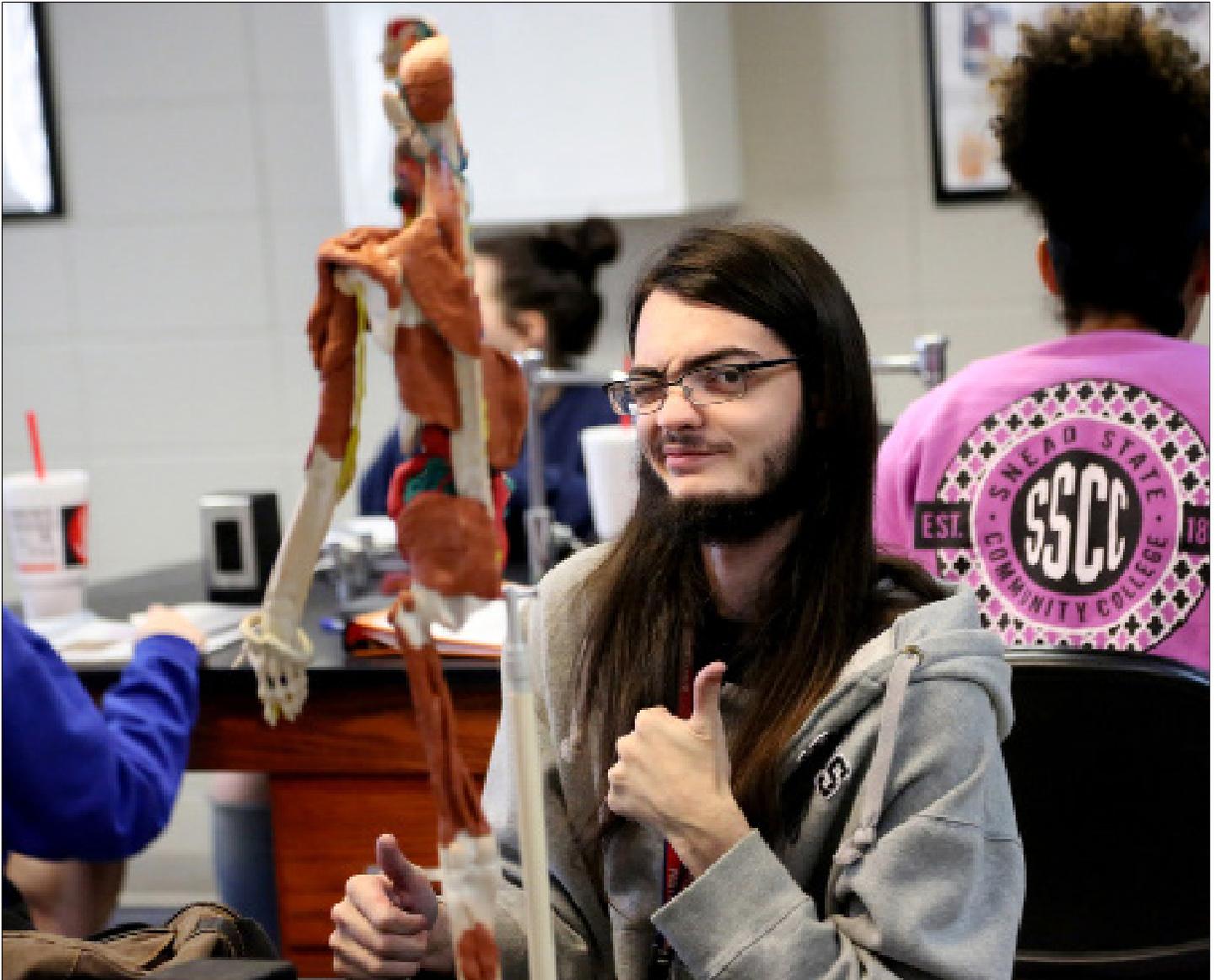


# COURSE DESCRIPTIONS

---

## 2018-2020



Snead State offers a diverse and challenging curriculum that provides the education and training students need to pursue their careers. Classes are available both on-campus and online to offer flexibility to students juggling their coursework with their life responsibilities.

## OFFICIAL SYMBOLS

The following course abbreviations are the official symbols used by Snead State Community College:

ACT	Accounting Technology
AGR	Agriculture
AMP	Aviation Maintenance Power Plant
AMT	Aviation Maintenance Technology
ART	Art
AST	Astronomy
AVM	Aviation Management
BIO	Biology
BUS	Business
CHM	Chemistry
CHD	Child Development
CIS	Computer Science
CRJ	Criminal Justice
ECO	Economics
ELT	Electrical Technology
EET	Electronic Engineering Technology
ENG	English and Literature
GEO	Geography
HED	Health Education
HIT	Health Information Technology
HIS	History
HOC	Horticulture
HPS	Health Sciences
HEC	Home Economics
HUM	Humanities
IDS	Interdisciplinary Studies
INT	Industrial Maintenance Technology
MCM	Mass Communications
MST	Management and Supervision
MTH	Mathematics
MUL	Music Class Performance Instruction and Music Ensembles
MUP	Music Individual Performance Instruction
MUS	Music
NAS	Nursing Assistant/Home Health Aide
NUR	Nursing
OAD	Office Administration
PHL	Philosophy
PED	Physical Education

PHS	Physical Science
PHY	Physics
POL	Political Science
PSY	Psychology
REL	Religion
SOC	Sociology
SPA	Spanish
SPH	Speech Communication
THR	Theater Arts
WKO	Workplace Skills

## CREDIT HOURS DEFINITION

Snead State operates within the Alabama Community College System (ACCS) and adheres to the ACCS Board of Trustees policies and procedures for determining credit hours awarded for courses and programs. Additionally, the College also adheres to the Federal definition of a credit hour as being an amount of work represented in intended learning outcomes and verified as evidence of student achievement that is an institutionally established equivalency that reasonably approximates:

1. Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time, or
2. At least an equivalent amount of work as required in item 1 above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Snead State uses the semester credit hour as the unit of credit for all coursework. A semester credit hour is based upon the average weekly number of hours of instruction during a 15-week period, with an hour of instruction defined as not less than 50 minutes of instructor/student contact. Courses taught in fewer than fifteen weeks have weekly contact hours increased so that the total amount of contact time for the course is constant.

Courses that are taught in online or blended formats are designed by faculty in such a way that the activities, assessments, and time investment required by the students are equivalent to those in the on-campus sections of the same course. The division directors for each academic division review online and blended courses with faculty to verify that they are equivalent to their traditional counterparts as a part of the course evaluation process.

All courses at Snead State Community College are taken from the ACCS Course Directory in accordance with ACCS Policy 717.01. The ACCS Course Directory provides a comprehensive system of common course names, numbers, and descriptions which include the amount of credit hours and categories of instruction associated with each course. The precise ratio of weekly contact hours to credit hours varies according to the categories of instruction within a course as defined in the Chancellor's Procedures for ACCS Policy 705.01.

## **COURSE DESCRIPTIONS**

### **ACCOUNTING TECHNOLOGY (ACT)**

**256.840.4163** | [MJACKSON@SNEAD.EDU](mailto:mjackson@snead.edu)

#### **ACT 249. PAYROLL ACCOUNTING 3 cr. hrs.**

This course focuses on federal, state and local laws affecting payrolls. Emphasis is on payroll accounting procedures and practices, and on payroll tax reports. Upon completion of this course, the student will be able to apply knowledge of federal, state and local laws affecting payrolls. Prerequisite: None.

#### **ACT 253. INDIVIDUAL INCOME TAX 3 cr. hrs.**

This course focuses on the fundamentals of the federal income tax laws with primary emphasis on those affecting the individual. Emphasis is on gross income determination, adjustments to income, business expenses, itemized deductions, exemption, capital gains/losses, depreciation, and tax credits. Upon completion of this course, the student will be able to apply the fundamentals of the federal income tax laws affecting the individual. Prerequisite: None. (Online Only)

## **AGRICULTURE (AGR)**

**256.840.4188** | [VSCOTT@SNEAD.EDU](mailto:vscott@snead.edu)

#### **AGR 200. INTRODUCTION TO ANIMAL DAIRY SCIENCE 3 cr. hrs.**

This course concerns the importance of livestock to agriculture and to the nutrition of people. Livestock terminology, selection, reproduction, nutrition, management, marketing, and species characteristics of beef cattle, swine, sheep, and horses are emphasized. Prerequisite: None.

#### **AGR 201. AGRICULTURAL ECONOMICS 3 cr. hrs.**

Economic principles, with emphasis on farm-related production, marketing, prices, consumption, taxation, credit, finance, and public policies and tenure, are discussed. The course covers utilization of land, labor and capital. Prerequisite: None.

#### **AGR 215. AGRIBUSINESS MANAGEMENT 3 cr. hrs.**

This course focuses on practices essential to establishing and maintaining an agribusiness. Topics include personnel management, finance, customer service, insurance, and record keeping. Upon course completion, students will demonstrate an understanding of the requirements to comply with mandated state and federal regulations, manage employees, and meet consumer demands. Prerequisite: None.

## **AVIATION MAINTENANCE POWER PLANT (AMP)**

**256.571.0622** | [DOWEN@SNEAD.EDU](mailto:dowen@snead.edu)

#### **AMP 120. ENGINE THEORY AND PROPELLERS 5 cr. hrs., Lec. 3, Lab 4**

This course provides an overview of the theory, construction, and operation of aircraft reciprocating engines and the physical laws and characteristics governing propeller operation. Emphasis is placed on gaining a basic understanding of reciprocating engines and of fixed and variable pitch propellers. Upon completion, students should understand the inspection, service, and repair requirements of reciprocating engines; be able to demonstrate an understanding of propeller fundamentals; and remove, troubleshoot, and install propellers. Prerequisite: AMT 100, AMT 101, and AMT 102, or equivalent.

### **AMP 121. RECIPROCATING ENGINE SYSTEMS**

**5 cr. hrs., Lec. 3, Lab 4**

This course focuses on the inspection, troubleshooting, and repair of reciprocating engine systems. Emphasis is on inspection, troubleshooting, and repairs of ignition systems, fuel and induction systems, lubrication systems, and cooling and exhaust systems. Upon completion, students should be able to inspect, service, troubleshoot, and repair ignition, lubrication, fuel, induction, and cooling and exhaust systems. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

### **AMP 122. RECIPROCATING ENGINE OVERHAUL**

**5 cr. hrs., Lec. 3, Lab 4**

This course is a study of theory, construction, operation, and timing mechanisms associated with aircraft reciprocating power plant; overhaul to include disassembly, cleaning, measuring, inspecting, reassembly and troubleshooting in accordance with appropriate FAA and manufacturers' regulations and practices. Emphasis is placed on overhauling a reciprocating engine. Upon completion, students should be able to overhaul a reciprocating engine. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

### **AMP 123. RECIPROCATING ENGINE INSPECTION**

**5 cr. hrs., Lec. 3, Lab 4**

This course is a study of engine instruments, electrical systems, ignition systems and aircraft Power plant inspections, as well as the study of rotary wing aircraft, rotary wing aerodynamics, main and tail rotor systems, rotor blades, primary and secondary controls, and general maintenance practices. Emphasis is placed on the theory of operation of these systems, analysis of system performance and faults, interpretations of instrument indications, and the performance of power plant conformity and airworthiness inspections. Upon completion, students should be able to read and interpret instrument readings, analyze faults in instruments and electrical and ignition systems, and perform conformity and airworthiness inspections of reciprocating engines. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

### **AMP 124. TURBINE ENGINE THEORY AND INSPECTIONS**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces the turbine engine. Emphasis is placed on turbine engine development, application, theory, components, materials and construction, and operating and power extraction principles. Upon completion, students should be

able to explain turbine engine theory and operating principles, describe procedures for 100-hour and Boroscope inspections, and perform a hot section inspection by disassembling and reassembling a turbine engine. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

### **AMP 125. TURBINE ENGINE SYSTEMS OVERHAUL**

**5 cr. hrs., Lec. 3, Lab 4**

This course provides a study of turbine engine systems. Emphasis is placed on starter, ignition, anti-ice, fire detection, and fire extinguishing systems. Upon completion, students should be able to troubleshoot, and repair turbine engine systems; remove and install engines in test cell and airframes; explain engine analysis and troubleshooting techniques; and describe correct procedures for rigging and running a turbine engine. Prerequisites: AMP 120, AMP 121, AMP 122, AMP 123, and AMP 124.

## **AVIATION MAINTENANCE TECHNOLOGY (AMT)**

**256.571.0622 | [DOWEN@SNEAD.EDU](mailto:DOWEN@SNEAD.EDU)**

### **AMT 100. TECHNICAL PREPARATION**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces basic information necessary for entering students in aviation maintenance technology. Emphasis is placed on math and physics, aircraft weight and balance, and Federal Aviation Administration (FAA) and manufacturers' technical and legal publications. Upon completion, students should be able to make basic computations, apply principles of physics, compute weight and balance, use maintenance forms and records, state mechanic's privileges and limitations, and interpret maintenance publications. Prerequisite: Appropriate Placement Scores to place into ENG 101 and MTH 100.

### **AMT 101. BASIC ELECTRICITY**

**5 cr. hrs., Lec. 3, Lab 4**

This course provides a study in electricity. Emphasis is placed on alternating current (AC) and direct current (DC) circuits and controls, electrical measurements, electrical test equipment, aircraft batteries, fundamental electronics, and semi-conductor devices. Upon completion, students should be able to solve problems associated with electrical measurements, use basic electrical test equipment, and service aircraft batteries. Prerequisite: Appropriate Placement Scores to place into ENG 101 and MTH 100.

## **AMT 102. MATERIALS AND PROCESSES**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces aircraft hardware and materials, precision measuring and non-destructive testing, aircraft ground operations, fuels, cleaning and corrosion control methods, and the use of aircraft drawings. Emphasis is on identification and selection of aircraft hardware, performance of non-destructive testing, fabrication and inspection of flexible fluid lines, identification of fuels, use of cleaning materials, and corrosion control programs. Upon completion, students should be able to perform non-destructive tests, use precision measuring tools, fabricate and install rigid and flexible fluid lines, select hardware and fuels, handle and secure an aircraft, and identify, read, create and interpret aircraft drawings. Prerequisite: Appropriate Placement Scores to place into ENG 101 and MTH 100.

