intro Turfgrass Cult \& ID | 3 | 2 | 4 |
| WBL-111 | Work-Based Learning I | 0 | 10 | 1 |
|  | Credit Hours | 6 | 23 | 12 |
| Third Semester (Summer) |  |  |  |  |
| $\begin{aligned} & \text { ENG-112 or } \\ & \text { ENG-114 } \\ & \text { LSG-123 } \\ & \text { TRF-152 } \\ & \text { WBL-121 } \\ & \text { *** } \end{aligned}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
|  | Summer Gardening Lab | 0 | 6 | 2 |
|  | Landscape Maintenance | 2 | 2 | 3 |
|  | Work-Based Learning II | 0 | 10 | 1 |
|  | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 8 | 18 | 12 |
| Fourth Semester (Fall) |  |  |  |  |
| HOR-112 | Landscape Design I | 2 | 3 | 3 |
| TRF-210 | Turfgrass Eqmt Mgmt | 1 | 4 | 3 |
| TRF-220 | Turfgrass Calculations | 2 | 0 | 2 |
| TRF-230 | Turfgrass Mgmt Apps | 1 | 2 | 2 |
| WBL-131 | Work-Based Learning III | 0 | 10 | 1 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 9 | 19 | 14 |
| Fifth Semester (Spring) |  |  |  |  |
| HOR-114 | Landscape Construction | 2 | 2 | 3 |
| HOR-164 | Hort Pest Management | 2 | 2 | 3 |
| HOR-215 | Landscape Irrigation | 2 | 2 | 3 |
| LSG-244 | Advanced Issues/LSG | 2 | 0 | 2 |
| TRF-260 | Adv Turfgrass Mgmt | 3 | 2 | 4 |
|  | Credit Hours | 11 | 8 | 15 |
| Sixth Semester (Summer) |  |  |  |  |
| WBL-212 | Work-Based Learning IV | 0 | 20 | 2 |
|  | Credit Hours | 0 | 20 | 2 |
| Total Required Minimum Semester Hours Credit |  |  |  | 70 |
| View Catalog Archives |  |  |  |  |
| Associate Professor Hilarie Blevins, Landscape Gardening Coordinator |  |  |  |  |

## LANDSCAPE GARDENING - TURFGRASS MANAGEMENT

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, government agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Turfgrass Management Technology: A program that focuses on turfgrasses and related groundcover plants and prepares individuals to develop ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |

View Catalog Archives
Associate Professor Hilarie Blevins, Landscape Gardening Coordinator
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blevinsh@sandhills.edu

## MEDICAL LABORATORY TECHNOLOGY

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/ treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/ recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take the examination given by the Board of Certification of the American Society of Clinical Pathology. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

The MLT program is accredited by the:

## Associate in Applied Science Degree Program


$\left.\begin{array}{llllll} & & \begin{array}{l}\text { Course } \\ \text { Week }\end{array} & & & \begin{array}{l}\text { Semester } \\ \text { Hours }\end{array} \\ \text { BIO*** } & \text { Take BIO-169 (if BIO-168 taken) } & 0-3 & 0-3 & & 0-4 \\ \text { ENG-112 or } & \text { Writing/Research in the Disc or }\end{array}\right)$

View Catalog Archives
Instructor Aimi Vanden Oever, Medical Laboratory Technology Coordinator 164 Kennedy Hall
910.695.3839
vandenoevera@sandhills.edu

## Associate Professor Denise Schliep, Medical Laboratory Technology Clinical Coordinator <br> 167 Kennedy Hall <br> 910.246.2866 <br> schliepd@sandhills.edu

## MEDICAL OFFICE ADMINISTRATION

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

## Certificate Program

|  |  | Course <br> Week |  | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester | Class | Lab | Credit |  |


| Second Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| OST-243 | Med Office Simulation | 2 | 2 | 3 |
| OST-286 | Professional Development | 3 | 0 | 3 |
| OST-288 | Medical Office Admin Capstone | 2 | 2 | 3 |
|  | Credit Hours | 7 | 4 | 9 |
| Total Required Minimum Semester Hours Credit |  |  | 18 |  |

View Catalog Archives
Associate Professor Victoria Collins, Medical Office Administration Coordinator 105 Meyer Hall
910.246.4118
collinsv@sandhills.edu

## MEDICAL OFFICE ADMINISTRATION - GENERAL

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-115 or | College Accounting or |  |  |  |
| ACC-120 Prin of Financial Accounting | 3 | 2 | 4 |  |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |


| Programs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Course Hours Per Week |  | Semester Hours |
| OST-131 | Keyboarding | 1 | 2 | 2 |
| MED-121 | Medical Terminology I | 3 | 0 | 3 |
| *** | Natural Science Elective or |  |  |  |
| MAT*** | MAT-143 or higher | 0-4 | 0-3 | 3-5 |
|  | Credit Hours | 10-14 | 6-9 | 16-18 |
| Second Semester (Spring) |  |  |  |  |
| $\begin{array}{r} \hline \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| OST-134 | Text Entry \& Formatting | 2 | 2 | 3 |
| MED-122 | Medical Terminology II | 3 | 0 | 3 |
| OST-148 | Med Ins \& Billing | 3 | 0 | 3 |
| OST-164 | Office Editing | 3 | 0 | 3 |
|  | Credit Hours | 14 | 2 | 15 |
| Third Semester (Summer) |  |  |  |  |
| OST-136 | Word Processing | 2 | 2 | 3 |
| OST-137 or | Office Applications I or |  |  |  |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |
| Fourth Semester (Fall) |  |  |  |  |
| OST-149 | Medical Legal Issues | 3 | 0 | 3 |
| OST-236 | Adv Word Processing | 2 | 2 | 3 |
| OST-243 | Med Office Simulation | 2 | 2 | 3 |
| OST-247 | Procedure Coding | 2 | 2 | 3 |
| OST-248 | Diagnostic Coding | 2 | 2 | 3 |
| OST-284 | Emerging Technologies | 1 | 2 | 2 |
|  | Credit Hours | 12 | 10 | 17 |
| Fifth Semester (Spring) |  |  |  |  |
| OST-286 or Professional Development or BUS-151 People Skills |  | 3 | 0 | 3 |
| OST-288 | Medical Office Admin Capstone | 2 | 2 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
| ${ }^{* * *}$ | Technical Elective | 1-3 | 0-3 | 2-3 |
|  | Credit Hours | 12-14 | 2-5 | 14-15 |
| Total Required Minimum Semester Hours Credit |  |  |  | 68 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-140 | Payroll Accounting | 1 | 3 | 2 |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |


|  |  | Course <br> Weurs Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- |
| ACC-150 | Accounting Software Appl | 1 | 3 |

## MEDICAL OFFICE ADMINISTRATION - MEDICAL CODING AND BILLING

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester | Class | Lab | Credit |  |
| MED-121 | Medical Terminology | 3 | 0 | 3 |
| OST-148 | Med Ins \& Billing | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |
| Second Semester | 2 | 2 | 3 |  |
| OST-247 | Procedure Coding | 2 | 2 | 3 |
| OST-248 | Diagnostic Coding | 4 | 4 | 6 |
|  | Credit Hours |  |  |  |
| Third Semester | 3 | 0 | 3 |  |
| MED-122 | Medical Terminology II | 2 | 3 | 3 |
| OST-249 | Med Coding Certification Prep | 2 |  |  |


|  | Course Hours Per | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- |
| $\quad$ Week |  | 6 |  |
| Credit Hours | 5 | 3 | 18 |
| Total Required Minimum Semester Hours Credit |  |  |  |
| View Catalog Archives |  |  |  |
| Associate Professor Victoria Collins, Medical Office Administration Coordinator |  |  |  |
| 105 Meyer Hall |  |  |  |
| 910.246-4118 |  |  |  |
| collinsv@sandhills.edu |  |  |  |

## MEDICAL OFFICE ADMINISTRATION - MEDICAL CODING AND BILLING

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


|  |  | Course |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Hours Per | Semester |

## MEDICAL OFFICE ADMINISTRATION - PATIENT SERVICES

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and
ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

