



NORTH CENTRAL TEXAS COLLEGE

Course Descriptions

ACCOUNTING

ACNT1303 INTRODUCTION TO ACCOUNTING I

48 lecture hours 3 credit hours
 A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations and payroll.

ACNT1304 INTRODUCTION TO ACCOUNTING II

Prerequisite: ACNT1303
 48 lecture hours 3 credit hours
 A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment and valuation of inventories in a manual and computerized environment. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent.

ACNT1313 COMPUTERIZED ACCOUNTING APPLICATIONS

48 lecture hours 3 credit hours
Prerequisite: ACNT 1303
 A study of utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a spreadsheet and/or data base package/program.

ACNT1329 PAYROLL & BUSINESS TAX ACCOUNTING

48 lecture hours 3 credit hours
Prerequisite: ACNT 1303
 A study of payroll procedures, tax entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent.

ACNT1391 SPECIAL TOPICS IN ACCOUNTING (INTERNATIONAL ACCOUNTING)

Prerequisite: ACNT 1303
 48 hour lecture hours 3 credit hours
 Topics address recently identified current events, skills, knowledge and/or attitudes and behavior pertinent to the technology or occupation and relevant to the professional development of the student. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent.

5203015125
ACCT2301 PRINCIPLES OF ACCOUNTING I

48 lecture hours 3 credit hours
 Fundamentals of financial accounting concepts and interpretation of accounting data; analysis of financial statements; income and cash flow analysis; nature of assets, liabilities and equities; understanding and use of the accounting process. Course will include computer applications. Recommended prerequisite: MATH1314 and COSC1400 or equivalent.

5203015125
ACCT2302 PRINCIPLES OF ACCOUNTING II

Prerequisite: ACCT2301
 48 lecture hours 3 credit hours
 Managerial use of accounting information; terminology, activity and cost behavior; use of accounting information for pricing; product and investment decisions, budgeting and quality control. Course will include computer applications. Recommended prerequisite: MATH1314 and COSC1400 or equivalent. Required prerequisite: ACCT2301.

ACNT2309 COST ACCOUNTING

48 lecture hours 3 credit hours
 A study of budgeting and cost control systems including a detailed study of manufacturing cost accounts and reports, job order costing, and process costing. Includes introduction to alternative costing methods such as activity-based and just-in-time costing. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent. Required prerequisite: ACNT1303.

ACNT2330 GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING

Prerequisite: ACNT1303
 48 lecture hours 3 credit hours
 Basic concepts and techniques of fund accounting, financial reporting for governmental and not-for-profit entities. Accounting cycle for funds and account groups. Governmental and not-for-profit financial statements. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent.

ACNT2331 INTERNAL CONTROL AND AUDITING

48 lecture hours 3 credit hours
 A study of internal control and auditing standards and processing used by internal auditors, managers, and independent public accountants. Course may include computer applications. Recommended prerequisite: COSC1400 or equivalent. Required prerequisite: ACNT1303.

AGRICULTURE

0101035221
AGRI1131 THE AGRICULTURE INDUSTRY

16 lecture hours 1 credit hour
 Insights into agriculture curricula from standpoint of professional and managerial careers in agriculture; survey of field of agriculture and vocational guidance. Recommended for all freshman agriculture majors.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

0101015121

AGRI1309 COMPUTERS IN AGRICULTURE

32 lecture hours + 32 laboratory hours 3 credit hours

Computer technology applied to management, record keeping, and agribusiness. Emphasis on the application of database, spreadsheets, and other business software used in various agricultural environments.

0202065121

AGRI1311 DAIRY SCIENCE

32 lecture hours + 32 laboratory hours 3 credit hours

A survey of dairy industry: dairy breeds, standards for selection and culling, herd replacements, feeding, management and health maintenance. Food value of milk, tests for composition and quality utilization and processing of market milk and dairy products.

0101025121

AGRI1325 MARKETING OF AGRICULTURE PRODUCTS

48 lecture hours 3 credit hours

General introductory course covering operations involved in movement of agricultural commodities from farmer to consumer. Essential marketing functions of buying, selling, transportation, storage, financing, standardization, pricing and risk bearing.

0202095121

AGRI1327 POULTRY SCIENCE

32 lecture hours + 32 laboratory hours 3 credit hours

A general course in poultry including type of breeds, poultry houses and construction, breeding, feeding, incubation and brooding, marketing, culling, diseases and insects.

0204025121

AGRI1407 AGRONOMY

48 lecture hours + 32 laboratory hours 4 credit hours

An introduction to the agronomic aspects of basic agriculture for beginning students. This course includes: background, objectives and opportunities in agronomy; classification, judging and identification of crops and weeds; introduction to soils, crop production factors and crop production hazards.

0106015121

AGRI1415 HORTICULTURE

48 lecture hours + 32 laboratory hours 4 credit hours

Principles of propagating plants, including vegetables, ornamentals and fruits. Methods of handling seed; starting plants by the use of cuttings, layers, buds, grafts and bulbs; ways of propagating specific plants; factors influencing growth of plants after transplanting. Topics such as sites, soils, fertilizers and varieties will be covered.

0202015121

AGRI1419 ANIMAL SCIENCE

48 lecture hours + 32 laboratory hours 4 credit hours

An introductory course designed to acquaint the students with the importance of the livestock industry. A study of the types and breeds; market classes and grades of such animals as beef cattle, swine, goats, horses and sheep; attention in breeding, judging, care and management.