## **AMT 110. NON-METALLIC STRUCTURES AND WELDING**

**5 cr. hrs., Lec. 3, Lab 4**

This course is a study of repairs to non-metallic aircraft surfaces and structures and welding. Emphasis is placed on repairs to fabric surfaces and to wood, composite, and steel structures. Upon completion, students should be able to repair fabric surfaces and apply finishing materials, make repairs to wood structures, layout and form composite structures, and make repairs to steel structures using various welding methods. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

## **AMT 111. AIRCRAFT SHEET METAL STRUCTURES**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces aircraft sheet metal repairs. Emphasis is placed on the use of proper procedures, tools, and materials to complete sheet metal repairs. Upon completion, students should be able to install conventional rivets; form, layout, and bend sheet metal; install special rivets and fasteners; inspect and repair sheet metal structures. Prerequisite AMT 100, AMT 101, and AMT 102 or equivalent.

## **AMT 112. AIRFRAME SYSTEMS I**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces aircraft electrical, communication, and navigation systems and components. Emphasis is placed on inspecting, repairing, installing, adjusting, and troubleshooting aircraft alternating and direct current electrical systems. Upon completion, students should know the operation and theory of generators, al-

ternators, and starters; be able to fabricate wiring; and inspect, troubleshoot, and repair lighting, communication, and navigation systems. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

## **AMT 113. AIRFRAME SYSTEMS II**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces aircraft inclement weather control, fire protection and fuel systems as well as cabin environmental control, and instrumentation. Emphasis is placed on theory and skills necessary to inspect, service, maintain and troubleshoot. Upon completion, students should be able to inspect, repair, troubleshoot and understand operating principles of ice and rain removal, fire protection, cabin environmental, instruments and fuel systems. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

## **AMT 114. AIRFRAME SYSTEMS III**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces the theory of operation of various hydraulic and pneumatic components and systems, landing gear systems, and various position and warning systems. Emphasis is on testing, inspecting, troubleshooting, and servicing hydraulic and pneumatic system components, wheel and brake systems, and position and warning systems. Upon completion, students should be able to inspect, troubleshoot, and repair hydraulic and pneumatic power systems, aircraft wheels and tires, aircraft landing gear systems, anti-skid and electrical braking systems, and position and warning systems. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

## **AMT 115. AIRFRAME SYSTEMS IV**

**5 cr. hrs., Lec. 3, Lab 4**

This course introduces aircraft structural assembly and rigging, helicopters, and required inspections. Emphasis is placed on skills required to inspect, service, maintain, and troubleshoot airframes, airframe systems, and components and assemble and rig aircraft structures. Upon completion, students should be able to inspect, repair, troubleshoot, assemble and rig aircraft structures and determine conditions of airframes, airframe systems, and components. Prerequisite: AMT 100, AMT 101, and AMT 102 or equivalent.

## **ART (ART)**

256.840.4125 | JONATHAN.WATTS@SNEAD.EDU

### **ART 100. ART APPRECIATION 3 cr. hrs.**

This course is designed to help the student find personal meaning in works of art and develop a better understanding of the nature and validity of art. Emphasis is on the diversity of form and content in original art work. Upon completion, students should understand the fundamentals of art and the materials used and have a basic overview of the history of art. Prerequisite: None.

### **ART 113. DRAWING I 3 cr. hrs., Lab. 6**

This course provides the opportunity to develop perceptual and technical skills in a variety of media. Emphasis is placed on communication through experimenting with composition, subject matter and technique. Upon completion, students should demonstrate and apply the fundamentals of art to various creative drawing projects. Prerequisite: None.

### **ART 114. DRAWING II 3 cr. hrs., Lab. 6**

This course advances the students' drawing skills in various art media. Emphasis is placed on communication through experimentation, composition, technique and personal expression. Upon completion, students should demonstrate creative drawing skills, the application of the fundamentals of art, and the communication of personal thoughts and feelings. Prerequisite: ART 113.

### **ART 121. TWO-DIMENSIONAL COMPOSITION I 3 cr. hrs., Lab. 6**

This course introduces the basic concepts of two-dimensional design. Topics include the elements and principles of design with emphasis on the arrangement and relationships among them. Upon completion, students should demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions. Prerequisite: Determined by instructor. Prerequisite: None.

### **ART 127. THREE-DIMENSIONAL COMPOSITION 3 cr. hrs., Lab. 6**

This course introduces art materials and principles of design that acquaint the beginner with the fundamentals of three-dimensional art. Emphasis is placed on the use of art fundamentals and the creative exploration of materials in constructing three-dimensional art works.

Upon completion students should demonstrate basic technical skills and a personal awareness of creative potential inherent in three-dimensional art forms. Prerequisites: ART 113 or ART 121.

### **ART 133. CERAMICS I 3 cr. hrs., Lab. 6**

This course introduces methods of clay forming as a means of expression. Topics may include hand building, wheel throwing, glazing, construction, design, and the functional and aesthetic aspects of pottery. Upon completion, students should demonstrate through their work, a knowledge of the methods, as well as an understanding of the craftsmanship and aesthetics involved in ceramics. Prerequisite: None.

### **ART 173. PHOTOGRAPHY I 3 cr. hrs., Lab. 6**

This course is an introduction to the art of photography. Emphasis is placed on the technical and aesthetics aspects of photography with detailed instruction in darkroom techniques. Upon completion, students should understand the camera as a creative tool, understand the films, chemicals and papers, and have a knowledge of composition and history. Prerequisite: None.

### **ART 176. FILM MAKING 3 cr. hrs., Lab. 6**

This course provides a knowledge of the basics of film making. Emphasis is placed on procedure, equipment, editing and sound. Upon completion, students should demonstrate a basic knowledge of film making through critical analysis and film projects. Prerequisite: None.

### **ART 180. INTRODUCTION TO GRAPHIC DESIGN 3 cr. hrs., Lab. 6**

This course is a general introduction to graphic design. Topics include history, processes, and production design. Upon completion, students should understand the concepts used to create media graphics. This course is designed for Technical majors and is not intended to transfer to a higher educational institution. Prerequisite: None.

### **ART 203. ART HISTORY I 3 cr. hrs.**

This course covers the chronological development of different forms of art, such as sculpture, painting, and architecture. Emphasis is placed on history from the ancient period through the Renaissance. Upon comple-

tion students should be able to communicate knowledge of time period and chronological sequence including knowledge of themes, styles and of the impact of society on the arts. Prerequisite: None.

**ART 204. ART HISTORY II** 3 cr. hrs.

This course covers a study of the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the Baroque to the present. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles, and of the impact of society on the arts. Prerequisite: None.

**ART 233. PAINTING I** 3 cr. hrs., Lab. 6

This course is designed to introduce the student to fundamental painting processes and materials. Topics include art fundamentals, color theory, and composition. Upon completion, students should be able to demonstrate the fundamentals of art and discuss various approaches to the media and the creative processes associated with painting. Prerequisite: ART 113, ART 121, and/or as required by program.

**ART 234. PAINTING II** 3 cr. hrs., Lab. 6

This course is designed to develop the student's knowledge of the materials and procedures of painting beyond the introductory level. Emphasis is placed on the creative and technical problems associated with communicating through composition and style. Upon completion, students should be able to demonstrate the application of the fundamentals of painting and the creative process to the communication of ideas. Prerequisite: ART 233.

**ART 291. SUPERVISED STUDY IN STUDIO ART I**  
3 cr. hrs., Lab. 3-12

This course is designed to enable the student to continue studio experiences in greater depth. Topics are to be chosen by the student with the approval of the instructor. Upon completion the student should have a greater expertise in a particular area of art. Prerequisite: None.

**ART 299. ART PORTFOLIO** 3 cr. hrs., Lab. 3-12

This course is designed to help the art major in the preparation and presentation of an art portfolio. Emphasis is placed on representing the student's potential as an artist in order to interest employers, clients or schools. Upon completion, students should be able to make a professional presentation of their design and communication skills. Prerequisite: None.

**ASTRONOMY (AST)**

256.840.4137 | DRHODEN@SNEAD.EDU

**AST 220. INTRODUCTION TO ASTRONOMY**

4 cr. hrs., Lec. 3, Lab. 2

This course covers the history of astronomy and the development of astronomical thought leading to the birth of modern astronomy and its most recent development. Emphasis is placed on the coverage of astronomical instruments and measuring technologies, the solar system, the Milky Way galaxy, important extra galactic objects and cosmology. Laboratory is required. Prerequisite: None.

**AVIATION MANAGEMENT (AVM)**

256.571.0622 | DOWEN@SNEAD.EDU

**AVM 140. FCC RULES AND REGULATIONS** 2 cr. hrs.

This course provides instruction on the pertinent rules and regulations of the Federal Communications Commission (FCC). Emphasis is placed on the relationship of FCC rules and regulations to the practice of avionics and electronics in the aviation industry. Upon completion, students should be able to apply rules and regulations and take the basic FCC certification examination. Prerequisite: None.

**BIOLOGY (BIO)**

256.840.4137 | DRHODEN@SNEAD.EDU

**BIO 103. PRINCIPLES OF BIOLOGY I**

4 cr. hrs., Lec. 3, Lab. 2

This is an introductory course for science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific

method, basic principles of evolution, an overview of the diversity of life with emphasis on viruses, prokaryotes, and protists. A 120-minute laboratory is required. Prerequisite: None.

#### **BIO 104. PRINCIPLES OF BIOLOGY II**

**4 cr. hrs., Lec. 3, Lab. 3**

This course is an introduction to the basic ecological and evolutionary relationships of plants and animals and a survey of plant and animal diversity including classification, morphology, physiology, and reproduction. A 180-minute laboratory is required. Prerequisite: BIO 103.

#### **BIO 120. MEDICAL TERMINOLOGY 3 cr. hrs.**

This course is a survey of words, terms, and descriptions commonly used in medical arts. Emphasis is placed on spelling, pronunciation, and meanings of prefixes, suffixes, and roots. No laboratory is required. Prerequisite: None.

#### **BIO 201. HUMAN ANATOMY AND PHYSIOLOGY I**

**4 cr. hrs., Lec. 3, Lab. 2**

Human Anatomy and Physiology I covers the structure and function of the human body. Included is an orientation of the human body, basic principles of chemistry, a study of cells and tissues, metabolism, joints, the integumentary, skeletal, muscular, and nervous systems, and the senses. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120-minute lab is required. Prerequisite: None.

#### **BIO 202. HUMAN ANATOMY AND PHYSIOLOGY II**

**4 cr. hrs., Lec. 3, Lab. 2**

Human Anatomy and Physiology II covers the structure and function of the human body. Included is a study of basic nutrition, basic principles of water, electrolyte, and acid-base balance, and the endocrine, respiratory, digestive, excretory, cardiovascular, lymphatic, and reproductive systems. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120-minute lab is required. Prerequisite: BIO 201.

#### **BIO 220. GENERAL MICROBIOLOGY**

**4 cr. hrs., Lec. 2, Lab. 4**

This course includes historical perspectives, cell structure and function, microbial genetics, infectious diseases, immunology, distribution, physiology, culture, identification, classification, and disease control of microorganisms. The laboratory experience includes micro-techniques, distribution, culture identification, and control. Two 120-minute laboratories per week are required. Prerequisite: None.

#### **BIO 250. DIRECTED STUDIES IN BIOLOGY I**

**1-4 cr. hrs., Lab. 2-8**

This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to or at the beginning of the class. Upon completion, students will be able to demonstrate knowledge of the topics as specified by the instructor. Prerequisite: Permission of instructor.

#### **BIO 251. DIRECTED STUDIES IN BIOLOGY II**

**1-4 cr. hrs., Lab. 2-8**

This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to or at the beginning of the class. Upon completion, students will be able to demonstrate knowledge of the topics as specified by the instructor. Prerequisite: BIO 250.

#### **BUSINESS (BUS)**

**256.840.4188 | [VSCOTT@SNEAD.EDU](mailto:VSCOTT@SNEAD.EDU)**

#### **BUS 146. PERSONAL FINANCE 3 cr. hrs.**

This course is a survey of topics of interest to the consumer. Topics include budgeting, financial institutions, basic income tax, credit, consumer protection, insurance, house purchase, retirement planning, estate planning, investing, and consumer purchases. Prerequisite: None.

**BUS 147. INTRODUCTION TO FINANCE 3 cr. hrs.**

This course is a survey of monetary and credit systems. Topics include the role of the Federal Reserve System, sources of capital, including forms of long-term corporate financing, and consumer credit in the financial structure of our economy. Prerequisite: None.

**BUS 150. BUSINESS MATH 3 cr. hrs.**

This course is a study of practical business mathematics. Topics include fundamental processes of arithmetic with emphasis on decimals and percentages, markup, discounts, bank reconciliation, simple and compound interest discounting notes, depreciation methods, and present value. Prerequisite: None.

**BUS 175. RETAILING 3 cr. hrs.**

This course is a study of the principles and practices of retailing. Topics include planning, policies and procedures of distribution, store design, layout and location, the economic and social role of retailing, competitive strategies, and retail management. Prerequisite: None.

**BUS 177. SALESMANSHIP 3 cr. hrs.**

This course provides an introduction to the principles and practices of ethical salesmanship. Topics include industrial and retail selling methods of market analysis, professional salesmanship and sales methods, consumer types, attitudes, and behavior. Prerequisite: None.

**BUS 178. PURCHASING 3 cr. hrs.**

This course provides an overview of the principles of purchasing for resale. Topics include buying techniques, market buying systems, financial management of purchasing departments, market information systems, and problems confronting retail and wholesale buyers. Prerequisite: None.

**BUS 179. TRENDS IN DISTRIBUTION 3 cr. hrs.**

This course provides an overview of the distribution function. Topics include changing trends in distribution, problems created in areas of marketing, and ways to capitalize on latest distribution patterns. Prerequisite: None.