Associate in Applied Science Degree Program

|  |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| $\begin{aligned} & \text { ACC-115 or } \\ & \text { ACC-120 } \end{aligned}$ | College Accounting or Prin of Financial Accounting | 3 | 2 | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |
| MED-121 | Medical Terminology I | 3 | 0 | 3 |
| OST-131 | Keyboarding | 1 | 2 | 2 |
| *** | Natural Science Elective or |  |  |  |
| MAT ${ }^{* * *}$ | MAT-143 or higher | 0-4 | 0-3 | 3-5 |
|  | Credit Hours | 10-14 | 6-9 | 16-18 |
| Second Semester (Spring) |  |  |  |  |
| ENG-112 or Writing/Research in the Disc or ENG-114 Prof Research \& Reporting |  | 3 | 0 | 3 |
| MED-122 | Medical Terminology II | 3 | 0 | 3 |
| OST-134 | Text Entry \& Formatting | 2 | 2 | 3 |
| OST-148 | Med Ins \& Billing | 3 | 0 | 3 |
| OST-164 | Office Editing | 3 | 0 | 3 |
| OST-184 | Records Management | 2 | 2 | 3 |
|  | Credit Hours | 16 | 4 | 18 |
| Third Semester (Summer) |  |  |  |  |
| OST-136 | Word Processing | 2 | 2 | 3 |
| $\begin{aligned} & \text { OST-137 or } \\ & \text { CIS-110 } \end{aligned}$ | Office Applications I or |  |  |  |
|  | Introduction to Computers | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |
| Fourth Semester (Fall) |  |  |  |  |
| BUS-121 | Business Math | 2 | 2 | 3 |
| MKT-223 | Customer Service | 3 | 0 | 3 |
| OST-149 | Medical Legal Issues | 3 | 0 | 3 |
| OST-236 | Adv Word Processing | 2 | 2 | 3 |
| OST-243 | Med Office Simulation | 2 | 2 | 3 |
| OST-284 | Emerging Technologies | 1 | 2 | 2 |


| Credit Hours |  | Course Hours Per Week |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 13 | 8 | 17 |
| Fifth Semester (Spring) |  |  |  |  |
| BUS-260 | Business Communication | 3 | 0 | 3 |
| $\begin{gathered} \text { OST-286 or } \\ \text { BUS-151 } \end{gathered}$ | Professional Development or People Skills | 3 | 0 | 3 |
| OST-288 | Medical Office Admin Capstone | 2 | 2 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 14 | 2 | 15 |
| Total Requir | d Minimum Semester Hours Credit |  |  | 72 |
| View Catalog Archives |  |  |  |  |
| Associate Professor Victoria Collins, Medical Office Administration Coordinator <br> 105 Meyer Hall <br> 910.246 .4118 <br> collinsv@sandhills.edu |  |  |  |  |

## NURSE AIDE

The Nurse Aide curriculum prepares individuals to work under the supervision of licensed nursing professionals in performing nursing care and services for persons of all ages.

Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills.

Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

## Certificate Program

|  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) | Class | Lab | Clinic | Credit |
| NAS-101 Nurse Aide I | 3 | 4 | 3 | 6 |
| Credit Hours | 3 | 4 | 3 | 6 |
| Second Semester (Spring) |  |  |  |  |
| NAS-102 Nurse Aide II | 3 | 2 | 6 | 6 |
| Credit Hours | 3 | 2 | 6 | 6 |
| Total Required Minimum Semester Hours Credit |  |  |  | 12 |
| View Catalog Archives |  |  |  |  |
| Professor Jenell Powell, Nurse Aide Coordinator |  |  |  |  |

## NURSING

The Associate Degree Nursing (ADN) curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

The Associate Degree Nursing program at Sandhills is approved by the North Carolina Board of Nursing.

Associate in Applied Science Degree Program

|  |  | Course <br>  <br>  <br>  <br>  <br> Weeek |  | Class | Lab |
| :--- | :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Clinic | Semester <br> Hours |  |  |  |
| BIO-168 | Anatomy and Physiology I | 3 | 3 |  | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 |  | 3 |
| NUR-111 | Intro to Health Concepts | 4 | 6 | 6 | 8 |
| PSY-150 | General Psychology | 3 | 0 |  | 3 |
|  | Credit Hours | 13 | 9 | 6 | 18 |


| Second Semester (Spring) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACA-122 | College Transfer Success | 0 | 2 |  | 1 |
| BIO-169 | Anatomy and Physiology II | 3 | 3 |  | 4 |
| ENG-112 or ENG-114 | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 |  | 3 |
| NUR-112 | Health-IIIness Concepts | 3 | 0 | 6 | 5 |
| NUR-211 | Health Care Concepts | 3 | 0 | 6 | 5 |
|  | Credit Hours | 12 | 5 | 12 | 18 |
| Third Semester (Summer) |  |  |  |  |  |
| NUR-114 | Holistic Health Concepts | 3 | 0 | 6 | 5 |
| PSY-241 | Developmental Psych | 3 | 0 |  | 3 |
|  | Credit Hours | 6 | 0 | 6 | 8 |

Fourth Semester (Fall)

|  |  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BIO-275 | Microbiology | 3 | 3 |  | 4 |
| NUR-113 | Family Health Concepts | 3 | 0 | 6 | 5 |
| NUR-212 | Health System Concepts | 3 | 0 | 6 | 5 |
| SOC-210 | Introduction to Sociology | 3 | 0 |  | 3 |
|  | Credit Hours | 12 | 3 | 12 | 17 |
| Fifth Semester (Spring) |  |  |  |  |  |
| NUR-213 | Complex Health Concepts | 4 | 3 | 15 | 10 |
| *** | Humanities/Fine Arts Elective* | 3 | 0 |  | 3 |
|  | Credit Hours | 7 | 3 | 15 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 74 |

## Humanities/Fine Arts Elective list:

ART-111, ART-114, ART-115, HUM-115, MUS-110, MUS-112, PHI-215, PHI-240
View Catalog Archives
Professor Heather Cox, Nursing Coordinator
1010 Foundation Hall
910.695.3852
coxh@sandhills.edu

## OFFICE ADMINISTRATION

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| ACC-115 or | College Accounting or |  |  |  |
| ACC-120 | Prin of Financial Accounting | 3 | 2 | 4 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 3 |


| Programs |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Course Hours Per | Semester |  |
| OST-131 | Keyboarding | Week |  | Hours |
| ${ }^{* * *}$ | Humanities/Fine Arts Elective | 3 | 0 | 2 |
| ${ }^{* * *}$ | Natural Science Elective or |  |  | 3 |
| MAT*** $^{*}$ | MAT-143 or higher | $0-4$ | $0-3$ | $3-5$ |
|  | Credit Hours | $10-14$ | $6-9$ | $16-18$ |


| Second Semester (Spring) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| OST-134 | Text Entry \& Formatting | 2 | 2 | 3 |
| OST-164 | Office Editing | 3 | 0 | 3 |
| OST-184 | Records Management | 2 | 2 | 3 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 3 |
|  | Credit Hours | 13 | 4 | 15 |
| Third Semester (Summer) |  |  |  |  |
| OST-136 | Word Processing | 2 | 2 | 3 |
| OST-137 or | Office Applications I or |  |  |  |
| CIS-110 | Introduction to Computers | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |


| Fourth Semester (Fall) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ACC-149 | Intro to ACC Spreadsheets | 1 | 3 | 2 |
| BUS-125 | Personal Finance | 3 | 0 | 3 |
| BUS-230 | Small Business Management | 3 | 0 | 3 |
| MKT-223 | Customer Service | 3 | 0 | 3 |
| OST-236 | Adv Word Processing | 2 | 2 | 3 |
| OST-284 | Emerging Technologies | 1 | 2 | 2 |
|  | Credit Hours | 13 | 7 | 16 |
| Fifth Semester (Spring) |  |  |  |  |
| ACC-150 | Accounting Software Appl | 1 | 3 | 2 |
| $\begin{gathered} \text { OST-286 or } \\ \text { BUS-151 } \end{gathered}$ | Professional Development or People Skills | 3 | 0 | 3 |
| OST-289 | Office Admin Capstone | 2 | 2 | 3 |
| *** | Technical Elective | 1-3 | 0-3 | 3 |
| *** | Technical Elective | 1-3 | 0-3 | 3 |
|  | Credit Hours | 8-12 | 5-11 | 14 |
| Total Required Minimum Semester Hours Credit |  |  |  | 67 |


| Technical Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| ACC-121 | Prin of Managerial Accounting | 3 | 2 | 4 |
| ACC-140 | Payroll Accounting | 1 | 3 | 2 |


|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| BUS-115 | Business Law I | 3 | 0 | 3 |
| BUS-121 | Business Math | 2 | 2 | 3 |
| BUS-153 | Human Resource Management | 3 | 0 | 3 |
| BUS-225 | Business Finance | 2 | 2 | 3 |
| BUS-255 | Org Behavior in Business | 3 | 0 | 3 |
| BUS-260 | Business Communication | 3 | 0 | 3 |