0202015521

AGRI2221 LIVESTOCK JUDGING

16 lecture hours + 32 laboratory hours 2 credit hours

Instruction in selection, evaluating, and judging of beef cattle, dairy cattle, sheep, swine, and horses. The course will include the judging of classes of breeding and market animals with written and oral reasons. May be repeated for credit with permission of instructor.

0102045121

AGRI2301 FARM SHOP

16 lecture hours + 64 laboratory hours 3 credit hours

Fundamental skills needed for teaching farm shop in the high school. Includes selection and care of tools, welding and wood working procedures.

0101035121

AGRI2317 AGRICULTURAL ECONOMICS

48 lecture hours 3 credit hours

The field of agricultural economics and its relationship to other sciences. The characteristics of economic system and basic economic concept. Survey of the farm and ranch firm and its organization and management; structure and operation of the marketing system; functional and institutional aspects of agricultural finance; governmental policies and programs related to agriculture.

0306015121

AGRI2330 WILDLIFE CONSERVATION & MANAGEMENT

32 lecture hours + 32 laboratory hours 3 credit hours

Introduction to the wildlife and fishery resources of the United States with special reference to those species occurring in North Texas. Emphasis will be placed upon the need for conservation and methods for the rehabilitation, maintenance and increase of local wildlife species.

ART

5007035130

ARTS1301 ART APPRECIATION

48 lecture hours 3 credit hours

A course open to all students directed toward understanding the elements and principles of art as applied to the visual arts: painting, sculpture and architecture as well as printmaking, ceramics, metal work and weaving.

5007035230

ARTS1303 ART HISTORY I

48 lecture hours 3 credit hours

A critical and analytical study of the great historical works of art in architecture, sculpture, painting, and minor arts from the prehistoric times to the Renaissance.

5007035230

ARTS1304 ART HISTORY II

48 lecture hours 3 credit hours

Survey of the history of art from Renaissance to the present. Special consideration is given to the form and content of a work of art, as well as the social and cultural context in which the work is created.

5004015330

ARTS1311 DESIGN I

32 lecture hours + 64 laboratory hours 3 credit hours

A basic course in the theory and practice of design including fundamentals of line, form, space, texture and color with emphasis on two-dimensional form.

5004015330

ARTS1312 DESIGN II

32 lecture hours + 64 laboratory hours 3 credit hours

A continuation of ARTS1311 with emphasis on three-dimensional design.

Continued On Next Page

5007055230
ARTS1316 DRAWING I
 32 lecture hours + 64 laboratory hours 3 credit hours
 A beginning course using a variety of media and techniques exploring the descriptive and expressive possibilities of drawing objects and the environment.

5007055230
ARTS1317 DRAWING II
 32 lecture hours + 64 laboratory hours 3 credit hours
 Expansion of ARTS1316 stressing greater facility in materials and techniques and an increase of graphic skills by means of line, full value, and creative studies.

5007085230
ARTS2316 PAINTING I
 32 lecture hours + 64 laboratory hours 3 credit hours
 An introduction to the techniques of various mediums in painting. Exploring and dealing with the problems encountered in color and pictorial composition.

5007085230
ARTS2317 PAINTING II
 32 lecture hours + 64 laboratory hours 3 credit hours
 A continuation of ARTS2316.

5007095130
ARTS2326 SCULPTURE I
 32 lecture hours + 64 laboratory hours 3 credit hours
 An exploration of various sculptural approaches in a variety of media including additive and subtractive techniques.

5007095130
ARTS2327 SCULPTURE II
 32 lecture hours + 64 laboratory hours 3 credit hours
 A continuation of ARTS2326.

5007135130
ARTS2341 JEWELRY & METALWORKING I
 32 lecture hours + 64 laboratory hours 3 credit hours
 Design, construction and forming of metals and various materials using basic techniques.

5007135130
ARTS2342 JEWELRY & METALWORKING II
 32 lecture hours + 64 laboratory hours 3 credit hours
 Design in metal, using basic and advanced process.

5007115130
ARTS2346 CERAMICS I (POTTERY)
 32 lecture hours + 64 laboratory hours 3 credit hours
 Pottery construction using coil and slab methods and use of the potter's wheel, compounding of glazes, glazing and firing.

5007115130
ARTS2347 CERAMICS II (POTTERY)
 32 lecture hours + 64 laboratory hours 3 credit hours
 Continuation of ARTS2346 with opportunity to specialize in one area.

5007085330
ARTS2366 WATERCOLOR PAINTING I
 32 lecture hours + 64 laboratory hours 3 credit hours
 Development of painting skills, techniques, and aesthetic sensibilities to artistic expression in watercolor medium.

ARTS2367 WATERCOLOR PAINTING II
 32 lecture hours + 64 laboratory hours 3 credit hours
 Continuation of Arts 2366

GRAPH1357 DIGITAL IMAGING II
Instructor approval required
 32 lecture hours + 32 laboratory hours 3 credit hours
 An in-depth investigation of digital imaging on the computer using imaging editing and/or image creation software. Manipulation, creation, and editing of digital images. Topics include: image capture, high-end work stations, image bit-depth, interaction with service bureaus and printing industries.

GRAPH1359 OBJECT ORIENTED COMPUTER GRAPHICS
Instructor approval required
 32 lecture hours + 32 laboratory hours 3 credit hours
 Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use of the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included.

BIOLOGY

1905025133
BIOL1322 BASIC NUTRITION
 48 lecture hours 3 credit hours
 A study of the basic principles of nutrition in health and disease. The course is designed to develop a good background in the science of nutrition that can be used as a basis for decisions in the dietary planning for health and disease, provide for the acquisition of practical knowledge concerning selection of foods according to nutritive values, and provide the ability to apply techniques of education and dietary counseling so that the principles of normal and therapeutic nutrition can be interpreted to the layman.