**BUS 215. BUSINESS COMMUNICATION 3 cr. hrs.**

This course covers written, oral and nonverbal communications. Topics include the application of communication principles to the production of clear, correct, and logically organized faxes, e-mail, memos, letters, resumes, reports, and other business communications. Prerequisite: None.

**BUS 241. PRINCIPLES OF ACCOUNTING I 3 cr. hrs.**

This course is designed to provide a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is placed on financial accounting, including the accounting cycle, and financial statement preparation analysis. Prerequisite: None.

**BUS 242. PRINCIPLES OF ACCOUNTING II 3 cr. hrs.**

This course is a continuation of BUS 241. In addition to a study of financial accounting, this course also places emphasis upon managerial accounting, with coverage of corporations, statement analysis introductory cost accounting, and use of information for planning, control, and decision making. Prerequisite: BUS 241.

**BUS 246. ACCOUNTING ON THE MICROCOMPUTER 3 cr. hrs.**

This course utilizes the microcomputer in a study of accounting principles and practices. Emphasis is on the preparation and analysis of financial statements, measuring business activity, and making rational business decisions. Prerequisite: BUS 242.

**BUS 260. STATISTICAL DATA ANALYSIS 3 cr. hrs.**

Introduction to the use of basic statistical concepts in business applications. Descriptive statistics, index numbers, measures of central tendency and variation, probability, random variables, discrete and continuous probability distributions, sampling distributions, and point and interval estimation are covered. Computer software applications are utilized. Prerequisite: CIS 146 and MTH 112 or higher level or equivalent placement score.

**BUS 263. THE LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS** 3 cr. hrs.

This course provides an overview of the legal and social environment for business operations with emphasis on contemporary issues and their subsequent impact on business. Topics include the Constitution, the Bill of Rights, the legislative process, civil and criminal law, administrative agencies, trade regulations, consumer protection, contracts, employment and personal property. Prerequisite: None.

**BUS 271. BUSINESS STATISTICS I** 3 cr. hrs.

This is an introductory study of basic statistical concepts applied to economic and business problems. Topics include the collection, classification, and presentation of data, statistical description and analysis of data, measures of central tendency and dispersion, elementary probability, sampling, estimation and introduction of hypothesis testing. Prerequisite: MTH 100 or equivalent placement score.

**BUS 272. BUSINESS STATISTICS II** 3 cr. hrs.

This course is a continuation of BUS 271. Topics include sampling theory, statistical inference, regression and correlation, chi square, analysis of variance, time series index numbers, and decision theory. Prerequisite: BUS 271.

**BUS 275. PRINCIPLES OF MANAGEMENT** 3 cr. hrs.

This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing, and controlling with emphasis on practical business applications. Prerequisite: None.

**BUS 276. HUMAN RESOURCE MANAGEMENT** 3 cr. hrs.

This course provides an overview of the responsibilities of the supervisor of human resources. Topics include the selection, placement, testing, orientation, training, rating, promotion, and transfer of employees. Prerequisite: None.

**BUS 285. PRINCIPLES OF MARKETING** 3 cr. hrs.

This course provides a general overview of the field of marketing. Topics include marketing strategies, channels of distribution, marketing research, and consumer behavior. Prerequisite: None.

**BUS 296. BUSINESS INTERNSHIP I** 3 cr. hrs.

This two-course sequence allows the student to work part-time on a job closely related to his or her academic major while attending classes on a full-time basis. Emphasis is placed on a student's work experience as it integrates academic knowledge with practical applications in the business environment. The grade is based on a term paper, job-site visits by the instructor, the employer's evaluation of the student, and the development and assessment by the student of a learning contract. Prerequisite: Minimum of 6 semester hours in business and minimum GPA of 2.0 (C).

**BUS 298. DIRECTED STUDIES I** 1-3 cr. hrs.

This course offers independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need. Prerequisite: Instructor approval.

**CHEMISTRY (CHM)**

256.840.4137 | [DRHODEN@SNEAD.EDU](mailto:DRHODEN@SNEAD.EDU)

**CHM 104. INTRODUCTION TO INORGANIC CHEMISTRY** 4 cr. hrs., Lec. 3, Lab. 3

This is a survey of general chemistry for students who do not intend to major in science or engineering and may not be substituted for CHM 111. Lecture will emphasize the facts, principles, and theories of general chemistry including math operations, matter and energy, atomic structure, symbols and formulas, nomenclature, the periodic table, bonding concepts, equations, reactions, stoichiometry, gas laws, phases of matter, solutions, pH, and equilibrium reactions. Laboratory is required. Prerequisite: MTH 098 or equivalent math placement score.

**CHM 105. INTRODUCTION TO ORGANIC CHEMISTRY** 4 cr. hrs., Lec. 3, Lab. 3

This is a survey course of organic chemistry and biochemistry for students who do not intend to major in science or engineering. Topics will include basic nomenclature, classification of organic compounds, typical

organic reactions, reactions involved in life processes, function of biomolecules, and the handling and disposal of organic compounds. Laboratory is required. Prerequisite: CHM 104 or CHM 111.

### **CHM 111. COLLEGE CHEMISTRY I**

**4 cr. hrs., Lec. 3, Lab. 3**

This is the first course in a two-semester sequence designed for the science or engineering major who is expected to have a strong background in mathematics. Topics in this course include measurement, nomenclature, stoichiometry, atomic structure, equations and reactions, basic concepts of thermochemistry, chemical and physical properties, bonding, molecular structure, gas laws, kinetic-molecular theory, condensed matter, solutions, colloids, and some descriptive chemistry topics. Laboratory is required. Prerequisite: MTH 112 or equivalent math placement score.

### **CHM 112. COLLEGE CHEMISTRY II**

**4 cr. hrs., Lec. 3, Lab. 3**

This is the second course in a two-semester sequence designed primarily for the science and engineering student who is expected to have a strong background in mathematics. Topics in this course include chemical kinetics, chemical equilibrium, acids and bases, ionic equilibrium of weak electrolytes, solubility product principle, chemical thermodynamics, electrochemistry, oxidation-reduction, nuclear chemistry, and introduction to organic chemistry and biochemistry, atmospheric chemistry, and selected topics in descriptive chemistry including the metals, nonmetals, semi-metals, coordination compounds, transition compounds, and post-transition compounds. Laboratory is required. Prerequisite: CHM 111.

### **CHM 221. ORGANIC CHEMISTRY I**

**4 cr. hrs., Lec. 3, Lab. 3**

This course is the first course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, and aromatic compounds, with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques. Prerequisite: CHM 112.

### **CHM 222. ORGANIC CHEMISTRY II**

**4 cr. hrs., Lec. 3, Lab. 3**

This is the second course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, aromatic, and biological compounds, polymers and their derivatives, with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques. Prerequisite: CHM 221.

### **CHM 250. DIRECTED STUDIES IN CHEMISTRY**

**3 cr. hrs.**

This course is designed for independent study in specific areas of chemistry, chosen in consultation with a faculty member, and carried out under faculty supervision. This course may be repeated three times for credit. Prerequisite: Permission of the instructor.

### **CHILD DEVELOPMENT (CHD)**

**256.840.4193 | KWATTS@SNEAD.EDU**

#### **CHD 100. INTRODUCTION TO EARLY CARE AND EDUCATION OF CHILDREN**

**3 cr. hrs.**

This course introduces students to the child education and care profession. It is designed to increase understanding of the basic concepts of child development and the developmental characteristics of children from birth through age 8/9 years, including infant and toddler and pre-school years. This course is the foundation for planning appropriate activities for children and establishing appropriate expectations of young children. This class also offers an opportunity to study the developmental domains (social, emotional, cognitive/language and physical). Course includes observations of the young child in early childhood settings. Prerequisite: None.

#### **CHD 201. CHILD GROWTH AND DEVELOPMENT PRINCIPLES**

**3 cr. hrs.**

This course is a systematic study of child growth and development from conception through early childhood. Emphasis is placed on principles underlying physical, mental, emotional and social development, and on methods of child study and practical implications. Upon completion, students should be able to use knowledge of

how young children differ in their development and approaches to learning to provide opportunities that support the physical, social, emotional, language, cognitive, and aesthetic development of children. Prerequisite: None.

### **CHD 202. CHILDREN'S CREATIVE EXPERIENCES**

**3 cr. hrs.**

This course focuses on fostering creativity in preschool children and developing a creative attitude in teachers. Topics include selecting and developing creative experiences in language arts, music, art, science, math, and movement with observation and participation with young children required. Upon completion, students should be able to select and implement creative and age-appropriate experiences for young children. Prerequisite: None.

### **CHD 203. CHILDREN'S LITERATURE AND LANGUAGE DEVELOPMENT**

**3 cr. hrs.**

This course surveys appropriate literature and language arts activities designed to enhance young children's speaking, listening pre-reading, and writing skills. Emphasis is placed on developmental appropriateness as related to language. Upon completion, students should be able to create, evaluate and demonstrate activities which support a language-rich environment for young children. Prerequisite: None.

### **CHD 204. METHODS AND MATERIALS FOR TEACHING CHILDREN**

**3 cr. hrs.**

This course introduces basic methods and materials used in teaching young children. Emphasis is placed on students compiling a professional resource file of activities used for teaching math, language arts, science, and social studies concepts. Upon completion students will be able to demonstrate basic methods of creating learning experiences using developmentally appropriate techniques, materials, and realistic expectations, including infant and toddler and pre-school. Course includes observations of young children in a variety of childcare environments. Prerequisite: None.

### **CHD 205. PROGRAM PLANNING FOR EDUCATING YOUNG CHILDREN**

**3 cr. hrs.**

This course provides students with knowledge to develop programs for early child development. Specific content includes a review of child development concepts and program contents. Upon completion students will be able to develop and evaluate effective programs for the education of young children. Prerequisite: None.

### **CHD 206. CHILDREN'S HEALTH AND SAFETY**

**3 cr. hrs.**

This course introduces basic health, nutrition and safety management practices for young children. Emphasis is placed on setting up and maintaining a safe, healthy environment for young children including specific procedures for infants and toddlers and procedures regarding childhood illnesses and communicable diseases. Prerequisite: None.

### **CHD 208. ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS**

**3 cr. hrs.**

This course includes appropriate administrative policies and procedures relevant to preschool programs. Topics include local, state and federal regulations; budget planning; record keeping; personnel policies and parent involvement. Upon completion, students should be able to identify elements of a sound business plan, develop familiarity with basic record keeping techniques, and identify elements of a developmentally appropriate program. Prerequisite: None.

### **CHD 209. INFANT AND TODDLER EDUCATION PROGRAMS**

**3 cr. hrs.**

This course focuses on child development from infancy to thirty months of age with emphasis on planning programs using developmentally appropriate material. Emphasis is placed on positive ways to support an infant's social, emotional, physical and intellectual development. Upon completion, student should be able to plan infant-toddler programs and environments which are appropriate and supportive of the families and the children. Prerequisite: None.

**CHD 210. EDUCATING CHILDREN WITH EXCEPTIONAL NEEDS** 3 cr. hrs.

This course explores the many different types of exceptionalities found in young children. Topics include speech, language, hearing and visual impairments; gifted and talented children; mental retardation; emotional, behavioral, and neurological handicaps. Upon completion, students should be able to identify appropriate strategies for working with young exceptional children. Prerequisite: None.

**CHD 215. SUPERVISED PRACTICAL EXPERIENCE IN EARLY CHILDHOOD** 3 cr. hrs., Lab. 6

This course provides a minimum of 90 hours of hands-on, supervised experience in an approved program for young children. Students will develop a portfolio documenting experiences gained during this course. This course cannot be taken during a student's first semester. Prerequisite: None.

**CHD 217. MATH AND SCIENCE FOR YOUNG CHILDREN** 3 cr. hrs.

This course provides students with information on children's conceptual development and the fundamental basic concepts of both math and science. Students learn various techniques for planning, implementing and evaluating developmentally appropriate activities. Students will also learn about integrated curriculum. Prerequisite: None.

**CHD 222. SOCIAL STUDIES FOR CHILDREN** 3 cr. hrs.

This course takes a global approach to the theory and practice of teaching social studies to young children. It includes methods and materials used for teaching geography, history, the arts and multicultural education using an integrated curriculum approach. The application of theoretical and philosophical concepts will be emphasized, as students are required to participate in both in-class demonstrations and laboratory experiences. Prerequisite: None.

**COMPUTER SCIENCE (CIS)**  
256.840.4166 | GRANDALL@SNEAD.EDU

**CIS 117. DATABASE MANAGEMENT SOFTWARE APPLICATIONS** 3 cr. hrs.

This course provides students with hands-on experience using database management software. Students will develop skills common to most database management software by developing a wide variety of databases. Emphasis is on planning, developing, and editing functions associated with database management. Prerequisite: None.

**CIS 130. INTRODUCTION TO INFORMATION SYSTEMS** 3 cr. hrs.

This course is an introduction to computers that reviews computer hardware and software concepts such as equipment, operations, communications, programming and their past, present and future impact on society. Topics include computer hardware, various types of computer software, communication technologies and program development using the computer to write simple programs. Upon completion, students should be able to describe and use the major components of selected computer software and hardware. Prerequisite: None.

**CIS 146. MICROCOMPUTER APPLICATIONS** 3 cr. hrs.

This course is an introduction to the most common microcomputer software applications. These software packages should include typical features of applications, such as word processing, spreadsheets, database management, and presentation software. Upon completion, students will be able to utilize selected features of these packages. This course will help prepare students for the MOS and IC3 certification. Prerequisite: None.

**CIS 157. INTRODUCTION TO APP DEVELOPMENT WITH SWIFT** 3 cr. hrs., Lec. 1, Lab. 4

This introductory one-semester course is designed to help students build a solid foundation in programming fundamentals using Swift as the language. Students get practical experience with the tools, techniques, and concepts needed to build a basic iOS system. Prerequisite: None.

**CIS 161. INTRODUCTION TO NETWORKING COMMUNICATIONS 3 cr. hrs.**

This course is designed to introduce students to basic concepts of computer networks. Emphasis is placed on terminology and technology involved in implementing selected networked systems. The course covers various network models, topologies, communications protocols, transmission media, networking hardware and software, and network troubleshooting. Students gain hands-on experience in basic networking. This course further helps prepare students for certification. Prerequisite: None.