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Associate Professor Victoria Collins, Office Administration Coordinator
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## OFFICE ADMINISTRATION

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

## Certificate Program

|  |  | Course <br> Week | Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Summer) | Class | Lab | Credit |  |

View Catalog Archives
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## OFFICE ADMINISTRATION - CUSTOMER SERVICE REPRESENTATIVE

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

## Certificate Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Summer) | Class | Lab | Credit |

[^0]Graduates are employed in medical institutions, clinics, or physician practices.
Graduates may qualify as candidates to take the International Joint Commission on Allied Health Personnel in Ophthalmology's exam for the Certified Assistant level.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Credit |
| First Semester (Fall) | 2 | 0 | 2 |  |
| OPH-113 | Intro to Diseases of Eye | 1 | 2 | 2 |
| OPH-115 | Ophthalmic Clin Proc I | 2 | 0 | 2 |
| OPH-119 | Ophtha Optics \& Basic Refract | 2 | 0 | 2 |
| OPH-150 | Intro to Ophth Med Assist | 2 | 0 | 2 |
| OPH-151 | Ocular Anat. \& Physiology | 2 | 2 | 10 |


| Second Semester (Spring) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| OPH-114 | Basic Ophthalmic Pharma. | 2 | 0 | 2 |
| OPH-117 | Ophthalmic Clin Proc II | 1 | 2 | 2 |
| OPH-118 | Ophthalmic Patient Care | 2 | 0 | 2 |
|  | Credit Hours | 5 | 2 | 6 |
| Total Required Minimum Semester Hours Credit |  |  | 16 |  |

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## Professor Sue Senior, Health Science

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## OPHTHALMIC MEDICAL PERSONNEL

The Ophthalmic Medical Personnel Program prepares individuals to perform ophthalmic procedures under the supervision of a licensed physician specializing in Ophthalmology. Course work includes lecture, laboratory, and clinical training in ocular measurements; ocular testing; lensometry; administering topical and oral medications; eye care; and caring for instruments.

Graduates are employed in medical institutions, clinics, or physician practices.
Graduates may qualify as candidates to take the International Joint Commission on Allied Health Personnel in Ophthalmology's exam for the Certified Assistant level.

## Diploma Program

|  | Course |  | Wours Per | Semester |
| :--- | :--- | :--- | :--- | :--- |
| Week |  | Hours |  |  |


|  |  | Course Hours Per | Semester <br> Hours |
| :--- | :--- | :--- | :--- | :--- |
| COM-120 | Intro Interpersonal Com or |  |  |

## PROFESSIONAL PILOT

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, unmanned aircraft systems industries, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, unmanned aircraft systems, and instrument and commercial ground training, flight and simulator training, and entrepreneurship or business management training.

Graduates may earn a commercial pilot certificate with an instrument rating, specialize in aviation management or in unmanned air systems, and may find employment as commercial, corporate, and military pilots, fixed base operators
and airport managers, as pilots or technicians in the unmanned aircraft systems industry, or as flight instructors, and flight dispatchers.

Students in the Aviation Management and Career Pilot Technology program will be required to fly simulator hours during the Air Navigation course and within the Flight-Private Pilot, -Instrument Pilot, -Commercial Pilot and -Certified Flight Instructor courses toward their FAA certification which are required to receive credit for flight courses. There will be a per hour fee for simulator use that will be set by the department.

The Professional Pilot track focuses on the skills and knowledge required to be a successful commercial pilot. Graduates may earn a commercial pilot certificate with an instrument rating.

Associate in Applied Science Degree Program

|  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |


| Third Semester (Summer) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} \hline \text { ENG-112 or } \\ \text { ENG-114 } \end{array}$ | Writing/Research in the Disc or Prof Research \& Reporting | 3 | 0 | 3 |
| *** | Humanities/Fine Arts Elective | 3 | 0 | 3 |
|  | Credit Hours | 6 | 0 | 6 |
| Fourth Semester (Fall) |  |  |  |  |
| AER-114 | Aviation Management | 3 | 0 | 3 |
| AER-161 | Flight-Instrument Pilot | 0 | 6 | 2 |
| AER-170 | Commercial Flight Theory | 3 | 0 | 3 |


|  |  | Course Hours Per Week |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: |
| AER-216 | Engines \& Systems | 2 | 2 | 3 |
| COM-120 or COM-231 or | Intro Interpersonal Com or Public Speaking or |  |  |  |
| BUS-260 | Business Communication | 3 | 0 | 3 |
| *** | Aviation Elective | 0-3 | 0-3 | 1-3 |
|  | Credit Hours | 11-14 | 8-11 | 15-17 |
| Fifth Semester (Spring) |  |  |  |  |
| AER-171 | Flight-Commercial Pilot | 0 | 6 | 3 |
| AER-215 | Flight Safety | 3 | 0 | 3 |
| AER-217 | Air Transportation | 3 | 0 | 3 |
| AER-280 | Instructor Pilot Flt Theory | 3 | 0 | 3 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
| *** | Avaition Elective | 0-3 | 0-3 | 1-3 |
|  | Credit Hours | 12-15 | 6-9 | 16-18 |
| Total Required Minimum Semester Hours Credit |  |  |  | 71 |


| Aviation Electives: | Class | Lab | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| AER-115 | Flight Simulator | 1 | 3 | 2 |
| AER-116 | Private Pilot Flight Simulato | 1 | 2 | 2 |
| AER-119 | Aircraft Structures | 2 | 0 | 2 |
| AER-211 | Air Traffic Control | 2 | 0 | 2 |
| AER-212 | Air Transport Pilot | 3 | 0 | 3 |
| AER-213 | Avionics | 2 | 0 | 2 |
| AER-218 | Human Factors in Aviation | 2 | 0 | 2 |
| AER-220 | Airport Management | 2 | 0 | 2 |
| AER-281 | Flight-CFI | 0 | 3 | 1 |
| AER-285 | Flight-Multi-Engine | 0 | 3 | 1 |

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## Associate Professor Keith Davies, Aviation Management and Professional Pilot Coordinator <br> 167 Causey Hall <br> 910.693.2076 <br> daviesk@sandhills.edu

## PROFESSIONAL PILOT - INSTRUMENT PILOT

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, unmanned aircraft systems industries, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, unmanned aircraft systems, and instrument and commercial ground training, flight and simulator training, and entrepreneurship or business management training.

Graduates may earn a commercial pilot certificate with an instrument rating, specialize in aviation management or in unmanned air systems, and may find employment as commercial, corporate, and military pilots, fixed base operators and airport managers, as pilots or technicians in the unmanned aircraft systems industry, or as flight instructors, and flight dispatchers.

Students in the Aviation Management and Career Pilot Technology program will be required to fly simulator hours during the Air Navigation course and within the Flight-Private Pilot, -Instrument Pilot, -Commercial Pilot and -Certified Flight Instructor courses toward their FAA certification which are required to receive credit for flight courses. There will be a per hour fee for simulator use that will be set by the department.

## Certificate Program

|  |  | Course <br> Wours Per | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Spring) | Class | Lab | Credit |  |
| AER-111 | Aviation Meteorology | 3 | 0 | 3 |
| AER-116 | Private Pilot Flight Simulato | 1 | 2 | 2 |
| AER-151 | Flight-Private Pilot | 0 | 3 | 1 |
| AER-160 | Instrument Flight Theory | 2 | 2 | 3 |
|  | Credit Hours | 6 | 7 | 9 |


| Second Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| AER-115 | Flight Simulator | 1 | 3 | 2 |
| AER-161 | Flight-Instrument Pilot | 0 | 6 | 2 |
| AER-215 | Flight Safety | 3 | 0 | 3 |
|  | Credit Hours | 4 | 9 | 7 |
| Total Required Minimum Semester Hours Credit |  |  | 16 |  |

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The Instrument Pilot Certificate program will provide the student with the opportunity to qualify for a FAA Instrument Pilot Rating. The student must complete their Private Pilot Certificate and receive credit for AER-151 prior to entering the instrument flight training portion of the certificate program. SCC does not offer the flight training for the private certificate. Students must go to a FAA approved flight training school and qualify under FAR Part 61 or Part 141 to receive their FAA Private Pilot Certificate.

The flight portion of AER-161 is not offered on campus, however, there is an Advanced Aviation Training Device that the student can train in AER-115 and credit up to 20 instrument flight hours toward their instrument rating. The flight portion of the Instrument Rating must be taken at a Part 61 or Part 141 flight school and the student must receive their FAA Instrument Rating through the flight training and FAA testing and evaluation process.