2601015124
BIOL1408 GENERAL BIOLOGY
 48 lecture hours + 48 laboratory hours 4 credit hours
 A survey of key concepts including biological chemistry, cell structure and function, genetics, evolution and ecology. An overview of the plants and animals is included with special emphasis given to the morphology and physiology of man. The course includes the dissecting of fetal pigs. For non-science majors.

2603015124
BIOL1411 GENERAL BOTANY
 48 lecture hours + 48 laboratory hours 4 credit hours
 Fundamental structures and functions of plants with emphasis on their levels of organization. Physiology of seed plants with emphasis on photosynthesis, respiration, nutrition, reproduction and identification. Environmental features, agricultural and industrial importance and phylogenetic sequence included.

2607015324
BIOL1413 GENERAL ZOOLOGY
 48 lecture hours + 48 laboratory hours 4 credit hours
 A study of representatives of the animal kingdom with special consideration devoted to cytology, morphology, physiology and ecology of the organism. The course includes the dissecting of an assortment of animals. Laboratory and lecture are correlated for a more comprehensive understanding of the phylogenetic relationship within the animal kingdom.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

2606135124

BIOL2316 GENETICS

48 lecture hours 3 credit hours

Emphasis is given to human genetics and health concerns in this study of gene action and inheritance. An overview of population studies and basic inheritance principles is included.

2607065124

BIOL2401 HUMAN ANATOMY AND PHYSIOLOGY I

Prerequisite: It is highly recommended that the student complete BIOL1408, CHEM1413, and a course in medical terminology prior to enrolling in BIOL2401.

48 lecture hours + 32 laboratory hours 4 credit hours

A study of the structure and function of the body and its relationship to health and disease. Designed to meet requirements of physical education and nursing education majors. Laboratory experience includes experiments in vertebrate physiology and the dissection of a mammal.

2607065124

BIOL2402 HUMAN ANATOMY AND PHYSIOLOGY II

Prerequisite: BIOL2401

48 lecture hours + 32 laboratory hours 4 credit hours

A continuation of BIOL2401.

0301025124

BIOL2406 ENVIRONMENTAL BIOLOGY

48 lecture hours + 32 laboratory hours 4 credit hours

An introduction to basic ecological principles and techniques. Aquatic and terrestrial communities will be studied with emphasis upon biotic interrelationships and the effects of pollution upon various biotic communities. The laboratory will combine experimental studies with field investigations.

2605015124

BIOL2420 MICROBIOLOGY

Prerequisite: BIOL1408 OR BIOL2401

48 lecture hours + 32 laboratory hours 4 credit hours

A study of the morphology, physiology and taxonomy of microorganisms. Special emphasis is placed upon the human immune system. Laboratory includes the fundamental procedures of sterilizations, cultures and identification of common bacteria.

BUSINESS & BUSINESS MANAGEMENT

201015125

BMGT1303 PRINCIPLES OF MANAGEMENT

48 lecture hours 3 credit hours

Concepts, terminology, principles, theory, and issues that are the substance of the practice of management.

BMGT1307 HIGH PERFORMANCE WORK TEAMS

48 lecture hours 3 credit hours

Basic principles of building and sustaining teams in organizations including team dynamics and process involvement.

BMGT2303 PROBLEM SOLVING AND DECISION MAKING

48 lecture hours 3 credit hours

Decision making and problem solving processes in organizations, utilizing logical and creative problem solving techniques. Application of theory is provided by experimental activities such as small group discussions, case studies, and the use of other managerial decision aids.

BUSG1301 INTRODUCTION TO BUSINESS

48 lecture hours 3 credit hours

Fundamental business principles including structure, functions, resources, and operational processes.

BUSG1304 PERSONAL FINANCE

48 lecture hours 3 credit hours

The course will present a study of the financial problems encountered in managing family and business financial affairs. Topics include financial security for the family, budgeting, use of credit, home ownership, financial tangles, and savings and investment planning.

BMGT1391 SPECIAL TOPICS IN BUSINESS ADMINISTRATION AND MANAGEMENT

48 lecture hours 3 credit hours

Topics address recently identified current events, skills, knowledge and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

BUSG2280 COOPERATIVE EDUCATION – BUSINESS, GENERAL

16 lecture hours + 112 laboratory hours 2 credit hours

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be related if topics and learning outcomes vary.

BUSG2305 BUSINESS LAW/CONTRACTS

48 lecture hours 3 credit hours

Principles of law which form the legal framework for business activity including applicable statutes, contracts, and agency.

BUSG2307 LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS

48 lecture hours 3 credit hours

The role of law in business and society including government regulations of business, legal reasoning, sources of law, social policy, legal institutions, antitrust, security regulations, consumer protection, environmental laws, worker health and safety, employment discrimination, and other laws affecting business.

BMGT2309 LEADERSHIP

48 lecture hours 3 credit hours

Concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to inspire and influence.

HRPO1301 CUSTOMER RELATIONS

48 lecture hours 3 credit hours

Topics address general principles of customer service including skills, knowledge, attitudes, and behaviors pertinent to the professional development of the student.

HRPO2301 HUMAN RESOURCE MANAGEMENT

48 lecture hours 3 credit hours

Behavioral and legal approaches to the management of human resources in organizations.

HRPO2307 ORGANIZATIONAL BEHAVIOR

48 lecture hours 3 credit hours

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts and the integration of interdisciplinary concepts from the behavioral sciences.