**CIS 162. ADVANCED NETWORKING 3 cr. hrs., Lec. 2, Lab 2**

This course exposes students to networking concepts in increased breadth and depth. Advanced topics in networking architecture, operations and configuration are covered, as well as management and troubleshooting of common wired and wireless network devices. Also included is an introduction to network security, current industry standards and best practices and emerging technologies such as unified communications, mobile, cloud and virtualization technologies. Upon successful completion of this course, students will be able to demonstrate the essential knowledge and skills needed to confidently design, configure, manage and troubleshoot wired and wireless networks. **This course, in combination with CIS 161 will prepare the student to sit for the CompTIA Network+ certification exam.** Prerequisite: CIS 161.

**CIS 165. NETWORKING LAB 1 cr. hr.**

This lab is designed to allow instructors to provide additional implementation of networking concepts as needed. This course may be duplicated with an alpha suffix added to the course number. Prerequisite: None. Corequisite: CIS 270 Cisco I.

**CIS 171. LINUX I 3 cr. hrs.**

This course presents fundamental applications in Linux. Included in this course are skills development for OS installation and setup, recompile techniques, system configuration settings, file/folder structures and types, run levels, basic network applications, and scripting. Addi-

tionally, the course presents security features from an administrative and user consideration. Prerequisite: As required by college. Corequisite: As required by college.

**CIS 207. WEB DEVELOPMENT 3 cr. hrs.**

At the conclusion of this course, students will be able to use specified markup languages to develop basic Web pages. Prerequisite: None.

**CIS 209. ADVANCED MOBILE APP DEVELOPMENT 3 cr. hrs.**

This course serves as a capstone class for app development. Students will conceive, design, develop and deploy a finished app for mobile platforms using specified app development software. Prerequisite: None.

**CIS 212. VISUAL BASIC PROGRAMMING 3 cr. hrs., Lec. 2, Lab. 2**

This course emphasizes BASIC programming using a graphical user interface. The course will emphasize graphical user interfaces with additional topics on such topics as advanced file handling techniques, simulation, and other selected areas. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. Prerequisite: None.

**CIS 214. SECURITY ANALYSIS (PEN TESTING) 3 cr. hrs.**

This course introduces students to the concept of security analysis, or penetration testing, of information systems. Students will evaluate the security of a computer system or network, assessing security risks from the position of a potential attacker. Emphasis is on identifying security flaws and providing technical solutions. Prerequisite: CIS 246.

**CIS 220. APP DEVELOPMENT WITH SWIFT I 3 cr. hrs., Lec. 1, Lab. 4**

This is the first of two courses designed to teach specific skills related to app development using Swift language. Prerequisite: None.

**CIS 226. ORACLE DATABASE ADMINISTRATION I****3 cr. hrs.**

This course is designed to give students a firm foundation in basic administration of a database (i.e. Oracle Database 11g or higher). In this class, students learn how to install and maintain an Oracle Database. Students gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Students learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques. The lesson topics are reinforced with structured hands-on practices. This course is the first of two courses required to acquire certification as Oracle Database Administrator - Oracle Certified Associate (OCA) - maps to Oracle Exam 1Z052. Prerequisite: None.

**CIS 227. APP DEVELOPMENT WITH SWIFT II****3 cr. hrs., Lec. 1, Lab. 4**

This course focuses on building specific features for iOS apps. Students apply their knowledge and skills to developing new apps. Prerequisite: CIS 220.

**CIS 228. ORACLE DATABASE ADMINISTRATION II****3 cr. hrs.**

In this course, the concepts and architecture that support backup and recovery, along with the steps of how to carry it out in various ways and situations, are covered in detail. This includes how to define and test our own backup and recovery scenarios. Students learn to manage memory effectively and to perform some performance evaluation and tuning tasks, including using some of the advisors. All types of flashback technologies, scheduling jobs inside and outside of the database, and controlling system resource usage are covered. Topics are reinforced with hands-on practices. This course counts towards the hand-on course requirement for the Oracle Database 11g Administrator Certification. This course is the second of two courses required to acquire certification as Oracle Database Administrator - Oracle Certified Associate (OCA) - Maps to Oracle Exam 1Z0053. Prerequisite: None.

**CIS 245. CYBER DEFENSE****3 cr. hrs.**

The course provides students with information on the concept of cyber defense. Topics include information relative to legal aspects of cyber attacks, threats to various levels of national and local social infrastructure, financial systems, personal data, and other direct and indirect threats. As part of this course students explore current and historical cyber threats and U.S. policy regarding infrastructure protection. Prerequisite: None.

**CIS 246. ETHICAL HACKING****3 cr. hrs.**

This course emphasizes scanning, testing, and securing computer systems. The lab-intensive environment provides opportunities to understand how perimeter defenses work and how hackers are able to compromise information systems. With awareness of hacking strategies, students learn to counteract those attempts in an ethical manner. Prerequisite: None.

**CIS 251. C++ PROGRAMMING:****3 cr. hrs.**

This course is an introduction to the C programming language. Included in this course are topics in an algorithmic approach to problem solving, structured programming techniques and constructs, using functions and macros, simple data structures, and using files for input and output. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. Prerequisite: None.

**CIS 259. ADVANCED MOBILE APP DEVELOPMENT:****3 cr. hrs.**

This course serves as a capstone class for app development. Students will conceive, design, develop and deploy a finished app for mobile platforms using specified app development software. Prerequisite: None.

**CIS 260. NETWORK SECURITY AND RISK****MANAGEMENT 3 cr. hrs., Lec. 2, Lab 2**

This course exposes students to essential concepts of networking security and IT risk management. Topics include design, protocols and administrative principles of secure networks, identification and elimination of threats and vulnerabilities, compliance and operational security, access control and identity management, application, data and host security, cryptography and current

and evolving issues in network security. Upon successful completion of this course, students will be able to demonstrate the knowledge and skills necessary to identify security issues, to mitigate and deter threats, to apply security controls and to implement and maintain an organization's security policies. **This course prepares students to sit for the CompTIA Security+ certification exam.** Prerequisite: None.

**CIS 267. ENTERPRISE VIRTUALIZATION 3 cr. hrs.**

This course is designed to provide students with the knowledge and skills required to implement enterprise virtualization. Students will gain hands-on experience installing, configuring, and managing enterprise virtualization technologies. Prerequisite: CIS 161.

**CIS 268. SOFTWARE SUPPORT 3 cr. hrs.**

This course provides students with hands-on practical experience in installing computer software, operating systems, and trouble-shooting. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. Prerequisite: None.

**CIS 269. HARDWARE SUPPORT 3 cr. hrs.**

This course provides students with hands-on practical experience in installation and troubleshooting computer hardware. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. Prerequisite: None.

**CIS 277. NETWORK SERVICES ADMINISTRATION  
3 cr. hrs.**

This course provides an introduction to the administration of fundamental networking services and protocols. Topics included in this course are implementing, managing, and maintaining essential network operating system services such as those for client address management, name resolution, security, routing, and remote access. Students gain hands-on experience performing common network infrastructure administrative tasks. Prerequisite: CIS 161.

**CIS 280. NETWORK SECURITY 3 cr. hrs.**

This course provides a study of threats to network security and methods of securing a computer network from such threats. Topics included in this course are security

risks, intrusion detection, and methods of securing authentication, network access, remote access, Web access, and wired and wireless network communications. Upon completion students will be able to identify security risks and describe appropriate counter measures. Prerequisite: None.

**CIS 282. COMPUTER FORENSICS 3 cr. Hrs.**

This course introduces students to methods of computer forensics and investigations. This course helps prepare students for industry specific certification. Prerequisite: None.

**CIS 284. CIS INTERNSHIP 3 cr. hrs.**

This course is designed to provide the student with an opportunity to work in a degree/program related environment. Emphasis is placed on the student's "real world" work experience as it integrates academics with practical applications that relate meaningfully to careers in the computer discipline. Significance is also placed on the efficient and accurate performance of job tasks as provided by the "real world" work experience. Grades for this course will be based on a combination of the employer's evaluation of the student, and the contents of a report submitted by the student. Upon completion of this course, the student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to a "real world" work experience. Prerequisite: Permission of instructor.

**CIS 287. SQL SERVER 3 cr. hrs.**

This course will provide students with the technical skill required to install, configure, administer, and troubleshoot SQL Server client/server database management system. At the completion of this series, student will be able to: identify the features of SQL Server and the responsibilities and challenges in system administration; identify the benefits of integrating SQL Server and setup clients for SQL Server, install and configure SQL Server, manage data storage using database devices and partition data using segments manage the user accounts; manage user permissions; identify the various task scheduling and alerting abilities of SQL Executive; identify the concepts uses in replication and implement replication of data between two SQL Services; identify the types of backup and create backup devices; identify the factors effecting SQL Server performance and the

need for monitoring and tuning; locate and troubleshoot problems that occur on the SQL Server. Prerequisite: None.

**CIS 294. SPECIAL TOPICS 3 cr. hrs.**

This course allows study of currently relevant computer science topics, with the course being able to be repeated for credit for each different topic covered. Course content will be determined by the instructor and will vary according to the topic being covered. Upon completion, the student will be able to demonstrate knowledge of the course topic through completion of assignments and appropriate tests. Prerequisite: None.

**CRIMINAL JUSTICE (CRJ)**

256.840.4193 | [KWATTS@SNEAD.EDU](mailto:KWATTS@SNEAD.EDU)

**CRJ 100. INTRODUCTION TO CRIMINAL JUSTICE 3 cr. hrs.**

This course surveys the entire criminal justice process from law enforcement to the administration of justice through corrections. It discusses the history and philosophy of the system and introduces various career opportunities.

**CRJ 110. INTRODUCTION TO LAW ENFORCEMENT 3 cr. hrs.**

This course examines the history and philosophy of law enforcement, as well as the organization and jurisdiction of local, state, and federal agencies. It includes the duties and functions of law enforcement officers. Prerequisite: None.

**CRJ 150. INTRODUCTION TO CORRECTIONS 3 cr. hrs.**

This course provides an introduction to the philosophical and historical foundations of corrections in America. Incarceration and some of its alternatives are considered. Prerequisite: None.

**CRJ 160. INTRODUCTION TO SECURITY 3 cr. hrs.**

This course surveys the operation, organization and problems in providing safety and security to business enterprises. Private, retail, and industrial security is covered. Prerequisite: None.

**ECONOMICS (ECO)**

256.840.4193 | [KWATTS@SNEAD.EDU](mailto:KWATTS@SNEAD.EDU)

**ECO 231. PRINCIPLES OF MACROECONOMICS 3 cr. hrs.**

This course is an introduction to macroeconomic theory, analysis, and policy applications. Topics include the following: scarcity, demand and supply, national income analysis, major economic theories concerning monetary and fiscal policies as stabilization measures, the banking system, and other economics issues or problems including international trade. Prerequisite: None.

**ECO 232. PRINCIPLES OF MICROECONOMICS 3 cr. hrs.**

This course is an introduction to the microeconomics theory, analysis, and applications. Topics include scarcity, the theories of consumer behavior, production and cost, markets, output and resource pricing, and international aspects of microeconomics. Prerequisite: None.

**ELECTRICAL TECHNOLOGY (ELT)**

256.840.4132 | [SBOWEN@SNEAD.EDU](mailto:SBOWEN@SNEAD.EDU)

**ELT 118. COMMERCIAL/INDUSTRIAL WIRING I 3 cr. hrs., Lec. 1, Lab 4**

This course focuses on principles and applications of commercial and industrial wiring. Topics include, electrical safety practices, an overview of National Electric Code requirements as applied to commercial and industrial wiring, conduit bending, circuit design, pulling cables, transformers, switch gear, and generation principles. Prerequisite: None.

**ELT 132. COMMERCIAL/INDUSTRIAL WIRING II 3 cr. hrs., Lec. 1, Lab 2**

This course is a continuation of ELT 131 and is all inclusive. Including the study of branch circuits, installation requirements for services, feeders and special equipment considerations including the NEC code requirements. Emphasis is placed on load calculations, conductors, service sizing, installation requirements, NEC code requirements, transformers, lighting, HVAC and special equipment considerations. Upon completion, students should be able to know how to size complete electrical commercial/industrial systems and know the NEC requirements for each system. Prerequisite: ELT 118.

## **ELECTRONIC ENGINEERING TECHNOLOGY (EET)**

256.840.4132 | [SBOWEN@SNEAD.EDU](mailto:SBOWEN@SNEAD.EDU)

### **EET 207. INTRODUCTION TO ROBOTICS**

**3 cr. hrs.**

This course provides an introduction to robots for students preparing to work in environments using robots. Topics covered include the service and repair of robots plus applications and uses of robots. Upon completion of this course and EET 212 a student will be able to program and operate a simple robot. Prerequisite: None.

## **ENGLISH AND LITERATURE (ENG)**

256.840.4133 | [CDENHAM@SNEAD.EDU](mailto:CDENHAM@SNEAD.EDU)

### **ENR 098. WRITING AND READING FOR COLLEGE**

**4 cr. hrs.**

This course integrates reading and writing skills students need to comprehend and interact with college-level texts and to produce original college-level writing. Reading skills will center on processes for literal and critical comprehension, as well as the development of vocabulary skills. Writing skills will focus on using an effective writing process including generating ideas, drafting, organizing, revising, and editing to produce competent essays using standard written English. This course may include a one-hour lab component. Prerequisite: Appropriate placement score.

### **ENG 099. INTRODUCTION TO COLLEGE WRITING**

**1 cr. hr.**

This course is a corequisite English course paired with ENG 101. Emphasis is placed on providing students with additional academic and noncognitive support with the goal of success in the students' paired ENG 101 class. The material covered or practiced in the ENG 099 course is complementary to and supportive of material taught in ENG 101 and the needs of ENG 099 students. Prerequisite: Appropriate placement score of 17 or better on the ACT English subject area, or non-cognitive assessment measures (high school GPA, high school English grade), or ACCUPLACER writing exam score of 4.