## Associate Professor Keith Davies, Aviation Management and Professional Pilot Coordinator

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## PROFESSIONAL PILOT - PRIVATE PILOT

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, unmanned aircraft systems industries, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, unmanned aircraft systems, and instrument and commercial ground training, flight and simulator training, and entrepreneurship or business management training.

Graduates may earn a commercial pilot certificate with an instrument rating, specialize in aviation management or in unmanned air systems, and may find employment as commercial, corporate, and military pilots, fixed base operators and airport managers, as pilots or technicians in the unmanned aircraft systems industry, or as flight instructors, and flight dispatchers.

Students in the Aviation Management and Career Pilot Technology program will be required to fly simulator hours during the Air Navigation course and within the Flight-Private Pilot, -Instrument Pilot, -Commercial Pilot and -Certified Flight Instructor courses toward their FAA certification which are required to receive credit for flight courses. There will be a per hour fee for simulator use that will be set by the department.

## Certificate Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Credit |  |
| AER-110 | Air Navigation | 2 | 2 | 3 |
| AER-150 | Private Pilot FIt Theory | 2 | 2 | 3 |
|  | Credit Hours | 4 | 4 | 6 |
| Second Semester (Spring) |  |  |  |  |
| AER-116 | Private Pilot Flight Simulato | 1 | 2 | 2 |
| AER-151 | Flight-Private Pilot | 0 | 3 | 1 |
| AER-215 | Flight Safety | 3 | 0 | 3 |
|  | Credit Hours | 4 | 5 | 6 |
| Total Required Minimum Semester Hours Credit |  |  | 12 |  |

SCC does not offer AER-151 on campus. A student must go to an FAA approved flight training school and qualify under FAR Part 61 or Part 141 to receive their FAA Private Pilot Certificate.

## Associate Professor Keith Davies, Aviation Management and Professional Pilot Coordinator

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## RADIOGRAPHY

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

The Radiography program is accredited by the:

## Associate in Applied Science Degree Program

|  |  | Course Hours Per <br> Week | Semester <br> Hours |  |
| :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Clinic | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 | 1 |
| BIO-168 | Anatomy and Physiology I | 3 | 3 | 4 |
| MAT-143 | Quantitative Literacy | 2 | 2 | 3 |
| RAD-110 | Rad Intro \& Patient Care | 2 | 3 | 3 |
| RAD-111 | RAD Procedures I | 3 | 3 |  |
| RAD-151 | RAD Clinical Ed I | 0 | 0 | 6 |
|  | Credit Hours | 10 | 13 | 6 |


| Programs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RAD-171 | RAD Clinical Ed III Credit Hours | Course Hours Per Week |  |  | Semester Hours 3 |
|  |  | 0 | 0 | 9 |  |
|  |  | 6 | 3 | 9 | 10 |
| Fourth Semester (Fall) |  |  |  |  |  |
| ENG-112 | Writing/Research in the Disc | 3 | 0 |  | 3 |
| RAD-211 | RAD Procedures III | 2 | 3 |  | 3 |
| RAD-231 | Image Production III | 1 | 3 |  | 2 |
| RAD-251 | RAD Clinical Ed IV | 0 | 0 | 21 | 7 |
|  | Credit Hours | 6 | 6 | 21 | 15 |
| Fifth Semester (Spring) |  |  |  |  |  |
| RAD-261 | RAD Clinical Ed V | 0 | 0 | 21 | 7 |
| RAD-271 | Radiography Capstone | 2 | 3 |  | 3 |
| *** | Humanities/Fine Arts Elective* | 3 | 0 |  | 3 |
| *** | Social/Behavioral Science Elective* | 3 | 0 |  | 3 |
|  | Credit Hours | 8 | 3 | 21 | 16 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 74 |
| Please select Humanities/Fine Arts Elective from one of the following: |  | Class | Lab | Clinic | Credit |
| ART-111 | Art Appreciation | 3 | 0 |  | 3 |
| HUM-122 | Southern Culture | 3 | 0 |  | 3 |
| HUM-150 | American Women's Studies | 3 | 0 |  | 3 |
| MUS-110 | Music Appreciation | 3 | 0 |  | 3 |
| PHI-240 | Introduction to Ethics | 3 | 0 |  | 3 |
| REL-110 | World Religions | 3 | 0 |  | 3 |


| Please select Social/Behavioral Sciences Elective from one of the following: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| HIS-111 | World Civilizations I | 3 | 0 | 3 |
| HIS-112 | World Civilizations II | 3 | 0 | 3 |
| HIS-131 | American History I | 3 | 0 | 3 |
| HIS-132 | American History II | 3 | 0 | 3 |
| PSY-118 | Interpersonal Psychology | 3 | 0 | 3 |
| PSY-150 | General Psychology | 3 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 3 |
| SOC-213 | Sociology of the Family | 3 | 0 | 3 |

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Instructor Ashley Davis, Radiography Clinical Coordinator

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## RESPIRATORY THERAPY

The Respiratory Therapy Curriculum prepares individuals to function as respiratory therapists. In these roles, individuals perform diagnostic testing, treatments, and management of patients with heart and lung diseases.

Students will master skills in patient assessment and treatment of cardiopulmonary diseases. These skills include life support, monitoring, drug administration, and treatment of patients of all ages in a variety of settings.

Graduates of accredited programs may be eligible to take entry-level examinations from the National Board of Respiratory Care. Therapy graduates may also take the Advanced Practitioner examination. Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

The Respiratory Therapy program at Sandhills is accredited by the

Associate in Applied Science Degree Program


|  |  | Course Hours Per Week |  |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fourth Semester (Fall) |  |  |  |  |  |
| RCP-139 | RCP Clinical Practice I | 0 | 0 | 27 | 9 |
| RCP-211 | Adv Monitoring/Procedures | 3 | 3 |  | 4 |
| RCP-213 | Neonatal/Ped's Concepts | 2 | 0 |  | 2 |
|  | Credit Hours | 5 | 3 | 27 | 15 |
| Fifth Semester (Spring) |  |  |  |  |  |
| RCP-149 | RCP Clinical Practice II | 0 | 0 | 27 | 9 |
| RCP-215 | Career Preparation | 0 | 3 |  | 1 |
| *** | Social/Behavioral Sciences Elective | 3 | 0 | 0 | 3 |
|  | Credit Hours | 3 | 3 | 27 | 13 |
| Total Required Minimum Semester Hours Credit 74 |  |  |  |  |  |
| View Catalog Archives |  |  |  |  |  |
| Associate Professor TyRonda Pettigrew, Respiratory Therapy Coordinator 166 Kennedy Hall 910.695.3836 pettigrewt@sandhills.edu |  |  |  |  |  |
| SURGICAL TECHNOLOGY |  |  |  |  |  |

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

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.

The Surgical Technology Curriculum offers two options - a degree and a diploma program. Completion of a diploma program from an accredited college will qualify students for entry into the Associate Degree program. Certification in Surgical Technology is preferred but not mandatory. Completion of the associate degree program is highly recommended as it prepares the graduate to be a practitioner with a broader knowledge base in the field of Surgical Technology.

## Diploma Program

|  |  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) |  | Class | Lab | Clinic | Credit |
| ACA-115 | Success \& Study Skills | 0 | 2 |  | 1 |
| BIO*** | Take BIO-163 or BIO-168 | 4-3 | 2-3 |  | 5-4 |
| SUR-110 | Intro to Surg Tech | 3 | 0 |  | 3 |
| SUR-111 | Periop Patient Care | 5 | 6 |  | 7 |
| *** | PSY/SOC Elective | 3 | 0 |  | 3 |
|  | Credit Hours | 15-14 | 10-11 | 0 | 19-18 |
| Second Semester (Spring) |  |  |  |  |  |
| BIO*** | Take BIO-169 (if BIO-168 taken) | 0-3 | 0-3 |  | 0-4 |
| BIO*** | Take BIO-175 or BIO-275 | 2-3 | 2-3 |  | 3-4 |
| SUR-122 | Surgical Procedures I | 5 | 3 |  | 6 |
| SUR-123 | Sur Clinical Practice I | 0 | 0 | 21 | 7 |
|  | Credit Hours | 7-11 | 5-9 | 21 | 16-21 |
| Third Semester (Summer) |  |  |  |  |  |
| ENG-111 | Writing and Inquiry | 3 | 0 |  | 3 |
| SUR-134 | Surgical Procedures II | 5 | 0 |  | 5 |
| SUR-135 | SUR Clinical Practice II | 0 | 0 | 12 | 4 |
| SUR-137 | Professional Success Prep | 1 | 0 |  | 1 |
|  | Credit Hours | 9 | 0 | 12 | 13 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 48 |

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## SURGICAL TECHNOLOGY

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

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.