Continued On Next Page

IBUS1305 INTRODUCTION TO INTERNATIONAL BUSINESS AND TRADE

48 lecture hours 3 credit hours

The course is designed for the business student to explore the techniques for entering the international marketplace. Emphasis will be placed on the impact and dynamics of socio-cultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise.

MRKG1311 PRINCIPLES OF MARKETING

48 lecture hours 3 credit hours

Introduction to basic marketing functions; identification of consumer and organizational needs; explanation of economic, psychological, sociological, and global issues; and description and analysis of the importance of marketing research.

POFT2312 BUSINESS CORRESPONDENCE & COMMUNICATION

48 lecture hours 3 credit hours

Emphasis is on the development of presentation skills and writing skills to produce effective business documents.

CHEMISTRY

4005015239

CHEM1411 GENERAL CHEMISTRY I

Prerequisite: Two years of high school algebra or concurrent enrollment in MATH1314 or consent of instructor

48 lecture hours + 48 laboratory hours 4 credit hours

A survey of basic chemical concepts, theories and practices; fundamental laws, periodic table, valence, stoichiometry, states of matter, oxidation and reduction.

4005015239

CHEM1412 GENERAL CHEMISTRY II

Prerequisite: CHEM1411

48 lecture hours + 48 laboratory hours 4 credit hours

A continuation of CHEM1411. Kinetics, thermodynamics, electrochemistry, acids and bases, chemical families, nuclear chemistry and introduction to organic chemistry.

4001015139

CHEM1413 CHEMISTRY FOR THE HEALTH SCIENCES

48 lecture hours + 48 laboratory hours 4 credit hours

The course is designed for nursing students and others who plan careers in health-related fields. Topics in inorganic, organic and biological chemistry, including basic chemical concepts and theories, nomenclature and reactions of organic compounds, and introduction to the chemistry of carbohydrates, lipids, proteins, nucleic acids and metabolism.

4005045239

CHEM2423 ORGANIC CHEMISTRY I

Prerequisite: CHEM1412 or consent of instructor

48 lecture hours + 48 laboratory hours 4 credit hours

An introduction to the chemistry of carbon compounds: nomenclature, functional groups, structure and spectroscopy, reaction mechanisms, radicals, kinetics and thermodynamics.

4005045239

CHEM2425 ORGANIC CHEMISTRY II

Prerequisite: CHEM2423

48 lecture hours + 48 laboratory hours 4 credit hours

A continuation of CHEM2423. Aromatic systems, electrophilic and nucleophilic substitution, carboxylic acids and derivatives, amines and sulfides, reactive intermediates, carbonyl compounds and enolates, heterocyclic and biochemical compounds.

COMPUTER INFORMATION SYSTEMS & TECHNOLOGY

ITSC1313 INTERNET/WEB PAGE DEVELOPMENT

32 lecture hours + 32 laboratory hours 3 credit hours

Instruction in the use of Internet services and the fundamentals of web page design and web site development.

ITSC1392 MANAGING A MICROSOFT 2000 NETWORK

32 lecture hours + 32 lab hours 3 credit hours

The focus of this course is on covering the skills needed to administer, support, and troubleshoot information systems that incorporate Microsoft Windows 2000 in an enterprise network.

ITSC1325 PERSONAL COMPUTER HARDWARE

32 lecture hours + 32 lab hours 3 credit hours

A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting.

ITSC2302 INTERMEDIATE WEB PROGRAMMING

32 lecture hours + 32 lab hours 3 credit hours

Intermediate applications for web authoring. Topics may include server side includes (SSI), Perl, HTML, Java, JavaScript and/or ASP.

ITSC1342 INFORMATION TECHNOLOGY SECURITY

32 lecture hours + 32 lab hours 3 credit hours

Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.

ITSC1333 MICROSOFT NETWORKING ESSENTIALS

32 lecture hours + 32 lab hours 3 credit hours

Instruction in networking essential concepts including the OSI reference model, network protocols, transmission media, and networking hardware and software.

ITSC1354 IMPLEMENTING AND SUPPORTING SERVERS

32 lecture hours + 32 lab hours 3 credit hours

A course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows Based Servers in a networked computing environment.

ITSC1392 SPECIAL TOPICS IN DATA PROCESSING AND DATA PROCESSING TECHNOLOGY/TECHNICIAN

32 lecture hours + 32 lab hours 3 credit hours

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

ITSC2280 COOPERATIVE EDUCATION

16 lecture hours + 112 laboratory hours 2 credit hours
Career related activities encountered in the student's area of specialization are offered through an individual agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

ITSE1302 COMPUTER PROGRAMMING

32 lecture hours + 32 lab hours Credit hours
An Introduction to computer programming using Visual BASIC, and/or Java, and/or C++. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files

ITSC1305 INTRODUCTION TO PC OPERATING SYSTEMS

32 lecture hours + 32 lab hours 3 credit hours
A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and demonstrate the use of utilities.

ITSE2313 WEB AUTHORING

32 lecture hours + 32 laboratory hours 3 credit hours
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools.

ITSE2317 JAVA PROGRAMMING

32 lecture hours + 32 laboratory hours 3 credit hours
Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets.

ITSW 1310 INTRODUCTION TO PRESENTATION GRAPHICS SOFTWARE

Prerequisite: Departmental permission.

32 lecture hours + 32 laboratory hours 3 credit hours
Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development.

ITSW2337 ADVANCED DATABASE

Prerequisite: Departmental permission.

32 lecture hours + 32 laboratory hours 3 credit hours
Designed to provide an understanding of advanced functionality of databases.