### **ENG 101. ENGLISH COMPOSITION I**

**3 cr. hrs.**

English Composition I provides instruction and practice in the writing of at least six (6) extended compositions and the development of analytical and critical reading skills and basic reference and documentation skills in the

composition process. English Composition I may include instruction and practice in library usage. Prerequisite: ACT English score of 18 (ACT English score of 17 with ENG 099 co-requisite course), or an appropriate high school GPA and English IV grade, or an ACCUPLACER WritePlacer score of 5 (ACCUPLACER WritePlacer score of 4 with ENG 099 co-requisite course), or successful completion of ENR 098 (or ENR 094) with a grade "C" or higher.

### **ENG 102. ENGLISH COMPOSITION II**

**3 cr. hrs.**

English Composition II provides instruction and practice in the writing of six (6) formal, analytical essays, at least one of which is a research project using outside sources and/or references effectively and legally. Additionally, English Composition II provides instruction in the development of analytical and critical reading skills in the composition process. English Composition may include instruction and practice of library usage. Prerequisite: A grade of "C" or better in English 101 or equivalent.

### **ENG 251. AMERICAN LITERATURE I**

**3 cr. hrs.**

This course is a survey of American literature from its inception to the middle of the nineteenth century. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

### **ENG 252. AMERICAN LITERATURE II**

**3 cr. hrs.**

This course is a survey on American literature from the middle of the nineteenth century to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

**ENG 261. ENGLISH LITERATURE I 3 cr. hrs.**

This course is a survey of English literature from the Anglo-Saxon period to the Romantic Age. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

**ENG 262. ENGLISH LITERATURE II 3 cr. hrs.**

This course is a survey of English literature from the Romantic Age to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

**ENG 271. WORLD LITERATURE I 3 cr. hrs.**

This course is a study of selected literary masterpieces from Homer to the Renaissance. Emphasis is placed on major representative works and writers of this period and the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

**ENG 272. WORLD LITERATURE II 3 cr. hrs.**

This course is a study of selected literary masterpieces from the Renaissance to the present. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works

to their historical and literary contexts, and understand relevant criticism and research. Prerequisite: ENG 102 or equivalent.

**ENG 299. DIRECTED STUDIES IN LANGUAGE AND LITERATURE 1-3 cr. hrs.**

This course, which may be repeated for credit so long as the topics differ, provides the student the opportunity to study an English-language or literary topic chosen by the student in consultation with the instructor. Emphasis is placed on the student's investigating the topic and reporting the results of the investigation. The student will demonstrate knowledge of the topic through either a written or an oral presentation. Prerequisite: Permission of Instructor.

**GEOGRAPHY (GEO)**

256.840.4137 | DRHODEN@SNEAD.EDU

**GEO 100. WORLD REGIONAL GEOGRAPHY**

**3 cr. hrs.**

This course surveys various countries and major regions of the world with respect to location and landscape, world importance, political status, population, type of economy, and its external and internal organization problems and potentials. Prerequisite: None.

**GEO 101. PRINCIPLES OF PHYSICAL GEOGRAPHY I**

**4 cr. hrs., Lec. 3, Lab. 2**

Physical Geography I is the first in a two part sequence including topics such as weather and climate relative to the earth and relationships between the earth and sun. Laboratory is required. Prerequisite: None.

**GEO 102. PRINCIPLES OF PHYSICAL GEOGRAPHY II**

**4 cr. hrs., Lec. 3, Lab. 2**

Physical Geography II is the second in a two part sequence including topics such as landforms, landscapes, soil, and vegetation of the earth. Laboratory is required. Prerequisite: GEO 101.

## **HEALTH EDUCATION (HED)**

256.840.4137 | DRHODEN@SNEAD.EDU

### **HED 224. PERSONAL AND COMMUNITY HEALTH**

**3 cr. hrs.**

This course covers health problems for the individual and for the community. Areas of study include mental health, family life, physical health, chronic and degenerative diseases, control of communicable diseases, and the understanding of depressants and stimulants. Healthful living habits will be emphasized. Prerequisite: None.

### **HED 231. FIRST AID**

**3 cr. hrs.**

This course provides instruction to the immediate, temporary care which should be given to the victims of accidents and sudden illness. It also includes standard and advanced requirements of the American Red Cross and/or the American Heart Association. Prerequisite: None.

## **HEALTH INFORMATION TECHNOLOGY (HIT)**

256.840.4178 | KSNYDER@SNEAD.EDU

### **HIT 230. MEDICAL CODING SYSTEMS I**

**3 cr. hrs.**

This course is intended to develop an understanding of coding and classification systems in order to assign valid diagnostic and procedure codes. Instruction includes description of classification and nomenclature systems; coding diagnoses and procedures; sequencing codes; analyzing actual medical records to identify data elements to be coded; and validating coded clinical information. Student competency includes demonstration of coding principles and applications (manual and/or computer assisted). Prerequisite: None.

### **HIT 232. MEDICAL CODING SYSTEMS II**

**3 cr. hrs.**

This course is a continuation of Medical Coding Systems I which is intended to develop an understanding of coding and classification systems in order to assign valid diagnostic and procedure codes. Instruction includes coding diagnoses and procedures; sequencing codes, analyzing actual medical records to identify data elements to be coded; validating coded clinical information, DRG assignment and case mix/severity of illness data. Student competency includes demonstration of coding principles and applications (manual and/or computer assisted). Prerequisite: HIT 230.

## **HEALTH SCIENCES (HPS)**

256.840.4188 | VSCOTT@SNEAD.EDU

### **HPS 107. TRENDS AND ISSUES IN HEALTH SCIENCE**

**1 cr. hr.**

This course is an overview of current trends and issues common to the health-related disciplines. Emphasis is placed on ethical, legal, educational, economic, cultural, social, and regulatory trends and issues influencing health care. Upon completion of this course, the student should be able to compare and contrast the effects that trends and issues have on health-related disciplines and client care. Prerequisite: None.

### **HPS 110. INTRODUCTION TO HEALTH CARE**

**2 cr. hrs.**

This interdisciplinary course focuses on topics in health care which are common to health care disciplines. Emphasis is placed on communication, client/employee safety, psychosocial aspects of health care, health care delivery systems, professionalism, ethical/legal issues in health care, historical perspectives of various health care professions, and medical terminology. Prerequisite: None.

## **HISTORY (HIS)**

256.840.4193 | KWATTS@SNEAD.EDU

### **HIS 101. WESTERN CIVILIZATION I**

**3 cr. hrs.**

This course is a survey of social, intellectual, economic, and political developments, that have molded the modern western world. This course covers the ancient and medieval periods and concludes in the era of the Renaissance and Reformation. Prerequisite: None.

### **HIS 102. WESTERN CIVILIZATION II**

**3 cr. hrs.**

This course is a continuation of HIS 101, and it surveys development of the modern western world from the era of the Renaissance and Reformation to the present. Prerequisite: None.

**HIS 121. WORLD HISTORY I** 3 cr. hrs.

This course surveys social, intellectual, economic, and political developments that have molded the modern world. Focus is on both non-western and western civilizations from the prehistoric to the early modern era. Prerequisite: None.

**HIS 122. WORLD HISTORY II** 3 cr. hrs.

This course is a continuation of HIS 121. It covers world history - both western and non-western - from the early modern era to the present. Prerequisite: None.

**HIS 201. UNITED STATES HISTORY I** 3 cr. hrs.

This course surveys United States history during colonial, Revolutionary, early national and antebellum periods. It concludes with the Civil War and Reconstruction. Prerequisite: None.

**HIS 202. UNITED STATES HISTORY II** 3 cr. hrs.

This course is a continuation of HIS 201, and it surveys United States history from the Reconstruction era to the present. Prerequisite: None.

**HOME ECONOMICS (HEC)**

256.840.4187 | DRHODEN@SNEAD.EDU

**HEC 140. PRINCIPLES OF NUTRITION** 3 cr. hrs.

This course introduces students to the principles of nutrition and the role and functions of nutrients to man's food. Basic information concerning food selection and nutrition as a factor in health, ecology, and economy is included. Implications of nutrition for children may be stressed. Prerequisite: None.

**HORTICULTURE (HOC)**

256.840.4137 | DRHODEN@SNEAD.EDU

**HOC 110. INTRODUCTION TO HORTICULTURE**  
3 cr. hrs.

This course provides students with foundational knowledge relative to the horticulture profession. Specific topics include information regarding the horticulture industry, safety practices, basic botany, and general plant care and culture. Prerequisite: None.

**HUMANITIES (HUM)**

256.840.4125 | JONATHAN.WATTS@SNEAD.EDU

**HUM 299. PTK HONORS COURSE** 1 cr. hr.

This course provides an opportunity for the student to study selected topics in the area of the humanities under the supervision of a qualified instructor. The specific topics will be determined by the interests of the students and faculty.

**INDUSTRIAL MAINTENANCE TECHNOLOGY (INT)**

256.840.4132 | SBOWEN@SNEAD.EDU

**INT 100. MATHEMATICS FOR INDUSTRIAL TECHNICIANS** 3 cr. hrs

This course is designed to provide an understanding of basic mathematical concepts used in an industrial setting. Topics include the arithmetic of whole numbers, fractions, and decimals; basic ration, proportion, and percent; application problems in industrial maintenance. Prerequisite: None.

**INT 112. INDUSTRIAL MAINTENANCE SAFETY PROCEDURES** 3 cr. hrs

This course is an in-depth study of the health and safety practices required for maintenance of industrial production equipment. Topics include traffic, ladder, electrical, and fire safety, safe work in confined spaces, electrical and mechanical lock-out procedures, emergency procedures, OSHA regulations, MSDS Right-to-Know law, hazardous materials safety, and safety equipment use and care. Upon course completion, students will be able to implement health and safety practices in an industrial production setting. Prerequisite: None.

**INT 113. INDUSTRIAL MOTOR CONTROL I**  
3 cr. hrs, Lec. 1, Lab 4

This course is a study of the construction, operating characteristics, and installation of different motor control circuits and devices. Emphasis is placed on the control of three phase AC motors. This course covers the use of motor control symbols, magnetic motor starters, running overload protection, push button stations, multiple control stations, two wire control, three wire control, jogging control, sequence control, and ladder diagrams of motor control circuits. Upon completion, students should be able to understand the operation of motor

starters, overload protection, interpret ladder diagrams using push button stations and understand complex motor control diagrams. Prerequisite: None.

#### **INT 114. BASIC ELECTRICITY**

**3 cr. hrs, Lec. 2, Lab 2**

This course provides an introduction to direct current (DC) and alternating current (AC) electrical theory. Topics include atomic theory, magnetism, properties of conductors and insulators, and characteristics of series, parallel, and series-parallel circuits. Inductors and capacitors are introduced and their effects on DC and AC circuits are examined. Students are prepared to analyze complex circuits, solve for unknown circuit variables and use basic electronic test equipment. This course also provides hands on laboratory exercises to analyze, construct, test, and troubleshoot electrical circuits. Emphasis is placed on the use of a scientific calculator, the operation of common test equipment, and the physical wiring of electrical circuits. Prerequisite: None.

#### **INT 117. PRINCIPLES OF INDUSTRIAL MECHANICS**

**3 cr. hrs, Lec. 2, Lab 2**

This course provides instruction in basic physics concepts applicable to mechanics of industrial production equipment. Topics include the basic application of mechanical principles with emphasis on power transmission, specific mechanical components, alignment, and tension. Upon completion, students will be able to perform basic troubleshooting, repair and maintenance functions on industrial production equipment. Prerequisite: None.

#### **INT 118. FUNDAMENTALS OF INDUSTRIAL HYDRAULICS AND PNEUMATICS**

**3 cr. hrs, Lec. 2, Lab. 2**

This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems. Prerequisite: None.

#### **INT 128. PRINCIPLES OF INDUSTRIAL ENVIRONMENTAL CONTROLS**

**3 cr. hrs, Lec. 1, Lab. 4**

This course focuses on basic knowledge and skills to service perform routine troubleshooting, maintenance, and adjustments of HVACR systems in an industrial environment. After completion, students will be able to perform routine, low-level maintenance on institutional environmental systems. Additionally, students receive instruction to complete the EPA 608 certification examination. Prerequisite: None.

#### **INT 134. INDUSTRIAL MAINTENANCE WELD/METAL CUT TECH**

**3 cr. hrs, Lec. 2, Lab 2**

This course provides instruction in the fundamentals of acetylene cutting and the basics of welding needed for the maintenance and repair of industrial production equipment. Topics include oxy-fuel safety, choice of cutting equipment, proper cutting angles, equipment setup, cutting plate and pipe, hand tools, types of metal welding machines, rod and welding joints, and common welding passes and beads. Upon course completion, students will demonstrate the ability to perform metal welding and cutting techniques necessary for repairing and maintaining industrial equipment. Prerequisite: None.

#### **INT 161. BLUEPRINT READING FOR INDUSTRIAL TECHNICIANS**

**3 cr. hrs.**

This course is designed to provide the student a comprehensive understanding of blueprint reading. Topics include identifying types of lines and symbols used in mechanical drawings; recognition and interpretation of various types of views, tolerance, and dimensions. Prerequisite: None.

#### **INT 184. INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS**

**3 cr. hrs., Lec. 2, Lab 2**

This course provides an introduction to programmable logic controllers. Emphasis is placed on, but not limited to, the following: PLC hardware and software, numbering systems, installation, and programming. Upon completion, students must demonstrate their ability by developing, loading, debugging, and optimizing PLC programs. Prerequisite: None.

**INT 218. SPECIAL LAB IN HYDRAULICS AND PNEUMATICS** 2 cr. hrs., Lab 4

This course provides specialized instruction in maintaining and troubleshooting Hydraulic and Pneumatic systems. Topics include safe component removal and installation, schematic reading and diagramming, and theoretical calculations. Prerequisite: INT 118.

**INT 276. ELEMENTS OF INDUSTRIAL CONTROL II** 3 cr. hrs.

This course includes the advanced principals of PLC's including hardware, programming, variable speed drives, and troubleshooting. Emphasis is placed on developing advanced working programs, and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system. Prerequisite: INT 184. Corequisite: INT 277.