The Surgical Technology Curriculum offers two options - a degree and a diploma program. Completion of a diploma program from an accredited college will qualify students for entry into the Associate Degree program. Certification in Surgical Technology is preferred but not mandatory. Completion of the associate degree program is highly recommended as it prepares the graduate to be a practitioner with a broader knowledge base in the field of Surgical Technology.

## Associate in Applied Science Degree Program

|  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: |
| First Semester (Fall) | Class | Lab | Clinic | Credit |
| ACA-115 Success \& Study Skills | 0 | 2 |  | 1 |
| BIO*** $\quad$ Take BIO-163 or BIO-168 | 4-3 | 2-3 |  | 5-4 |
| SUR-110 Intro to Surg Tech | 3 | 0 |  | 3 |
| SUR-111 Periop Patient Care | 5 | 6 |  | 7 |
| *** PSY/SOC Elective | 3 | 0 |  | 3 |
| Credit Hours | 15-14 | 10-11 | 0 | 19-18 |
| Second Semester (Spring) |  |  |  |  |
| BIO*** Take BIO -169 (if $\mathrm{BIO}-168$ taken) | 0-3 | 0-3 |  | 0-4 |
| BIO*** $\quad$ Take BIO-175 or BIO-275 | 2-3 | 2-3 |  | 3-4 |
| SUR-122 Surgical Procedures I | 5 | 3 |  | 6 |
| SUR-123 Sur Clinical Practice I | 0 | 0 | 21 | 7 |
| Credit Hours | 7-11 | 5-9 | 21 | 16-21 |
| Third Semester (Summer) |  |  |  |  |
| ENG-111 Writing and Inquiry | 3 | 0 |  | 3 |
| SUR-134 Surgical Procedures II | 5 | 0 |  | 5 |
| SUR-135 SUR Clinical Practice II | 0 | 0 | 12 | 4 |
| SUR-137 Professional Success Prep | 1 | 0 |  | 1 |
| Credit Hours | 9 | 0 | 12 | 13 |


| Fourth Semester (Fall) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ENG-112 or | Writing/Research in the Disc or |  |  |  |
| ENG-114 | $\quad$ Prof Research \& Reporting |  |  |  |
| COM-231 | Public Speaking | 3 | 0 | 3 |
| SUR-211 | Adv Theoretical Concepts | 2 | 0 | 3 |
| $* * *$ | Humanities/Fine Arts Elective | 3 | 0 | 2 |
|  |  |  |  |  |


| Credit Hours |  | Course Hours Per Week |  |  | Semester Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 11 | 0 | 0 | 11 |
| Fifth Semester (Spring) |  |  |  |  |  |
| BUS-137 | Principles of Management | 3 | 0 |  | 3 |
| BUS-255 or BUS-230 | Org Behavior in Business or Small Business Management | 3 | 0 |  | 3 |
| SUR-210 | Adv SUR Clinical Practice | 0 | 0 | 6 | 2 |
| *** | Natural Sciences/Math Elective | 3 | 0 |  | 3 |
|  | Credit Hours | 9 | 0 | 6 | 11 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 70 |
| View Catalog Archives |  |  |  |  |  |
| Associate Professor Jordan Sprouse, Surgical Technology Coordinator <br> 161 Kennedy Hall <br> 910.695.3918 <br> sprousej@sandhills.edu |  |  |  |  |  |
| Instructor Taylor Cox, Surgical Technology Clinical Coordinator <br> 162 Kennedy Hall <br> 910.695.3838 <br> coxt@sandhills.edu |  |  |  |  |  |

## THERAPEUTIC MASSAGE

The Therapeutic Massage Curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities include hospitals/rehabilitation centers, health departments, home health, medical offices, nursing homes, spas/health/sports clubs, and private practice. Graduates may be eligible to take the Massage and Bodywork Licensing Exam.

The North Carolina Board of Massage and Bodywork Therapy may deny a license to practice massage and bodywork therapy if an applicant has a criminal record or there is other evidence that indicates the applicant lacks good moral character.

## Associate in Applied Science Degree Program

|  |  | Course |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Week |  | Per | Semester |
| :--- |
| Wours |


| MED-120 | Survey of Med Terminology | Course Hours Per Week |  |  | Semeste Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 0 |  | 2 |
| MTH-110 | Fundamentals of Massage | 6 | 9 | 3 | 10 |
|  | Credit Hours | 12-11 | 13-14 | 3 | 18-17 |
| Second Semester (Spring) |  |  |  |  |  |
| BIO*** | Take BIO-169 (if BIO-168 taken) | 0-3 | 0-3 |  | 0-4 |
| ENG-111 | Writing and Inquiry | 3 | 0 |  | 3 |
| MTH-120 | Ther Massage Applications | 6 | 9 | 3 | 10 |
| PSY-150 | General Psychology | 3 | 0 |  | 3 |
|  | Credit Hours | 12-15 | 9-12 | 3 | 16-20 |
| Third Semester (Summer) |  |  |  |  |  |
| MTH-125 | Ethics of Massage | 2 | 0 |  | 2 |
| MTH-130 | Therapeutic Massage Mgmt | 2 | 0 |  | 2 |
|  | Credit Hours | 4 | 0 | 0 | 4 |
| Fourth Semester (Fall) |  |  |  |  |  |
| BUS-230 or Small Business Management or BUS-139 Entrepreneurship I |  | 3 | 0 |  | 3 |
| MTH-210 | Adv Skills of Massage | 4 | 9 | 3 | 8 |
| PED*** | PED Activity Course Elective | 0 | 2-3 | 0 | 1 |
| *** | SOC/PSY Elective | 3 | 0 |  | 3 |
|  | Credit Hours | 10 | 11-12 | 3 | 15 |
| Fifth Semester (Spring) |  |  |  |  |  |
| COM*** | COM Elective | 3 | 0 |  | 3 |
| MTH-220 | Outcome-Based Massage | 4 | 6 | 3 | 7 |
| WBL-111 | Work-Based Learning I | 0 | 10 |  | 1 |
| *** | Humanities/Fine Arts Elective | 3 | 0 |  | 3 |
|  | Credit Hours | 10 | 16 | 3 | 14 |
| Total Required Minimum Semester Hours Credit |  |  |  |  | 67 |
| View Catalog Archives |  |  |  |  |  |
| Professor Samantha Allen, Therapeutic Massage Coordi 116A Meyer Hall 910.695.3996 allens@sandhills.edu |  |  |  |  |  |

The Therapeutic Massage Curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities include hospitals/rehabilitation centers, health departments, home health, medical offices, nursing homes, spas/health/sports clubs, and private practice. Graduates may be eligible to take the Massage and Bodywork Licensing Exam.

The North Carolina Board of Massage and Bodywork Therapy may deny a license to practice massage and bodywork therapy if an applicant has a criminal record or there is other evidence that indicates the applicant lacks good moral character.

## Diploma Program

|  | Course <br> Week |  |  |  | Hemester <br> Hours |
| :--- | :--- | :--- | :--- | :--- | :--- |
| First Semester (Fall) | Class | Lab | Clinic | Credit |  |

## PROGRAMS

## CAREER \& COLLEG PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN FINE ARTS IN MUSIC

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:

- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:

- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.


## College Transfer Pathways

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of $C$ or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

## Career \& College Promise College Transfer Pathway Leading to the Associate in Fine Arts in Music (P1072C)

The CCP College Transfer Pathway Leading to the Associate in Fine Arts in Music is designed for high school students who wish to begin study toward the Associate in Fine Arts in Music and a baccalaureate degree in Music.