ITNW1392 IMPLEMENTING MICROSOFT WINDOWS PROFESSIONAL AND SERVER

32 lecture hours + 32 lab hours 3 credit hours
In-depth coverage of the knowledge and skills necessary to install and configure Microsoft Windows on stand-alone computers and on client computers that are part of a workgroup or domain, and the skills and knowledge necessary to install and configure Windows Server to create file, print, and servers.

ITNW1337 INTRODUCTION TO THE INTERNET

32 lecture hours + 32 laboratory hours 3 credit hours
Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet.

ITCC1402 CCNA 1: NETWORKING BASICS

48 lecture hours + 32 laboratory hours 4 credit hours
A course introducing the basics of networking including network terminology, local area networks (LAN) and wide area networks (WAN). Topics include network protocols such as TCP/IP, Open System Interconnection (OSI) models, cabling and routers.

ITCC1406 CCNA 2: ROUTER AND ROUTING BASICS

48 lecture hours + 32 laboratory hours 4 credit hours
Introduction to basic Cisco router configuration. Topics include initial router configuration for TCP/IP, management of Cisco IOS and router configuration files, routing protocols, and access control lists.

ITCC1442 CCNA 3: SWITCHING BASIC AND INTERMEDIATE ROUTING

48 lecture hours + 32 laboratory hours 4 credit hours
An course focusing on advanced topics including IP addressing techniques intermediate routing protocols, CLI configuration of switches, Ethernet switching, VLANs, Spanning Tree Protocols, and VLAN Trunking Protocol.

ITCC1446 CCNA 4: WAN TECHNOLOGIES

48 lecture hours + 32 laboratory hours 4 credit hours
This course focuses on advanced IP addressing techniques (Network Address Translation [NAT], Port Address Translation [PAT], and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management and introduction to optical networking. In addition, the student will prepare for the CCNA exam.

ITSC2335 APPLICATION PROBLEM SOLVING

Prerequisites: ITSW2331, ITSW2334, ITSW2337 or departmental permission.

32 lecture hours + 32 laboratory hours 3 credit hours
Utilization of current application software to solve advanced problems and generate customized solutions, involving project and software specific to a specific curricular area.

COMPUTER SCIENCE

1101015227

COSC1400 INTRODUCTION TO COMPUTERS

Prerequisite: High school algebra, geometry, OR business mathematics

48 lecture hours + 32 laboratory hours 4 credit hours
An introductory course covering the effect of computers on society, the history and use of computers, computer applications, number systems, logical operation and organization of a computer, programming concepts and hardware and software terminology. This course may not be applied towards a computer science major or minor.

COSC1436 PROGRAMMING FUNDAMENTALS I

Prerequisite: COSC1400 or department exam

48 lecture hours + 32 laboratory hours 4 credit hours
Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing and debugging. This course assumes computer literacy.

COSC1437 PROGRAMMING FUNDAMENTALS II

Prerequisite: COSC1436

48 lecture hours + 32 laboratory hours 4 credit hours
Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering.

Continued On Next Page

COSC2436 PROGRAMMING FUNDAMENTALS III
Prerequisite: COSC1437
 48 lecture hours + 32 laboratory hours 4 credit hours
 Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs) and algorithmic analysis.

COSC2425 COMPUTER ORGANIZATION AND MACHINE LANGUAGE
Prerequisite: COSC1436
 48 lecture hours + 32 laboratory hours 4 credit hours
 Basic computer organization; machine cycle, digital representation of data and instructions; assembly language programming, assembler, loader, macros, subroutines and program linkages.

COSMETOLOGY

CSME1401 ORIENTATION TO COSMETOLOGY
 32 lecture hours + 128 laboratory hours 4 credit hours
 An overview of the skills and knowledge necessary for the field of cosmetology.

CSME1405 FUNDAMENTALS OF COSMETOLOGY
 32 lecture hours + 128 laboratory hours 4 credit hours
 A course in the basic fundamentals of cosmetology. Topics include service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, comb out, and salon management.

CSME1410 INTRODUCTION TO HAIRCUTTING AND RELATED THEORY
 32 lecture hours + 128 laboratory hours 4 credit hours
 Introduction to the theory and practice of hair cutting. Topics include terminology, implements, section haircutting and finishing techniques.

CSME1451 ARTISTRY OF HAIR, THEORY AND PRACTICE
 16 lecture hours + 144 laboratory hours 4 credit hours
 Instruction in the artistry of hair design. Topics include theory, techniques, and application of hair design.

CSME1453 CHEMICAL REFORMATION AND RELATED THEORY
 32 lecture hours + 128 laboratory hours 4 credit hours
 Presentation of the theory and practice of chemical reformation. Topics include terminology, application, and workplace competencies related to chemical reformation.

CSME1534 COSMETOLOGY INSTRUCTOR I
 32 lecture hours + 144 laboratory hours 5 credit hours
 The fundamentals of instruction of cosmetology students.

CSME1535 ORIENTATION TO THE INSTRUCTION OF COSMETOLOGY
 32 lecture hours + 144 laboratory hours 5 credit hours
 An overview of the skills and knowledge necessary for the instruction of cosmetology students.

CSME2401 THE PRINCIPLES OF HAIR COLORING AND RELATED THEORY
 16 lecture hours + 144 laboratory hours 4 credit hours
 Presentation of the theory and practice of hair color and chemistry. Topics include terminology, application, and workplace competencies related to hair color and chemistry.

CSME2514 COSMETOLOGY INSTRUCTOR II
 32 lecture hours + 144 laboratory hours 5 credit hours
 A continuation of the fundamentals of instruction of cosmetology students.