**INT 277. ELEMENTS OF INDUSTRIAL CONTROL II LAB** 2 cr. hrs., Lab 4

This course includes the advanced principals of PLC's including hardware, programming, variable speed drives, and troubleshooting. Emphasis is placed on developing advanced working programs, and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system. Corequisite: INT 276.

**INT 292. COOPERATIVE EDUCATION** 3 cr. hrs., Lab 6

This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Prerequisite: Permission of Instructor.

**INTERDISCIPLINARY STUDIES (IDS)**

256.840.4188 | [VSCOTT@SNEAD.EDU](mailto:VSCOTT@SNEAD.EDU)

**IDS 200. COLLEGE SCHOLARS BOWL WORKSHOP** 1 cr. hr.

This course offers the student preparation, practice, and participation in the College Scholars Bowl Program and competition. IDS may be repeated for credit. Prerequisite: Permission of instructor.

**MANAGEMENT AND SUPERVISION (MST)**

256.840.4188 | [VSCOTT@SNEAD.EDU](mailto:VSCOTT@SNEAD.EDU)

**MST 209. PHYSICAL SUPPLY AND DISTRIBUTION MANAGEMENT** 3 cr. hrs.

This course provides a comprehensive study of current logistics systems. Topics include organizing and analyzing logistics information, forecasting potential logistical problems, and making recommendations to coordinate actions to resolve problems. Prerequisite: None.

**MASS COMMUNICATIONS (MCM)**

256.840.4125 | [DJWATTS@SNEAD.EDU](mailto:DJWATTS@SNEAD.EDU)

**MCM 100. INTRODUCTION TO MASS COMMUNICATION** 3 cr. hrs.

This course provides the student with general study of mass communication and journalism. This course includes theory, development, regulation, operation, and effects upon society. Prerequisite: None.

**MCM 102. WRITING FOR THE MASS MEDIA** 3 cr. hrs.

Introduction to the technique, form, style, and content of writing for the mass media with attention to the various formats used in journalism, telecommunications, advertising, public relations and Internet communications. Prerequisite: None.

**MCM 113-15. 213-15. STUDENT PUBLICATIONS:** 1-2 cr. hrs. each, Lab. 2-4

These courses offer practical experience in journalism skills through working on the staff of student publications. Prerequisite: Permission of Instructor.

**MCM 211.SOCIAL MEDIA STRATEGIES 3 cr. hrs.**

This course focuses on how social media can be an effective tool in the workplace. Topics covered include how to collect, analyze and share data from social media; what tools can be used to collect data; advertising on social media and measuring its effectiveness; and making social media interactive. Upon completion of the course, students will have a better understanding of how to use social media in advertising and marketing. Prerequisite: None.

**MCM 250.MASS COMMUNICATION PRACTICUM  
1-3 cr. hrs., Lab. 2-6**

This course provides practical experience in media through supervised part- or full-time employment with a newspaper, radio, or television station, or public relations/advertising agency. Prerequisite: None.

**MATHEMATICS (MTH)  
256.840.4170 | BLEETH@SNEAD.EDU****MTH 091.DEVELOPMENTAL ALGEBRA 3 cr. hrs.**

This developmental course provides the student with a review of arithmetic and algebraic skills designed to provide sufficient mathematical proficiency necessary for entry into Elementary Algebra. Prerequisite: Appropriate mathematics placement score.

**MTH 098.ELEMENTARY ALGEBRA 3 cr. hrs.**

This course is a review of the fundamental arithmetic and algebra operations. The topics include the numbers of ordinary arithmetic and their properties; integers and rational numbers; the solving of equations; polynomials and factoring; and an introduction to systems of equations and graphs. Prerequisite: MTH 091 with a grade of "C" or better or appropriate mathematics placement score.

**MTH 100.INTERMEDIATE COLLEGE ALGEBRA  
3 cr. hrs.**

This course provides a study of algebraic techniques such as linear equations and inequalities, quadratic equations, systems of equations, and operations with exponents and radicals. Functions and relations are introduced and graphed with special emphasis on linear and quadratic

functions. This course does not apply toward the general core requirement for mathematics. Prerequisite: MTH 098 with a "C" or better or appropriate mathematics placement score.

**MTH 110.FINITE MATHEMATICS 3 cr. hrs.**

This course is intended to give an overview of topics in finite mathematics together with their applications, and is taken primarily by students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take Calculus). This course will draw on and significantly enhance the student's arithmetic and algebraic skills. The course includes sets, counting, permutations, combinations, basic probability (including Baye's Theorem), and introduction to statistics (including work with Binomial Distributions and Normal Distributions), matrices and their applications to Markov chains and decision theory. Additional topics may include symbolic logic, linear models, linear programming, the simplex method and applications. Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher (S if taken as pass/fail) MTH 100 Intermediate College Algebra.

**MTH 112.PRECALCULUS ALGEBRA 3 cr. hrs.**

This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's Rule, and mathematical induction. Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher (S if taken as pass/fail) MTH 100 Intermediate College Algebra.

**MTH 113. PRECALCULUS TRIGONOMETRY****3 cr. hrs.**

This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems. Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher (S if taken as pass/fail) MTH 112.

**MTH 116. MATHEMATICAL APPLICATIONS****3 cr. hrs.**

This course provides applications of mathematics and includes selected topics from consumer math and algebra. Some types included are integers, percent, interest, ratio and proportion, metrics system, probability, linear equations, and problem solving. This is a terminal course designed for students seeking an AAS degree or Certificate and is not intended to transfer and does not meet the general core requirements for mathematics. Prerequisite: MTH 091 with a "C" or better or appropriate mathematics placement score.

**MTH 120. CALCULUS AND ITS APPLICATIONS****3 cr. hrs.**

This course is intended to give a broad overview of calculus and is taken primarily by students majoring in Commerce and Business Administration. It includes differentiation and integration of algebraic, exponential, and logarithmic functions and applications to business and economics. The course should include functions of several variables, partial derivatives (including applications), Lagrange Multipliers, L'Hopital's Rule, and multiple integration (including applications). Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher MTH 112.

**MTH 125. CALCULUS I****4 cr. hrs.**

This is the first of three courses in the basic calculus sequence taken primarily by students in science, engineering, and mathematics. Topics include the limit of a function; the derivative of algebraic, trigonometric, exponential, and logarithmic functions; and the definite integral and its basic applications to area problems. Applications of the derivative are covered in detail, including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus. Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher MTH 113 or MTH 115.

**MTH 126. CALCULUS II****4 cr. hrs.**

This is the second of three courses in the basic calculus sequence. Topics include vectors in the plane and in space, lines, and planes in space, applications of integration (such as volume, arch length, work and average value), techniques of integration, infinite series, polar coordinates, and parametric equations. Prerequisite: All core mathematics courses in Alabama must have a minimum Prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a "C" or higher MTH 125.

**MTH 131. MATHEMATICS IN GENERAL  
EDUCATION I****3 cr. hrs.**

This course is designed for general education and for all students in education programs except those who will concentrate on science or mathematics. Emphasis is on the structure of the number system from the integers to the real numbers, logic, numeration systems, prime numbers, basic concepts of algebra, elementary probability and statistics, graphs, informal geometry, and the metric system. This course does not apply toward the general core requirement for mathematics for the Associate in Science program and is not intended to transfer. This course is intended to satisfy the

mathematics requirement for students seeking an AAS degree or a Certificate. Prerequisite: MTH 091 with a grade of "C" or better or appropriate math placement score.

**MTH 227. CALCULUS III** **4 cr. hrs.**

This course is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, partial derivatives (including applications), quadric surfaces, multiple integration, and vector calculus (including Green's Theorem, Curl and Divergence, surface integrals, and Stokes' Theorem). Prerequisite: MTH 126 with a "C" or better.

**MTH 231. MATH FOR THE ELEMENTARY  
TEACHER I** **3 cr. hrs.**

This course is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient in performing basic arithmetic operations. Topics include logic, sets and functions, operations and properties of whole numbers and integers including number theory; use of manipulatives by teachers to demonstrate abstract concepts; and by students while learning these abstract concepts as emphasized in the class. Upon completion, students are required to demonstrate proficiency in each topic studied as well as to learning teaching techniques that are grade level and subject matter appropriate, and test for mathematical proficiency and the learning of teaching concepts. Prerequisite: MTH 100. with a grade of "C" or better or appropriate math placement score.

**MTH 232. MATH FOR THE ELEMENTARY  
TEACHER II** **3 cr. hrs.**

This course is the second of a three-course sequence and is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient at performing basic arithmetic operations. Topics include numeration skills with fractions, decimals, and percentages, elementary concepts of probability and statistics, and analytic geometry concepts associated with linear equations and inequalities. The use of manipulatives and calculators in the teaching and

learning process is stressed. Upon completion, students will test for mathematical proficiency and the learning of teaching concepts. Students also will demonstrate an appropriate teaching technique by preparing a lesson and teaching it to the class for their final exam grade. Prerequisite: MTH 231 with a grade of "C" or higher.

**MTH 237. LINEAR ALGEBRA** **3 cr. hrs.**

This course introduces the basic theory of linear equations and matrices, real vector spaces, bases and dimension, linear transformations and matrices, determinants, eigenvalues and eigenvectors, inner product spaces, and the diagonalization of symmetric matrices. Additional topics may include quadratic forms and the use of matrix methods to solve systems of linear differential equations. Prerequisite: MTH 126 with a "C" or better.

**MTH 238. APPLIED DIFFERENTIAL EQUATIONS I**  
**3 cr. hrs.**

This course includes an introduction to numerical methods, qualitative behavior of first order differential equations, techniques for solving separable and linear equations analytically, and applications to various models (e.g. populations, motion, chemical mixtures, etc.); techniques for solving higher order linear differential equations with constant coefficients (general theory, undetermined coefficients, reduction of order and the method of variation of parameters), with emphasis on interpreting the behavior of the solutions, and applications to physical models whose governing equations are of higher order; and the Laplace transform as a tool for the solution of initial value problems whose inhomogeneous terms are discontinuous. Prerequisite: MTH 227 with a grade of "C" or higher.

**MTH 265. ELEMENTARY STATISTICS** **3 cr. hrs.**

This course provides an introduction to methods of statistics, including the following topics: sampling, frequency distributions, measures of central tendency, graphic representation, reliability, hypothesis testing, confidence intervals, analysis, regression, estimation, and applications. Probability, permutations, combinations, binomial theorem, random variables, and distributions may be included. Prerequisite: MTH 100 with a "C" or better or appropriate mathematics placement score.

## **MUSIC ENSEMBLES (MUL)**

256.840.4147 | [BHUDSON@SNEAD.EDU](mailto:BHUDSON@SNEAD.EDU)

*Group instruction is available in piano, voice, strings, woodwinds, brass, percussion and fretted instruments for students with little or no previous training. Emphasis is placed on the rudiments of music, basic performance technique and general musicianship skills. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in playing and a knowledge of music fundamentals.*

**MUL 101-02; 201-02 CLASS PIANO I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 111-12; 211-12 CLASS VOICE I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 121-122; 221-22 CLASS STRINGS**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 131-32; 231-32 CLASS WOODWINDS I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 141-42; 241-42 CLASS BRASS I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 151-152; 251-52 CLASS PERCUSSION**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 161-162; 261-62 CLASS FRETTED INSTRUMENTS**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 170-171-270-271 MUSIC WORKSHOP I, II, III, IV**  
1-3 cr. hrs. each, Lab. 2-6

Prerequisite: Courses in sequence.

**MUL 172-173-272-273 MUSICAL THEATRE WORKSHOP I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

*The following courses provide an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goal of the group. Upon completion, students should be able to effectively participate in performances presented by the ensemble.*

**MUL 180-81; 280-81 CHORUS I, II, III, IV**  
2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 184-85; 284-85 JAZZ/SHOW CHOIR I, II, III, IV**  
2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 190-91; 290-92 CONCERT BAND I, II, III, IV**  
1-2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 192-93; 292-93 INSTRUMENTAL ENSEMBLE I, II, III, IV**  
2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

**MUL 196-97; 296-97 JAZZ/SHOW BAND I, II, III, IV**  
2 cr. hrs. each, Lab. 2-4

Prerequisite: Courses in sequence.

## **INDIVIDUAL PERFORMANCE INSTRUCTION (MUP)**

256.840.4147 | BHUDSON@SNEAD.EDU

*Individual performance instruction is available in keyboard instruments, voice, strings, woodwinds, brass, percussion and fretted instruments. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. Upon completion, students should be able to effectively perform assigned repertoire and technical studies in an appropriate performance evaluation setting.*

**MUP 101-02; 201-02 PRIVATE PIANO I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 111-12; 211-12 PRIVATE VOICE I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 121-22; 221-22 PRIVATE VIOLIN I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 123-24; 223-24 PRIVATE VIOLA I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 133-34; 233-34 PRIVATE GUITAR I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 141-42; 241-42 PRIVATE FLUTE I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 143-44; 243-44 PRIVATE CLARINET I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 145-46; 245-46 PRIVATE SAXOPHONE  
I, II, III, IV 1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 161-62; 261-62 PRIVATE TRUMPET I, II, III, IV  
1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 163-64; 263-64 PRIVATE FRENCH  
HORN I, II, III, IV 1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 171-72; 271-72 PRIVATE  
TROMBONE I, II, III, IV 1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 175-76; 275-76 PRIVATE  
TUBA I, II, III, IV 1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

**MUP 181-82; 281-82 PRIVATE PERCUSSION  
I, II, III, IV 1-2 cr. hrs. each, Lab. 2-4**

Prerequisite: Permission of the instructor. Courses in sequence.

## **Music (MUS)**

256.840.4145 | [BHUDSON@SNEAD.EDU](mailto:BHUDSON@SNEAD.EDU)

### **MUS 100. CONVOCATION**

**1 cr. hr.**

This course (required for music majors/minors each semester) is designed to expose students to a variety of repertory styles and to give students an opportunity to practice individual performance skills. Emphasis is placed on exposure to performances and lectures by guest artists, faculty or students, and on personal performance(s) in class each semester. Prerequisite: None.