GENERAL EDUCATION (25-26 SHC)..................................................... 25
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.
English Composition (6 SHC) ..... 6

The following two English Composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Communications and Humanities/Fine Arts ( 6 SHC)................................. 6
Select two courses from two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
COM-120 Intro Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)
DRA-111 Theater Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-24O Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6 SHC)

Select two courses from two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (3-4 SHC)........................................................................................................ 3
Select one course from the following:
MAT-143 Quantitative Literacy (3 SHC)
MAT-152 Statistical Methods I (4 SHC)
MAT-171 Precalculus Algebra (4 SHC)
MAT-271 Calculus I (4 SHC)
Natural Sciences (4 SHC)...................................................................................... 4
Select 4 SHC from the following course(s):
AST-111 Descriptive Astronomy (3 SHC) and AST-111A Descriptive Astronomy Lab (1 SHC)

BIO-110 Principles of Biology (4 SHC)
BIO-111 General Biology I (4 SHC)
CHM-151 General Chemistry I (4 SHC)
GEL-111 Geology (4 SHC)
PHY-110 Conceptual Physics (3 SHC) and PHY-110A Conceptual Physics Lab (1 SHC)

OTHER REQUIRED HOURS............................................................................ 7
Academic Transition (1 SHC)................................................................... 1
The following course is required:
ACA-122 College Transfer Success (1 SHC)
Music (4 SHC)................................................................................................ 4
The following courses are required:
MUS-111 Fundamentals of Music (3 SHC)
MUS-151 Class Music I (1 SHC)
Ensemble (2 SHC).................................................................................. 2
Select 2 SHC from the following:
MUS-131 Chorus I (1 SHC)
MUS-132 Chorus II (1 SHC)
MUS-133 Band I (1 SHC)
MUS-134 Band II (1 SHC)
MUS-135 Jazz Ensemble I (1 SHC)
*OPTIONAL GENERAL EDUCATION HOURS (O-8 SHC) Foreign Language:
A student may take up to 8 SHC of foreign language courses, designated as
general education in the Comprehensive Articulation Agreement as a part of this
pathway. These courses are not a part of the Universal General Education Transfer
Component. Students who complete these courses with a grade of "C" or better
will receive transfer credit. The receiving university will determine whether the
courses will count as general education, premajor, or elective credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY...... 32-40
High school students in the CCP College Transfer Pathway Leading to the Associate in Fine Arts in Music must complete the entire pathway before taking additional course in the Associate in Fine Arts in Music degree, except for mathematics courses in the Associate in Fine Arts in Music.

Associate Dean of Instruction Kimberly McMillan, Career and College Promise 213B Van Dusen Hall
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mcmillank@sandhills.edu

## CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE DEGREE NURSING

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:

- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:

- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.


## College Transfer Pathways

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of C or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

## Career \& College Promise College Transfer Pathway Leading to the Associate Degree Nursing (P1032C)

The Career and College Promise (CCP) ADN Pathway is designed for high school students who wish to begin their educational studies toward the Associate in Nursing degree and a Baccalaureate degree in Nursing. The Pathway is based on Block 1 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing Programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015.

A student who completes an Associate in Applied Science (AAS) in Nursing, which includes courses listed below, with a GPA of at least 2.0 and a grade of C or better and completes the courses in Blocks 2-3 of the Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing Programs with a GPA of at least 2.0 and a grade of $C$ or better, and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the

UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

GENERAL EDUCATION (23 SHC)........................................................... 23
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.
English Composition (6 SHC) ..... 6The following English composition course is required:

ENG-111 Writing and Inquiry (3 SHC)
Select one English composition course from the following:
ENG-112 Writing/Research in the Disc (3 SHC)
ENG-114 Prof Research \& Reporting (3 SHC)
Humanities/Fine Arts (3 SHC)....................................................................... 3
Select one course from the following:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
HUM-115 Critical Thinking (3 SHC)
MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6SHC).............................................................. 6
The following courses are required:
PSY-150 General Psychology (3 SHC)
PSY-241 Developmental Psych (3 SHC)
Natural Sciences (8 SHC)............................................................................... 8
The following courses are required:
BIO-168 Anatomy and Physiology I (4 SHC)

Programs<br>BIO-169 Anatomy and Physiology II (4 SHC)<br>Academic Transition (1 SHC)........................................................................ 1<br>The following course is required:<br>ACA-122 College Transfer Success (1 SHC)<br>TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY............ 24<br>Associate Dean of Instruction Kimberly McMillan, Career and College Promise 213B Van Dusen Hall<br>910.246 .4111<br>mcmillank@sandhills.edu

## CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN ARTS

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:

- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:

- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.


## College Transfer Pathways

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of $C$ or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

## Career \& College Promise College Transfer Pathway Leading to the Associate in Arts (P1012C)

The CCP College Transfer Pathway Leading to the Associate in Arts is designed for high school students who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

## GENERAL EDUCATION (31-32 SHC) 31-32

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.
English Composition (6 SHC) ..... 6

The following two English composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Humanities/Fine Arts/Communication (9 SHC)........................................... 9
Select three courses from at least two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
COM-120 Intro to Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)
DRA-111 Theatre Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)

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MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (9 SHC)........................................................... }
Select three courses from at least two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (3-4 SHC)3-4
Select one course from the following:
MAT-143 Quantitative Literacy (3 SHC)
MAT-152 Statistical Methods I (4 SHC)
MAT-171 Precalculus Algebra (4 SHC)
Natural Sciences (4 SHC)............................................................................ }
Select 4 SHC from the following course(s):
AST-111 Descriptive Astronomy (3 SHC) and AST-111A Descriptive Astronomy Lab (1
SHC)
BIO-110 Principles of Biology (4 SHC)
BIO-111 General Biology I (4 SHC)
CHM-151 General Chemistry I (4 SHC)
GEL-111 Geology (4 SHC)
PHY-110 Conceptual Physics (3 SHC) and PHY-110A Conceptual Physics Lab (1
SHC)
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Academic Transition (1 SHC) ..... 1
The following course is required:
ACA-122 College Transfer Success (1 SHC)
*OPTIONAL GENERAL EDUCATION HOURS (O-8 SHC) Foreign Language:A student may take up to 8 SHC of foreign language courses, designated asgeneral education in the Comprehensive Articulation Agreement as a part of thispathway. These courses are not a part of the Universal General Education TransferComponent. Students who complete these courses with a grade of "C" or betterwill receive transfer credit. The receiving university will determine whether thecourses will count as general education, premajor, or elective credit.
TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY...... 32-40High school students in the CCP College Transfer Pathway Leading to theAssociate in Arts must complete the entire pathway before taking additionalcourse in the Associate in Arts degree, except for mathematics courses in theAssociate in Arts.

## CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN ARTS IN TEACHER PREPARATION

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:

- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:

- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.


## College Transfer Pathways

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of C or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

## Career \& College Promise College Transfer Pathway Leading to the Associate in Arts in Teacher Preparation (P1012T)

The CCP College Transfer Pathway Leading to the Associate in Arts in Teacher Preparation is designed for high school students who wish to begin study toward the Associate in Arts in Teacher Preparation degree and a baccalaureate degree in a non-STEM major.

GENERAL EDUCATION (31-32 SHC) 31-32

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.

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English Composition (6 SHC)6The following two English composition courses are required:
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ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Humanities/Fine Arts/Communication (9 SHC) ..... 9
Select three courses from at least two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
COM-120 Intro to Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)

DRA-111 Theatre Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6 SHC).................................................................... 6
Select two courses from at least two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)

PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (3-4 SHC)................................................................................................... 3-4
Select one course from the following:
MAT-143 Quantitative Literacy (3 SHC)
MAT-152 Statistical Methods I (4 SHC)
MAT-171 Precalculus Algebra (4 SHC)
Natural Sciences (4 SHC)....................................................................................... 4
Select 4 SHC from the following course(s):
AST-111 Descriptive Astronomy (3 SHC) and AST-111A Descriptive Astronomy Lab (1 SHC)

BIO-110 Principles of Biology (4 SHC)
BIO-111 General Biology I (4 SHC)
CHM-151 General Chemistry I (4 SHC)
GEL-111 Geology (4 SHC)
PHY-110 Conceptual Physics (3 SHC) and PHY-110A Conceptual Physics Lab (1 SHC)

Other Required General Education (3 SHC).................................................. 3
The following course is required:
SOC-225 Social Diversity (3 SHC)
OTHER REQUIRED HOURS............................................................................ 8
Education (7 SHC)...................................................................................... 7
The following courses are required:
EDU-187 Teaching and Learning for All (4 SHC)
EDU-216 Foundations of Education (3 SHC)
Academic Transition (1 SHC).................................................................. 1
The following course is required:
ACA-122 College Transfer Success (1 SHC)
*OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC) Foreign Language:
A student may take up to 8 SHC of foreign language courses, designated as general education in the Comprehensive Articulation Agreement as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, premajor, or elective credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY. 39-48

High school students in the CCP College Transfer Pathway Leading to the Associate in Arts in Teacher Preparation must complete the entire pathway before taking additional course in the Associate in Arts in Teacher Preparation degree, except for mathematics courses in the Associate in Arts in Teacher Preparation.

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mcmillank@sandhills.edu

## CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN ENGINEERING

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:

- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:

- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.