CSME2415 COSMETOLOGY III
 48 lecture hours + 32 laboratory hours 4 credit hours
 Presentation of assignments and evaluation techniques for a cosmetology program.

CSME2545 INSTRUCTIONAL THEORY AND CLINIC OPERATION
 32 lecture hours + 144 laboratory hours 5 credit hours
 An overview of the objectives required by the Texas Cosmetology Commission Instructor Examination.

CSME2237 ADVANCED COSMETOLOGY TECHNIQUES
 16 lecture hours + 64 laboratory hours 2 credit hours
 Mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies.

CSME2410 INTERMEDIATE HAIRCUTTING AND RELATED THEORY
 16 lecture hours + 144 laboratory hours 4 credit hours
 Advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razor, and/or clippers.

CSME2439 ADVANCED HAIR DESIGN
 16 lecture hours + 144 laboratory hours 4 credit hours
 Advanced concepts in the theory and practice of hair design.

CSME2441 PREPARATION FOR TEXAS COSMETOLOGY COMMISSION EXAMINATION
 16 lecture hours + 128 laboratory hours 4 credit hours
 Preparation for the Texas Cosmetology Commission Operator Examination.

CSME 2443 SALON DEVELOPMENT
 48 lecture hours + 48 laboratory hours 4 credit hours
 Exploration of salon development. Topics include professional ethics and goals, salon operation, and record keeping.

DRAFTING TECHNOLOGY

DFTG1302 INTRODUCTION TO TECHNICAL ANIMATION AND RENDERING
 32 lecture hours + 32 laboratory hours 3 credit hours
 Basic terminology and concepts associated with the development of computer modules used in technical computer animation. Topics include basic animation principles, model creation, light sources, camera positioning, rendering, importing and modification of external files.

DFTG1305 TECHNICAL DRAFTING
 32 lecture hours + 32 laboratory hours 3 credit hours
 Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

DFTG1309 BASIC COMPUTER AIDED DRAFTING

Prerequisite: DFTG1305, DFTG1356

32 lecture hours + 32 laboratory hours 3 credit hours

An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Exposure to the development of design practices using two-dimensional exercises.

DFTG1317 ARCHITECTURAL DRAFTING/RESIDENTIAL

Prerequisite: DFTG1305

32 lecture hours + 32 laboratory hours 3 credit hours

Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods.

DFTG2317 DESCRIPTIVE GEOMETRY

32 lecture hours + 32 laboratory hours 3 credit hours

Examination of the graphical solution to problems involving points, lines, and planes in space.

DFTG1358 ELECTRICAL/ELECTRONIC DRAFTING

Prerequisite: DFTG1305, DFTG1356

32 lecture hours + 32 laboratory hours 3 credit hours

A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams.

DFTG1391 SPECIAL TOPICS IN DRAFTING

Prerequisite: DFTG1309

32 lecture hours + 32 laboratory hours 3 credit hours

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

DFTG2300 INTERMEDIATE ARCHITECTURAL DRAFTING—RESIDENTIAL

32 lecture hours + 32 laboratory hours 3 credit hours

A continuation of principles and practices used in residential construction.

DFTG2302 MACHINE DRAFTING

Prerequisite: DFTG1305

32 lecture hours + 32 laboratory hours 3 credit hours

Production of detail and assembly drawings of machines, threads, cams, tolerances and limit dimensioning, surface finishes, and precision drawings.

DFTG2306 MACHINE DESIGN

Prerequisite: DFTG1305

32 lecture hours + 32 laboratory hours 3 credit hours

Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components.

DFTG2319 INTERMEDIATE COMPUTER AIDED DRAFTING

Prerequisites: DFTG1305, DFTG1309

32 lecture hours + 32 laboratory hours 3 credit hours

A continuation of practices and techniques used in basic computer-aided drafting emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduced to three-dimensional drafting.

DFTG2332 ADVANCED COMPUTER AIDED DRAFTING

Prerequisite: DFTG1305, 1309, 1352

32 lecture hours + 32 laboratory hours 3 credit hours

Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external nongraphic data.

DFTG2340 SOLID MODELING/DESIGN

32 lecture hours + 32 laboratory hours 3 credit hours

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.

DFTG2358 ADVANCED MACHINE DESIGN

32 lecture hours + 32 laboratory hours 3 credit hours

Use of design process skills for the production of complete design package, which includes jig and fixture design, extrusion dies, and injection mold design.

DFTG2359 TECHNICAL PRESENTATIONS

32 lecture hours + 32 laboratory hours 3 credit hours

A study of presentation techniques and methods used in the drafting field. *NOTE: DFTG2359 will constitute the capstone experience.*

DRAMA

50050151026

DRAM1310 INTRODUCTION TO THEATRE

48 lecture hours 3 credit hours

Theatre as an art form is presented from the historical, literary and production points of view in order to deepen the student's understanding and appreciation of Theatre. The course includes viewing and critiquing plays, musicals, motion pictures, and television dramas.

5005035126

DRAM1351 ACTING I

48 lecture hours 3 credit hours

This course introduces students to the skills and techniques of acting. Through improvisation and exercises, students learn character motivation and development, concentration, movement, line interpretation, vocal delivery and projection, blocking, and ensemble interaction. The course balances exercises that develop acting techniques and character development with exercises that release imaginative expression.

5005035126

DRAM1310 ACTING II

48 lecture hours 3 credit hours

With the focus on performance, this course employs the skills acquired in Acting I and emphasizes scene study and textural analysis, allowing students to concentrate on the method and technique of building a character. Performance of scenes and monologues offer challenges in textual interpretation, vocal expression, and physical embodiment.