### **MUS 101. MUSIC APPRECIATION**

**3 cr. hrs.**

This course is designed for non-music majors and requires no previous musical experience. It is a survey course that incorporates several modes of instruction including lecture, guided listening, and similar experiences involving music. The course will cover a minimum of three (3) stylistic periods, provide a multi-cultural perspective, and include both vocal and instrumental genres. Upon completion, students should be able to demonstrate knowledge of music fundamentals, the aesthetic/stylistic characteristics of historical periods, and an aural perception of style and structure in music. Prerequisite: None.

### **MUS 110. BASIC MUSICIANSHIP**

**3 cr. hrs.**

This course is designed to provide rudimentary music knowledge and skills for the student with a limited music background. Topics include a study of notation, rhythm, scales, keys, intervals, chords and basic sight singing and ear training skills. Upon completion, students should be able to read and understand musical scores and demonstrate basic sight singing and ear training skills for rhythm, melody and harmony. Prerequisite: None. Corequisite: MUL 101.

### **MUS 111. MUSIC THEORY I**

**3 cr. hrs.**

This course introduces the student to the diatonic harmonic practices in the Common Practice Period. Topics include fundamental musical materials (rhythm, pitch, scales, intervals, diatonic harmonies) and an introduction to the principles of voice leading and harmonic progression. Upon completion, students should be able to demonstrate a basic competency

using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills. Prerequisite: MUS 110. Corequisite: MUS 113.

### **MUS 112. MUSIC THEORY II**

**3 cr. hrs.**

This course completes the study of diatonic harmonic practices in the Common Practice Period and introduces simple musical forms. Topics include principles of voice leading used in three and four part triadic harmony and diatonic seventh chords, non-chord tones, cadences, phrases and periods. Upon completion, students should be able to demonstrate competence using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills. Prerequisite: MUS 111. Corequisite: MUS 114.

### **MUS 113. MUSIC THEORY LAB I**

**1 cr. hr., Lab. 2**

This course continues the practical application of basic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, simple triads, diatonic stepwise melodies, basic rhythmic patterns in simple and compound meter and four-part triadic progressions in root position. Upon completion, students should be able to write, sing and play intervals, scales, basic rhythmic patterns, diatonic stepwise melodies, simple triads and short four-part progressions in root position. Prerequisite: MUS 110 or suitable placement score or permission of the instructor. Corequisite: MUS 111.

### **MUS 114. MUSIC THEORY LAB II**

**1 cr. hr., Lab. 2**

This course continues the practical application of diatonic musical materials through sight singing, melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, scales, diatonic melodies with triadic arpeggiations, more complex rhythmic patterns in simple and compound meter and four-part diatonic progressions in all inversions. Upon completion, students should be able to write, sing and play all intervals, rhythmic patterns employing syncopations and beat divisions, diatonic melodies and four-part diatonic progressions. Prerequisite: MUS 113. Corequisite: MUS 112.

**MUS 211. MUSIC THEORY III 3 cr. hrs.**

This course introduces the student to the chromatic harmonic practices in the Common Practice Period. Topics include secondary functions, modulatory techniques, and binary and ternary forms. Upon completion, students should be able to demonstrate competence using chromatic harmony through analysis, writing, sight singing, dictation and keyboard skills. Prerequisite: MUS 112. Corequisite: MUS 213.

**MUS 212. MUSIC THEORY IV 3 cr. hrs.**

This course completes the study of chromatic harmonic practices in the Common Practice Period and introduces the student to twentieth-century practices. Topics include the Neapolitan and augmented sixth chords, sonata form, late nineteenth-century tonal harmony and twentieth century practices and forms. Upon completion, students should be able to demonstrate competencies using chromatic harmony and basic twentieth-century techniques through analysis, writing, sight singing, dictation and keyboard skills. Prerequisite: MUS 211. Corequisite: MUS 214.

**MUS 213. MUSIC THEORY LAB III 1 cr. hr., Lab. 2**

This course provides the practical application of chromatic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include melodies with simple modulations, complex rhythms in simple and compound meter, and secondary function chords. Upon completion, students should be able to write, sing and play modulating melodies, rhythmic patterns with beat subdivisions and four-part chromatic harmony. Prerequisite: MUS 114. Corequisite: MUS 211.

**MUS 214. MUSIC THEORY LAB IV 1 cr. hr., Lab. 2**

This course provides the practical application of chromatic musical materials and simple twentieth-century practices through sight singing; melodic, harmonic and rhythmic patters in simple, compound and asymmetric meters; chromatic chords and twentieth-century harmony. Upon completion, students should be able to write, sing and play chromatic and atonal melodies, complex rhythms and meters, four-part chromatic harmony and simple twentieth-century chord structures. Prerequisite: MUS 213. Corequisite: MUS 212.

**MUS 296. DIRECTED STUDIES IN MUSIC I 1-2 cr. hrs.**

This course deals with problems and practices associated with Music and Fine Arts performance and preparation. Activities and assignments may be arranged in conjunction with other disciplines in the Fine Arts. Students may be required to participate in and/or attend musical or other fine arts activities and productions.

**MUS 297. DIRECTED STUDIES IN MUSIC II 1-2 cr. hrs.**

This course deals with problems and practices associated with Music and Fine Arts performance and preparation. Activities and assignments may be arranged in conjunction with other disciplines in the Fine Arts. Students may be required to participate in and/or attend musical or other fine arts activities and productions.

**NURSING ASSISTANT/HOME HEALTH AIDE (NAS)**

**256.840.4185 | [DMCCLELLAN@SNEAD.EDU](mailto:DMCCLELLAN@SNEAD.EDU)**

**NAS 120. FUNDAMENTALS OF NURSING ASSISTANT/  
HOME HEALTH AIDE**

**7 cr. hrs., Theory 5, Lab. 4**

This course provides the student with the necessary theory and laboratory experiences for the development of skills required to qualify as a long-term care Nursing Assistant/Home Health Aide. Emphasis is placed on the acquisition of skills in communication, observation, safety, mobility/body mechanics, personal and restorative care, and infection control necessary to care for patients and clients of all ages. Upon completion of this course, the student will be able to apply concepts and skills in areas required by the Omnibus Budget Reconciliation Act (OBRA) and the National Association of Home Care. Prerequisite: None.

**NAS 121. FUNDAMENTALS OF NURSING ASSISTANT/  
HOME HEALTH AIDE CLINICAL**

**3 cr. hrs, Clin. 9**

This course is designed for students to apply knowledge and skills needed to perform basic nursing care safely and efficiently in various supervised health care settings. Emphasis is placed on safety, therapeutic communication, infection control, critical thinking, and proper documentation. Upon completion of this course,

the student will demonstrate beginning competency in the delivery of care to patients and clients in various health care settings. Corequisite: NAS 120

## **NURSING (NUR)**

256.840.4185 | [DMCCLELLAN@SNEAD.EDU](mailto:DMCCLELLAN@SNEAD.EDU)

### **NUR 112. FUNDAMENTAL CONCEPTS OF NURSING**

**7 cr. hrs.**

This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to healthcare delivery systems, professionalism, health promotion, psychosocial well-being, functional ability, gas exchange, safety, pharmacology, and coordinator/manager of care. Prerequisites: None. Corequisites: BIO 201, MTH 100 or higher.

### **NUR 113. NURSING CONCEPTS I**

**8 cr. hrs.**

This courses teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to coordinator/manager of care, oxygenation, infection, inflammation, tissue integrity, nutrition, elimination mobility/immobility, cellular regulation, acid/base balance, and fluid/electrolyte balance. Prerequisites: NUR 112, BIO 201, MTH 100 or higher. Corequisites: BIO 202, ENG 101, PSY 210

### **NUR 114. NURSING CONCEPTS II**

**8 cr. hrs.**

This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to coordinator/manager of care, sexuality, reproduction and childbearing, infection, inflammation, sensory perception, perfusion, cellular regulation, mood disorders and affect, renal fluid/electrolyte balance, and medical emergencies. Prerequisites: NUR 113, ENG 101, BIO 202, PSY 210. Corequisites: NUR 115, SPH 106 or 107.

### **NUR 115. EVIDENCE BASED CLINICAL REASONING**

**2 cr. hrs.**

This course provides students with opportunities to collaborate with various members of the health care team in a family and community context. Students utilize

clinical reasoning to assimilate concepts within the individual, health, and nursing domains. Prerequisites: NUR 113, PSY 210, ENG 101, BIO 202. Corequisites: NUR 114, SPH 106 or 107.

### **NUR 209. CONCEPTS FOR HEALTHCARE TRANSITION**

**10 cr. hrs.**

This course focuses on application of nursing concepts to assist health care professionals to transition into the role of the registered nurse. Emphasis in this course is placed on evidence-based clinical decision making and nursing concepts provided in a family and community context for a variety of health alterations across the lifespan. Prerequisites: MTH 100 or higher, BIO 201, BIO 202, ENG 101, SPH 106 or 107, PSY 210.

### **NUR 211. ADVANCED NURSING CONCEPTS**

**7 cr. hrs.**

This course provides opportunities for students to integrate advanced nursing care concepts within a family and community context. Content includes but is not limited to manager of care for advanced concepts in safety, fluid/electrolyte balance, cellular regulation, gas exchange, psychosocial well-being, growth and development, perfusion, and medical emergencies. Prerequisites: NUR 114, NUR 115, SPH 106 or 107. Corequisites: BIO 220.

### **NUR 221. ADVANCED EVIDENCE BASED CLINICAL REASONING**

**7 cr. hrs.**

This course provides students with opportunities to demonstrate graduate competencies through didactic and preceptorship experiences necessary to transition to the profession of nursing. Content in nursing and health care domains includes management of care, professionalism, and healthcare delivery systems. Prerequisites: BIO 220, NUR 211. Corequisites: Humanities elective.

## **OFFICE ADMINISTRATION (OAD)**

256.840.4178 | [KSNYDER@SNEAD.EDU](mailto:KSNYDER@SNEAD.EDU)

### **OAD 103. INTERMEDIATE KEYBOARDING 3 cr. hrs.**

This course is designed to assist the student in increasing speed and accuracy using the touch method of keyboarding through classroom instruction and lab exercises. Emphasis is on the production of business documents such as memoranda, letters, reports, tables, and outlines from unarranged rough draft to acceptable format. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of business documents. Prerequisite: None.

### **OAD 110. COMPUTER NAVIGATION 3 cr. hrs.**

This course is designed to introduce the student to the MS Windows® environment through classroom instruction. Emphasis is on Windows as a graphical user interface and includes operations and applications that use the Windows environment. Upon completion, the student should be able to demonstrate proficiency in the operation and management of hardware and software as defined by the course syllabus. Prerequisite: None.

### **OAD 125. WORD PROCESSING 3 cr. hrs.**

This course is designed to provide the student with basic word processing skills through classroom instruction and outside lab. Emphasis is on the utilization of software features to create, edit, and print common office documents. Upon completion, the student should be able to demonstrate the ability to use industry-standard software to generate appropriately formatted, accurate, and attractive business documents such as memoranda, letters, and reports. Prerequisite: None.

### **OAD 126. ADVANCED WORD PROCESSING 3 cr. hrs.**

This course is designed to increase student proficiency in using advanced word processing functions. Emphasis is on the use of industry-standard software to maximize productivity. Upon completion, the student should be able to demonstrate the ability to generate complex documents such as forms, newsletters, and multi-page documents. Prerequisite: OAD 125.

### **OAD 134. CAREER AND PROFESSIONAL DEVELOPMENT**

**3 cr. hrs.**

This course is designed to assist the student in preparing for employment. Emphasis is on developing resumes, improving interview techniques, participating in mock interviews, setting goals, conducting job searches, and improving personal and professional image. Upon completion, the student will be able to demonstrate confidence in seeking employment. Prerequisite: None.

### **OAD 138. RECORDS AND INFORMATION MANAGEMENT**

**3 cr. hrs.**

This course is designed to give the student knowledge about managing office records and information. Emphasis is on basic filing procedures, methods, systems, supplies, equipment, and modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon completion, the student should be able to perform basic filing procedures. Prerequisite: None.

### **OAD 214. MEDICAL OFFICE PROCEDURES 3 cr. hrs.**

This course focuses on the responsibilities of professional support personnel in a medical environment. Emphasis is on medical terms, the production of appropriate forms and reports, and office procedures and practices. Upon completion, the student should be able to perform office support tasks required for employment in a medical environment. Prerequisite: None.

### **OAD 215. HEALTH INFORMATION MANAGEMENT**

**3 cr. hrs.**

This course is designed to promote an understanding of the structure, analysis, and management of medical records. Emphasis is on managing medical and insurance records, coding of diseases, operations and procedures, and the legal aspects of medical records. Upon completion, the student should be able to maintain medical records efficiently. Prerequisite: None.

### **OAD 218. OFFICE PROCEDURES**

**3 cr. hrs.**

This course is designed to develop an awareness of the responsibilities and opportunities of the office professional through classroom instruction. Emphasis is on current operating functions, practices and procedures, work habits, attitudes, oral and written communications,

and professionalism. Upon completion, the student should be able to demonstrate the ability to effectively function in an office support role. Prerequisite: None.

**OAD 230. COMPUTERIZED DESKTOP PUBLISHING**  
**3 cr. hrs.**

This course is designed to introduce the student to the elements and techniques of page design, layout, and typography through classroom instruction and lab exercises. Emphasis is on the use of current commercial desktop publishing software, graphic tools, and electronic input/output devices to design and print high-quality publications such as newsletters, brochures, catalogs, forms, and flyers. Upon completion, the student should be able to utilize proper layout and design concepts in the production of attractive desktop published documents. Prerequisite: None.

**OAD 233. TRENDS IN OFFICE TECHNOLOGY**  
**3 cr. hrs.**

This course is designed to research current trends in office technology. Emphasis is on advances in technology relevant to the office environment such as electronic mail, multimedia interaction, presentation hardware and software, and Internet use. Upon completion, the student should be able to demonstrate an awareness of current technological applications for the modern office. Prerequisite: None.