## College Transfer Pathways

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of $C$ or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

## Career \& College Promise College Transfer Pathway Leading to the Associate in Engineering (P1052C)

The CCP College Transfer Pathway Leading to the Associate in Engineering is designed for high school students who wish to begin study toward the Associate in Engineering degree and a baccalaureate degree in a STEM or technical major.


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400
Select two courses from the following:
CHM-151 General Chemistry I (4 SHC)
PHY-251 General Physics I (4 SHC)
PHY-252 General Physics II (4 SHC)
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$\qquad$
Academic Transition (1 SHC) ..... 1
The following course is required:
ACA-122 College Transfer Success (1 SHC)
Engineering (5 SHC) ..... 5
The following courses are required:
DFT-170 Engineering Graphics (3 SHC)
EGR-150 Introduction to Engineering (2 SHC)
*PREREQUISITE GENERAL EDUATION HOURS (0-8 SHC)
MAT-171 Pre-Calculus Algebra (4 SHC)
MAT-172 Pre-Calculus Trigonometry (4 SHC)
*OPTIONAL GENERAL EDUCATION HOURS ( $0-8 \mathrm{SHC}$ ) Foreign Language:

```A student may take up to 8 SHC of foreign language courses, designated asgeneral education in the Comprehensive Articulation Agreement as a part of thispathway. These courses are not a part of the Universal General Education TransferComponent. Students who complete these courses with a grade of "C" or betterwill receive transfer credit. The receiving university will determine whether thecourses will count as general education, premajor, or elective credit.
```