Continued On Next Page

5005035126
DRAM2351 ACTING III
 48 lecture hours 3 credit hours
 The student will analyze known theatrical conventions such as the stage, costumes, and methods of speaking that would influence the presentation of a play in its particular period and develop acting techniques suitable for performing various styles and genres, such as Classical Greek, commedia del arte, French Classical and Shakespearean. Students will also develop and prepare audition pieces in this course.

5005065326
DRAM1120 THEATER PRACTCUM I
 48 lecture hours 1 credit hour
 The course provides the student an opportunity to apply classroom theory in a practical situation and environment through mounting a theatrical production. The student will gain familiarity with one or more of the following areas: acting, directing, costuming, scenery construction, properties, lighting, sound and stage management. Open to all students.

5005065326
DRAM1121 THEATER PRACTCUM II
 48 lecture hours 1 credit hour
 Continuation of DRAM1120.

5005065326
DRAM2120 THEATER PRACTCUM III
 48 lecture hours 1 credit hour
 Continuation of DRAM1120 and DRAM1121.

5005025126
DRAM1330 STAGECRAFT
 48 lecture hours 3 credit hours
 This course studies and applies the basic techniques of set construction, theatrical lighting, sound technology, stage rigging and backstage organization. The student will be introduced to the various theatre disciplines outlined above and have the opportunity for actual hands-on experience with building basic theatrical scenery and handling theatre lighting and sound equipment.

5005025126
DRAM1330 STAGECRAFT II
 48 lecture hours 3 credit hours
 Course is a continuation of DRAM1330, but it allows the individual student the opportunity to specialize in a particular area of technical theater.

EARLY CHILDHOOD EDUCATION

1907015109
TECA1303 FAMILIES & THE COMMUNITY
 48 lecture hours 3 credit hours
 A study of the relationship between the child, family, community, and educators, including a study of parent education and involvement, family and community lifestyles, child abuse, and current family life issues.

1907085109
TECA1311 INTRODUCTION TO EARLY CHILDHOOD EDUCATION
 48 lecture hours 3 credit hours
 An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues.

1907085109
TECA1318 NUTRITION, HEALTH, & SAFETY
 48 lecture hours 3 credit hours
 A study of nutrition, health, and safety including community health, universal health precautions, and legal implications. Practical application of these principles in a variety of settings.

1907065209
TECA1354 CHILD GROWTH & DEVELOPMENT
 48 lecture hours 3 credit hours
 A study of the principles of child growth and development from conception through adolescence. Focus on physical, cognitive, social, and emotional domains of development.

ECONOMICS

1904025242
ECON1303 CONSUMER ECONOMICS
 48 lecture hours 3 credit hours
 The goal of this course is to familiarize students with consumer issues and make direct applications of economic concepts such as supply and demand, business fluctuations, and interest rates to consumer topics. Specifically, the course addresses the economic issues involved with purchases of homes, cars, and consumer durables. It explains both monetary and fiscal policy and how consumers are affected by government policy. Health, auto, and live insurance are discussed from theoretical and applied perspectives. Finally, personal investment, saving, and retirement goals and vehicles are introduced and discussed.

4506015142
ECON2301 PRINCIPLES OF ECONOMICS (MACRO)
 48 lecture hours 3 credit hours
 An introduction to the principles of macroeconomics. This course explores Classical, Keynesian and other models in economics. Emphasis given to national income, money and banking, monetary and fiscal policy, economic fluctuations and growth. Other topics include but not limited to introductory international trade and finance, employment, comparative economic systems and economic decision-making.

4506015142
ECON2302 PRINCIPLES OF ECONOMICS (MICRO)
 48 lecture hours 3 credit hours
 An introduction to the principles of microeconomics. Emphasis given to price theory, income distribution, costs and productions, and theory of the firm. Other topics include but not limited to introductory international trade and finance, comparative economic systems and techniques of economic analysis.

Continued On Next Page

EMERGENCY MEDICAL SERVICES

EMSP1160 CLINICAL – EMERGENCY MEDICAL TECHNICIAN/ TECHNOLOGY

Corequisite: EMSP1501

48 clinical hours 1 credit hour
 A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

EMSP2261 CLINICAL I– EMERGENCY MEDICAL TECHNICIAN/PARAMEDIC

96 clinical hours 2 credit hours
 A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

EMSP1338 INTRODUCTION TO ADVANCED PRACTICE

32 lecture + 32 laboratory hours 3 credit hours
 At the completion of this module, the student will understand the roles and responsibilities of a paramedic within the EMS system; apply the basic concepts of development, pathophysiology and pharmacology to assessment and management of emergency patients; be able to properly administer medications; communicate effectively with patients; and understand the medical/legal and ethical issues relating to EMS practice as well as the issues impacting the well being of the paramedic.

EMSP1355 TRAUMA MANAGEMENT

32 lecture + 32 laboratory hours 3 credit hours
 A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries

EMSP1356 PATIENT ASSESSMENT & AIRWAY MANAGEMENT

32 lecture + 32 laboratory hours 3 credit hours
 A detailed study of the knowledge and skills required to reach competence in performing patient assessment and airway management.

EMSP1501 EMERGENCY MEDICAL TECHNICIAN

Prerequisite: Current AHA Health Care Provider CPR or equivalent

Corequisite: EMSP1160

32 lecture + 96 laboratory hours 5 credit hours
 Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services.