**OAD 242. OFFICE INTERNSHIP**      **3 cr. hrs., Lab. 6**

This course is designed to provide the students with an opportunity to work in an office environment. Emphasis is on the efficient and accurate performance of job tasks. Upon completion, the student should be able to demonstrate successful performance of skills required in an office support position. Prerequisite: Permission of Instructor.

**OAD 243. SPREADSHEET APPLICATIONS**      **3 cr. hrs.**

This course is designed to provide the student with a firm foundation in the use of computerized equipment and appropriate software in performing spreadsheet tasks through classroom instruction and lab exercises. Emphasis is on spreadsheet terminology and design, common formulas, and proper file and disk management

procedures. Upon completion, the student should be able to use spreadsheet features to design, format, and graph effective spreadsheets. Prerequisite: None.

**OAD 244. DATABASE APPLICATIONS**      **3 cr. hrs.**

This course is designed to provide the student with an understanding of the concepts of database management through classroom instruction and lab exercises. Emphasis is on the use of database software for business applications. Upon completion, the student should be able to create and manipulate data files and format output such as documents and reports. Prerequisite: None.

**OAD 246. OFFICE GRAPHICS AND PRESENTATIONS**  
**3 cr. hrs.**

This course is designed to provide the student with a foundation in the use of the computer and appropriate application software in the production of business slides and presentations through classroom instruction and lab exercises. Emphasis is on available software tools, presentation options and design, as well as such presentation considerations as the make-up of the target audience. Upon completion, the student should be able to demonstrate the ability to design and produce a business presentation. Prerequisite: None.

**PHILOSOPHY (PHL)**  
**256.840.4125 | JONATHAN.WATTS@SNEAD.EDU**

**PHL 106. INTRODUCTION TO PHILOSOPHY**  
**3 cr. hrs.**

This course is an introduction to the basic concepts of philosophy. The literary and conceptual approach of the course is balanced with emphasis on approaches to ethical decision making. The student should have an understanding of major philosophical ideas in a historical survey from the early Greeks to the modern era. Prerequisite: None.

**PHL 206. ETHICS AND SOCIETY**      **3 cr. hrs.**

This course involves the study of ethical issues that confront individuals in the course of their daily lives. The focus is on the fundamental questions of right and wrong, of human rights, and of conflicting obligations.

The student should be able to understand and be prepared to make decisions in life regarding ethical issues. Prerequisite: None.

## **PHYSICAL EDUCATION (PED)**

256.840.4137 | DRHODEN@SNEAD.EDU

### **PED 100. FUNDAMENTALS OF FITNESS 3 cr. hrs.**

This lecture course includes the basic principles of physical education and physical fitness. It explores psychological and physiological effects of exercise and physical fitness, including effects on the human skeleton, muscle development, respiration, and coordination. It is viewed as an introduction to such laboratory courses as gymnastics, weight training, and conditioning. The course may also include fitness evaluation, development of individual fitness programs, and participation in fitness activities. Prerequisite: None.

### **PED 103. WEIGHT TRAINING (BEGINNING)**

**1 cr. hr., Activity: 2**

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. Prerequisite: None.

### **PED 105. PERSONAL FITNESS 1 cr. hr., Activity: 2**

This course is designed to provide the student with information allowing him/her to participate in a personally developed fitness program. Topics include cardiovascular, strength, muscular endurance, flexibility and body composition. Prerequisite: None.

### **PED 118. GENERAL CONDITIONING (BEGINNING)**

**1 cr. hr., Lab 2**

This course provides an individualized approach to general conditioning utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness and conditioning programs. Upon completion, students should be able to set up and implement an individualized physical fitness and conditioning program. Prerequisite: None.

### **PED 119. GENERAL CONDITIONING (INTERMEDIATE)**

**1 cr. hr., Lab 2**

This course is an intermediate-level fitness and conditioning program 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 and conditioning program. Prerequisite: PED 118.

### **PED 123. GOLF (BEGINNING)**

**1 cr. hr., Lab 2**

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. Prerequisite: None.

### **PED 133. TENNIS (BEGINNING)**

**1 cr. hr., Activity: 2**

This course emphasized the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. Prerequisite: None.

### **PED 200. FOUNDATIONS OF PHYSICAL EDUCATION**

**3 cr. hrs.**

In this course, the history, philosophy, and objectives of health, physical education, and recreation are studied with emphasis on the physiological, sociological, and psychological values of physical education. It is required of all physical education majors. Prerequisite: None.

### **PED 227. ANGLING**

**1 cr. hr., Lab 2**

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 ballcaster and spinning reels and identify the various types of artificial lures. Prerequisite: None.

### **PED 251. VARSITY BASKETBALL**

**1 cr. hr., Activity: 2**

This course covers advanced fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in competitive basketball. Prerequisite: Permission of instructor.

**PED 252. VARSITY BASEBALL 1 cr. hr., Activity: 2**

This course covers advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. Prerequisite: Permission of instructor.

**PED 254. VARSITY SOFTBALL 1 cr. hr., Activity: 2**

This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to play competitive softball. Prerequisite: Permission of instructor.

**PED 255. VARSITY TENNIS 1 cr. hr., Activity: 2**

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. Prerequisite: Permission of instructor.

**PED 258. VARSITY VOLLEYBALL 1 cr. hr., Activity: 2**

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. Prerequisite: Permission of instructor.

**PHYSICAL SCIENCE (PHS)**

256.840.4137 | DRHODEN@SNEAD.EDU

**PHS 111. PHYSICAL SCIENCE I 4 cr. hrs., Lec. 3, Lab. 2**

This course provides the non-technical student with an introduction to the basic principles of geology, oceanography, meteorology, and astronomy. Laboratory is required. Prerequisite: MTH 091.

**PHS 112. PHYSICAL SCIENCE II**

**4 cr. hrs., Lec. 3, Lab. 2**

This course provides the non-technical student with an instruction to the basic principles of chemistry and physics. Laboratory is required. Prerequisite: MTH 091.

**PHS 230. INTRODUCTION TO METEOROLOGY**

**4 cr. hrs., Lec. 3, Lab. 2**

This course is an introductory survey of meteorology emphasizing the hydrologic cycle, cloud formation, weather maps, forecasting, and wind systems. Local weather systems will be given detailed study. Laboratory is required. Prerequisite: None.

**PHYSICS (PHY)**

256.840.4137 | DRHODEN@SNEAD.EDU

**PHY 115. TECHNICAL PHYSICS**

**4 cr. hrs., Lec. 3, Lab. 2**

Technical physics is an algebra based physics course designed to utilize modular concepts to include motion, forces, torque, work energy, heat wave/sound, and electricity. Results of physics education research and physics applications in the workplace are used to improve the student's understanding of physics in technical areas. Upon completion, students will be able to define motion and describe specific module concepts; utilize microcomputers to generate motion diagrams; understand the nature of contact forces and distinguish passive forces; work cooperatively to set-up laboratory exercises; and demonstrate applications of module-specific concepts. Prerequisite: MTH 100.

**PHY 201. GENERAL PHYSICS I - TRIG BASED**

**4 cr. hrs., Lec. 3, Lab. 2**

This course is designed to cover general physics at a level that assures previous exposure to college algebra and basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. A laboratory is required. Prerequisite: MTH 113 or equivalent.

**PHY 202. GENERAL PHYSICS II - TRIG BASED**

**4 cr. hrs., Lec. 3, Lab. 2**

This course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave motion, sound, light optics, electrostatics, circuits, magnetism, and modern physics. Laboratory is required. Prerequisite: PHY 201.

**PHY 213. GENERAL PHYSICS WITH CAL I****4 cr. hrs., Lec. 3, Lab. 2**

This course provides a calculus-based treatment of the principle subdivisions of classical physics: mechanics and energy. Laboratory is required. Prerequisite: MTH 125.

**PHY 214. GENERAL PHYSICS WITH CAL II****4 cr. hrs., Lec. 3, Lab. 2**

This course provides a calculus-based study in classical physics. Topics included are: simple harmonic motion, waves, sound, light, optics, electricity and magnetism. Laboratory is required. Prerequisite: PHY 213.

**POLITICAL SCIENCE (POL)****256.840.4193 | KWATTS@SNEAD.EDU****POL 200. INTRODUCTION TO POLITICAL SCIENCE****3 cr. hrs.**

This course is an introduction to the field of political science through examination of the fundamental principles, concepts, and methods of the discipline and the basic political processes and Colleges of organized political systems. Topics include approaches to political science, research methodology, the state, government, law, ideology, organized political influences, government bureaucracy, problems in political democracy, and international politics. Upon completion, students should be able to identify, describe, define, analyze, and explain relationships among the basic principles and concepts of political science and political processes and Colleges of contemporary political systems. Prerequisite: None.

**POL 211. AMERICAN NATIONAL GOVERNMENT****3 cr. hrs.**

This course surveys the background, constitutional principles, organization, and operation of the American political system. Topics include the U.S. Constitution, federalism, civil liberties, civil rights, political parties, interest groups, political campaigns, voting behavior, elections, the presidency, bureaucracy, Congress, and the justice system. Upon completion, students should be able to identify and explain relationships among the basic elements of American government and function as more informed participants of the American political system. Prerequisite: None.

**POL 220. STATE AND LOCAL GOVERNMENT****3 cr. hrs.**

This course is a study of the forms of organization, functions, Colleges, and operation of American state and local governments. Emphasis is placed on the variety of forms and functions of state and local governments, with particular attention to those in Alabama and to the interactions between state and local government and the national government. Upon completion, students should be able to identify elements of and explain relationships among the state, local, and national governments of the U.S. and function as more informed participants of state and local political systems. Prerequisite: None.

**PSYCHOLOGY****256.840.4193 | KWATTS@SNEAD.EDU****PSY 200. GENERAL PSYCHOLOGY****3 cr. hrs.**

This course is a survey of behavior with emphasis upon psychological processes. This course includes the biological bases for behavior, thinking, emotion, and motivation, and the nature and development of personality. Prerequisite: None.

**PSY 210. HUMAN GROWTH AND DEVELOPMENT****3 cr. hrs.**

This course is the study of psychological, social, and physical factors that affect human behavior from conception to death. Prerequisite: PSY 200.

**RELIGION (REL)****256.840.4125 | JONATHAN.WATTS@SNEAD.EDU****REL 100. HISTORY OF WORLD RELIGIONS****3 cr. hrs.**

This course is designed to acquaint the student with the beliefs and practices of the major contemporary religions of the world. This includes religions of Africa, the Orient, and the western world. The student should have an understanding of the history and origins of the various religions of the world. Prerequisite: None.

**REL 108. INTRODUCTION TO PREACHING  
MINISTRY**

**3 cr. hrs.**

This course is a study of the meaning of preaching, the importance of the sermon. Included in the course is an introduction to the textual and topical resources for sermons. The student should understand and be able to prepare sermons. Prerequisite: None.

**REL 151. SURVEY OF THE OLD TESTAMENT**

**3 cr. hrs.**

This course is an introduction to the content of the Old Testament with emphasis on the historical context and contemporary theological and cultural significance of the Old Testament. The student should have an understanding of the significance of the Old Testament writings upon completion of this course. Prerequisite: None.

**REL 152. SURVEY OF THE NEW TESTAMENT**

**3 cr. hrs.**

This course is a survey of the books of the New Testament with special attention focused on the historical and geographical setting. The student should have an understanding of the books of the New Testament and the cultural and historical events associated with these writings. Prerequisite: None.

**SOCIOLOGY (SOC)**

**256.840.4193 | KWATTS@SNEAD.EDU**

**SOC 200. INTRODUCTION TO SOCIOLOGY**

**3 cr. hrs.**

This course is an introduction to the vocabulary, concepts, and theory of sociological perspectives of human behavior. Prerequisite: None.

**SOC 210. SOCIAL PROBLEMS**

**3 cr. hrs.**

This course examines the social and cultural aspects, influences, incidences and characteristics of current social problems in light of sociological theory and research. Prerequisite: SOC 200.

**SPANISH (SPA)**

**256.840.4133 | CDENHAM@SNEAD.EDU**

**SPA 101. INTRODUCTORY SPANISH I**

**4 cr. hrs.**

This course provides an introduction to Spanish. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas. Prerequisite: None.

**SPA 102. INTRODUCTORY SPANISH II**

**4 cr. hrs.**

This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas. Prerequisite: SPA 101 or equivalent.

**SPA 201. INTERMEDIATE SPANISH I**

**3 cr. hrs.**

This course includes a review and further development of communication skills. Topics include reading of literary, historical, and/or cultural texts. Prerequisite: SPA 102 or equivalent.

**SPA 202. INTERMEDIATE SPANISH II**

**3 cr. hrs.**

This continuation course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts. Prerequisite: SPA 201 or equivalent.

**SPEECH COMMUNICATION (SPH)**

**256.840.4125 | JONATHAN.WATTS@SNEAD.EDU**

**SPH 106. FUNDAMENTALS OF ORAL  
COMMUNICATION**

**3 cr. hrs.**

Fundamentals of Oral Communication is a performance course that includes the principles of human communication: intrapersonal, interpersonal, and public. It surveys current communication theory and provides practical application. Prerequisite: None.

**SPH 107. FUNDAMENTALS OF PUBLIC SPEAKING**

**3 cr. hrs.**

This course explores principles of audience and environment analysis as well as the actual planning, rehearsing and presenting of formal speeches to specific audiences. Historical foundations, communication theories and student performance are emphasized. Prerequisite: None.

## **THEATER ARTS**

**256.840.4125** | *JONATHAN.WATTS@SNEAD.EDU*

### **THR 120. THEATER APPRECIATION            3 cr. hrs.**

This course is designed to increase appreciation of contemporary theater. Emphasis is given to the theater as an art form through the study of history and theory of drama and the contributions of modern media. Importance of playwright, actor, director, designer and technician to modern media is emphasized. Attendance at theater productions may be required. Prerequisite: None.

## **WORKPLACE SKILLS (WKO)**

**256.840.4166** | *GRANDALL@SNEAD.EDU*

### **WKO 106. WORKPLACE SKILLS            3 cr. hrs.**

This course is an overview of issues relevant to the general workforce. The course is designed to enhance students' communication, lifelong learning, interpersonal, and decision-making skills in preparation for employment.