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY ..... 34-50
High school students in the CCP College Transfer Pathway Leading to the

```Associate in Engineering must complete the entire pathway before takingadditional course in the Associate in Engineering degree, except for mathematicscourses in the Associate in Engineering.Associate Dean of Instruction Kimberly McMillan, Career and College Promise213B Van Dusen Hall

\section*{CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN FINE ARTS IN VISUAL ARTS}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{College Transfer Pathways}

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of C or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

\section*{Career \& College Promise College Transfer Pathway Leading to the Associate in Fine Arts in Visual Arts (P1062C)}

The CCP College Transfer Pathway Leading to the Associate in Fine Arts in Visual Arts is designed for high school students who wish to begin study toward the

Associate in Fine Arts in Visual Arts and a baccalaureate degree in Fine Arts-Visual Arts.

GENERAL EDUCATION (25-26 SHC)........................................................ 25
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.
English Composition (6 SHC) ..... 6

The following two English Composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Communication and Humanities/Fine Arts (6 SHC)...................................... 6
Select two courses from two different disciplines:
ART-111 Art Appreciation (3 SHC)
COM-120 Intro to Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)

DRA-111 Theatre Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)

PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6 SHC)

Select two courses from two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
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HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (3-4 SHC)3Select one course from the following:
MAT-143 Quantitative Literacy (3 SHC)
MAT-152 Statistical Methods I (4 SHC)
MAT-171 Precalculus Algebra (4 SHC)
MAT-271 Calculus I (4 SHC)
Natural Sciences (4 SHC)............................................................................ }
Select 4 SHC from the following course(s):
AST-111 Descriptive Astronomy (3 SHC) and AST-111A Descriptive Astronomy Lab (1
SHC)
BIO-110 Principles of Biology (4 SHC)
BIO-111 General Biology I (4 SHC)
CHM-151 General Chemistry I (4 SHC)
GEL-111 Geology (4 SHC)
PHY-110 Conceptual Physics (3 SHC) and PHY-110A Conceptual Physics Lab (1
SHC)
OTHER REQUIRED HOURS........................................................................ }
Academic Transition (1 SHC).............................................................. }
The following course is required:
ACA-122 College Transfer Success (1 SHC)
Art (6 SHC)........................................................................................... }
The following two courses are required:
ART-121 Two-Dimensional Design (3 SHC)
ART-131 Drawing I (3 SHC)

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*OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC) Foreign Language: A student may take up to 8 SHC of foreign language courses, designated as general education in the Comprehensive Articulation Agreement as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, premajor, or elective credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY...... 32-40
High school students in the CCP College Transfer Pathway Leading to the Associate in Fine Arts in Visual Arts must complete the entire pathway before taking additional course in the Associate in Fine Arts in Visual Arts degree, except for mathematics courses in the Associate in Fine Arts in Visual Arts.

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\section*{CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN SCIENCE}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{College Transfer Pathways}

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of C or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

\section*{Career \& College Promise College Transfer Pathway Leading to the Associate in Science (P1042C)}

The CCP College Transfer Pathway Leading to the Associate in Science is designed for high school students who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

GENERAL EDUCATION (34 SHC)................................................................ 34
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.

English Composition (6 SHC)............................................................................. 6
The following two English Composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Humanities/Fine Arts/Communication (6 SHC)............................................. 6
Select two courses from at least two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
COM-120 Intro to Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)
DRA-111 Theatre Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
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MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6 SHC)6Select two courses from at least two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (8 SHC)
8
Select two courses from the following:
MAT-171 Precalculus Algebra (4 SHC)
MAT-172 Pre-calculus Trigonometry (4 SHC)
MAT-263 Brief Calculus (4 SHC)
MAT-271 Calculus I (4 SHC)
MAT-272 Calculus II (4 SHC)
Natural Sciences (8 SHC)
8
Select 8 SHC from the following course(s):
BIO-111 General Biology I (4 SHC) and BIO-112 General Biology II (4 SHC)
CHM-151 General Chemistry I (4 SHC) and CHM-152 General Chemistry II (4 SHC)
PHY-151 College Physics I (4 SHC) and PHY-152 College Physics II (4 SHC)
PHY-251 General Physics I (4 SHC) and PHY-252 General Physics II (4 SHC)
Academic Transition (1 SHC) 1

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The following course is required:
ACA-122 College Transfer Success (1 SHC)
*OPTIONAL GENERAL EDUCATION HOURS ( \(0-8 \mathrm{SHC}\) ) Foreign Language: A student may take up to 8 SHC of foreign language courses, designated as general education in the Comprehensive Articulation Agreement as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, premajor, or elective credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY...... 35-43
High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional course in the Associate in Science degree, except for mathematics courses in the Associate in Science.

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\section*{CAREER \& COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN SCIENCE IN TEACHER PREPARATION}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{College Transfer Pathways}

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of \(C\) or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

\section*{Career \& College Promise College Transfer Pathway Leading to the Associate in Science in Teacher Preparation (P1042T)}

The CCP College Transfer Pathway Leading to the Associate in Science in Teacher Preparation is designed for high school students who wish to begin study toward the Associate in Science in Teacher Preparation degree and a baccalaureate degree in a STEM major.

GENERAL EDUCATION (31-32 SHC). 34

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.
\(\qquad\)
The following two English composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Humanities/Fine Arts/Communication (6 SHC) 6

Select two courses from at least two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)
ART-115 Art History Survey II (3 SHC)
COM-120 Intro to Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)
DRA-111 Theatre Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)

ENG-232 American Literature II (3 SHC)

ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
MUS-110 Music Appreciation (3 SHC)

MUS-112 Introduction to Jazz (3 SHC)
PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)

Social/Behavioral Sciences (3 SHC).................................................................. 3
Select one course from the following:
ECO-251 Principles of Microeconomics (3 SHC)

ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
Math (8 SHC)
Select two courses from the following:
MAT-171 Precalculus Algebra (4 SHC)

MAT-172 Precalculus Trigonometry (4 SHC)
MAT-263 Brief Calculus (4 SHC)

MAT-271 Calculus I (4 SHC)
MAT-272 Calculus II (4 SHC)
Natural Sciences (8 SHC)........................................................................................ 8
Select 8 SHC from the following course(s):
BIO-111 General Biology I (4 SHC) and BIO-112 General Biology II (4 SHC)
CHM-151 General Chemistry I (4 SHC) and CHM-152 General Chemistry II (4 SHC)
OTHER REQUIRED HOURS ..... 8
Education (7 SHC). ..... 7
The following courses are required:
EDU-187 Teaching and Learning for All (4 SHC)
EDU-216 Foundations of Education (3 SHC)
Academic Transition (1 SHC) ..... 1
The following course is required:
ACA-122 College Transfer Success (1 SHC)
*OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC) Foreign Language:A student may take up to 8 SHC of foreign language courses, designated asgeneral education in the Comprehensive Articulation Agreement as a part of thispathway. These courses are not a part of the Universal General Education TransferComponent. Students who complete these courses with a grade of "C" or betterwill receive transfer credit. The receiving university will determine whether thecourses will count as general education, premajor, or elective credit.
TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY ..... 42-50
High school students in the CCP College Transfer Pathway Leading to theAssociate in Science in Teacher Preparation must complete the entire pathwaybefore taking additional course in the Associate in Science in Teacher Preparationdegree, except for mathematics courses in the Associate in Science in TeacherPreparation.
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CAREER TECHINCAL PATHWAY - ACCOUNTING AND FINANCE - BOOKKEEPING

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{Career Technical Pathways}

Students may earn college credits toward a credential, certificate or diploma in a technical career. Curriculum Career Technical Pathways take the form of certificates which may be completed while in high school. These pathways allow students to explore potential career areas. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools. A description of the curriculum standards can be found under the specific program in the Applied Science programs section of this Catalog.
\begin{tabular}{lllll} 
& & \begin{tabular}{l} 
Course \\
Week
\end{tabular} & \begin{tabular}{l} 
Semester Per \\
Hours
\end{tabular} \\
& & Class & Lab & Credit
\end{tabular}

\footnotetext{
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\section*{CAREER TECHNICAL PATHWAY - ARCHITECTURAL TECHNOLOGY}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{Career Technical Pathways}

Students may earn college credits toward a credential, certificate or diploma in a technical career. Curriculum Career Technical Pathways take the form of certificates which may be completed while in high school. These pathways allow students to explore potential career areas. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools. A description of the curriculum standards can be found under the specific program in the Applied Science programs section of this Catalog.
\begin{tabular}{lll} 
& \begin{tabular}{l} 
Course Hours Per \\
Week
\end{tabular} & \begin{tabular}{l} 
Semester \\
Hours
\end{tabular} \\
First Semester (Fall) & Class & Lab \\
& & Credit
\end{tabular}
\begin{tabular}{lllll} 
& & \begin{tabular}{l} 
Course \\
Week
\end{tabular} & & \begin{tabular}{l} 
Semester \\
Hours
\end{tabular} \\
ACA-115 & Success \& Study Skills & 0 & 2 & 1 \\
ARC-111 & Intro to Arch Technology & 1 & 6 & 3 \\
ARC-112 & Constr Matls \& Methods & 3 & 2 & 4 \\
ARC-114 & Architectural CAD & 1 & 3 & 2 \\
BPR-130 & Print Reading-Construction & 3 & 0 & 3 \\
CST-241 & Planning/Estimating I & 2 & 2 & 3 \\
EGR-110 & Intro to Engineering Tech & 1 & 2 & 2 \\
& Credit Hours & 11 & 17 & 18 \\
Total Required & Minimum Semester Hours Credit & & & 18
\end{tabular}

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\section*{CAREER TECHNICAL PATHWAY - AUTOMOTIVE SYSTEMS TECHNOLOGY - AUTOMOTIVE MANAGEMENT}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{Career Technical Pathways}

Students may earn college credits toward a credential, certificate or diploma in a technical career. Curriculum Career Technical Pathways take the form of certificates which may be completed while in high school. These pathways allow students to explore potential career areas. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools. A description of the curriculum standards can be found under the specific program in the Applied Science programs section of this Catalog.
\begin{tabular}{lllll} 
& & \begin{tabular}{l} 
Course Hours Per \\
Week
\end{tabular} & \begin{tabular}{l} 
Semester \\
Hours
\end{tabular} \\
\hline First Semester (Fall) & Class & Lab & Credit \\
ACA-115 & Success \& Study Skills & 0 & 2 & 1 \\
ACC-120 & Prin of Financial Accounting & 3 & 2 & 4 \\
ACC-149 & Intro to ACC Spreadsheets & 1 & 3 & 2 \\
AUM-111 & Managing Automotive Org & 3 & 0 & 3 \\
BUS-137 & Principles of Management & 3 & 0 & 3 \\
BUS-153 & Human Resource Management & 3 & 0 & 3 \\
& Credit Hours & 13 & 7 & 16 \\
Total Required Minimum Semester Hours Credit & & & 16
\end{tabular}

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\section*{CAREER AND COLLEGE PROMISE COLLEGE TRANSFER PATHWAY LEADING TO THE ASSOCIATE IN FINE ARTS IN THEATRE}

Career and College Promise provides a focused means for students to begin completion of college transfer credits or career training prior to their graduation from high school. Courses under Career and College Promise are offered to high school students with no charge for tuition.

Eligible high school students may earn:
- College credit, which is completely transferrable to all UNC System Institutions, as well as many private schools and out-of-state universities and colleges.
- College credit toward a credential, certificate or diploma in a technical career.
- Workforce Continuing Education credit toward an industry-recognized credential or certification.
- A high school diploma and two years of college credit in four to five years through cooperative innovative high schools (Hoke County students only). Upon meeting eligibility requirements, students may enroll in a College Transfer pathway, a curriculum Career and Technical Education pathway, a Workforce

Continuing Education pathway, or SandHoke Early College High School (Hoke County students only).

Students may be concurrently enrolled in two pathways as follows:
- Two career-technical pathways,
- Two Workforce Continuing Education pathways,
- One career-technical pathway and one Workforce Continuing Education pathway,
- One college transfer pathway (if eligible) and career technical pathway,
- One college transfer pathway (if eligible) and one Workforce Continuing Education pathway.
Students must maintain a 2.0 grade point average in college courses to participate in the program.

\section*{College Transfer Pathways}

Students may earn college transfer credits that will transfer to any public North Carolina university as long as a grade of C or better is earned in each course. Credits may also be accepted for transfer by private or out-of-state schools. Courses may be offered on one of the SCC campuses, on one of the high school campuses or online. Not all courses are offered at all of the high schools.

\section*{Career \& College Promise College Transfer Pathway Leading to the Associate in Fine Arts in Theatre (P1082C)}

The CCP College Transfer Pathway Leading to the Associate in Fine Arts in Theatre is designed for high school students who wish to begin study toward the Associate in Fine Arts in Theatre and a baccalaureate degree in Fine Arts-Theatre.

GENERAL EDUCATION (25-26 SHC).......................................................... 25
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.

English Composition (6 SHC) 6

The following two English Composition courses are required:
ENG-111 Writing and Inquiry (3 SHC)
ENG-112 Writing/Research in the Disc (3 SHC)
Communications and Humanities/Fine Arts (6 SHC)................................... 6
Select two courses from at least two different disciplines:
ART-111 Art Appreciation (3 SHC)
ART-114 Art History Survey I (3 SHC)

ART-115 Art History Survey II (3 SHC)
COM-120 Intro Interpersonal Com (3 SHC)
COM-231 Public Speaking (3 SHC)
DRA-111 Theater Appreciation (3 SHC)
ENG-231 American Literature I (3 SHC)
ENG-232 American Literature II (3 SHC)
ENG-241 British Literature I (3 SHC)
ENG-242 British Literature II (3 SHC)
MUS-110 Music Appreciation (3 SHC)
MUS-112 Introduction to Jazz (3 SHC)

PHI-215 Philosophical Issues (3 SHC)
PHI-240 Introduction to Ethics (3 SHC)
Social/Behavioral Sciences (6 SHC).................................................................. 6
Select two courses from two different disciplines:
ECO-251 Principles of Microeconomics (3 SHC)
ECO-252 Principles of Macroeconomics (3 SHC)
HIS-111 World Civilizations I (3 SHC)
HIS-112 World Civilizations II (3 SHC)
HIS-131 American History I (3 SHC)
HIS-132 American History II (3 SHC)
POL-120 American Government (3 SHC)
PSY-150 General Psychology (3 SHC)
SOC-210 Introduction to Sociology (3 SHC)
\(\qquad\)
Select one course from the following:
MAT-143 Quantitative Literacy (3 SHC)
MAT-152 Statistical Methods I (4 SHC)
MAT-171 Precalculus Algebra (4 SHC)
MAT-271 Calculus I (4 SHC)
 courses will count as general education, premajor, or elective credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PATHWAY...... 32-40
High school students in the CCP College Transfer Pathway Leading to the Associate in Fine Arts in Theatre must complete the entire pathway before taking additional course in the Associate in Fine Arts in Theatre degree, except for mathematics courses in the Associate in Fine Arts in Theatre.

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[^0]:    The Ophthalmic Medical Personnel Program prepares individuals to perform ophthalmic procedures under the supervision of a licensed physician specializing in Ophthalmology. Course work includes lecture, laboratory, and clinical training in ocular measurements; ocular testing; lensometry; administering topical and oral medications; eye care; and caring for instruments.