EMSP2503 EMERGENCY MEDICAL SERVICES CERTIFICATION FOR THE REGISTERED NURSE/PHYSICIAN'S ASSISTANT

Corequisite: EMSP2563

Prerequisite: Currently licensed RN/PA with 36 months work experience

80 lecture hours 5 credit hours
 Preparation of the R.N. IPA (licensed to practice in Texas) for Emergency Medical Services (EMS) certification. Students that meet all course completion requirements are eligible to apply for certification as an Emergency Medical Technician - Basic, Intermediate, or Paramedic.

EMSP2262 CLINICAL II – EMERGENCY MEDICAL TECHNICIAN/ PARAMEDIC

96 clinical hours 2 credit hours
 A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

EMSP2135 ADVANCED CARDIAC LIFE SUPPORT

Corequisite: EMSP2544

16 lecture + 8 laboratory hours 1 credit hour
 Skill development for EMS personnel practicing on a critical care paramedic ambulance. Establishes a systematic approach for management of the patient experiencing cardiac difficulties according to American Heart Association protocols.

EMSP2563 *CLINICAL – EMT-P INTERNSHIP

**Denotes CAPSTONE Experience*

256 clinical hours 5 credit hours
 A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

EMSP2330 SPECIAL POPULATIONS

32 lecture + 32 laboratory hours 3 credit hours
 A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations.

EMSP2338 EMS OPERATIONS

48 lecture 3 credit hours
 A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency.

EMSP2434 MEDICAL EMERGENCIES

48 lecture + 32 laboratory hours 4 credit hours
 A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies.

EMSP2544 CARDIOLOGY

Corequisite: EMSP2135

64 lecture + 40 laboratory hours 5 credit hours
 A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies.

EMSP2458 CRITICAL CARE PARAMEDIC

Corequisite: EMSP2563

Prerequisite: Current licensed RRT/RN/PA with 36 months work experience, approval from EMS Department

48 lecture + 32 laboratory hours 4 credit hours
 Prepares the healthcare personnel to function as a member of a critical care transport team either by ground or air transport. Preparation of the RRT, RN, or PA for Emergency Medical Services certification (EMT and/or EMT-P).

Continued On Next Page

ENGLISH (DEVELOPMENTAL)

(ENGL COURSE NUMBERS BELOW 1000):

Note: NCTC offers a number of courses (listed below) designed to help you acquire the skills necessary for success in college-level courses. The courses are widely offered in Texas community/junior colleges, and the policy statewide is that these will not transfer as college-level courses nor will they count toward graduation at accredited Texas colleges and universities. It is important that you understand that such courses are designed to help you overcome academic deficiencies that are likely to hinder you in your pursuit of a college degree.

3201085335

ENGL0300 FUNDAMENTALS OF ENGLISH I

48 lecture hours 3 credit hours

A course designed for students who have demonstrated, by scores on placement tests and their writing samples, their need for the beginning level of Fundamentals of English. Students will practice formulating simple and compound sentences and learn tense formation, basic subject-verb agreement, end punctuation, dictionary skills, prefixes, roots, suffixes, and basic spelling rules and skills. Students will gain skill in writing clear, logically developed paragraphs using standard American English. Does not count toward graduation at NCTC.

3201085335

ENGL0305 FUNDAMENTALS OF ENGLISH II

Prerequisite: Satisfactory placement score OR passed ENGL0300 with a "C" or better.

48 Lecture hours 3 credit hours

A course designed for students who have demonstrated by scores on placement tests and their writing samples that they should be capable of starting at the second level of Fundamentals of English. Fundamentals of English II will review skills from the first level and then will help students gain practice in recognizing, writing, and revising clear, correct compound and complex sentences; in mastering subject-verb agreement and pronoun usage; in using all punctuation; and in overcoming major spelling problems. This course, building on paragraph skills taught in Fundamentals of English I, will teach students to write five short essays in standard American English. Does not count toward graduation at NCTC.

ENGLISH (COLLEGE-LEVEL)

(ENGL COURSE NUMBERS ABOVE 1000):

2304015135

ENGL1301 GRAMMAR AND COMPOSITION

Prerequisite: Satisfactory placement test score or passing grade in ENGL0305.

48 lecture hours 3 credit hours

Lecture and discussion for a study of the principles of expository and argumentative writing with special attention to sentence and paragraph structure, diction, punctuation, outlining and note taking; analysis and discussion of model essays; preparation of an annotated bibliography, essay writing.

2304015135

ENGL1302 LITERATURE & COMPOSITION

Prerequisite: ENGL1301

48 lecture hours 3 credit hours

Introduction to the genres of fiction, poetry and drama. A study of critical thinking, sequential to ENGL 1301, leading to critical writing about literature and including two research papers demonstrating skills in research and literary criticism.

2305015135

ENGL2307 CREATIVE WRITING

Prerequisite: ENGL1302 OR special permission of instructor.

48 lecture hours 3 credit hours

Elective for students interested in original and imaginative writing; a study of one or more of the genres of poetry, short story, novel, drama, screenplay with practice in the writing of one or more genres.

2305015135

ENGL 2308 ADVANCED CREATIVE WRITING

Prerequisite: ENGL2307

48 lecture hours 3 credit hours

Elective for students interested in advanced practice in original and imaginative writing; a study of one or more of the genres of poetry, short story, novel, drama, and screenplay

2311015135

ENGL2311 TECHNICAL WRITING

Prerequisite: ENGL1301

48 lecture hours 3 credit hours

The study of the fundamentals of clear writing in general. A study of presentations of technical information to non-technical audiences through samples of such writing and through practice in specific tasks, such as process analyses, object descriptions, instructions, reports, manuals and business correspondence.

2308015135

ENGL2322 BRITISH LITERATURE I

Prerequisite: ENGL1302

48 lecture hours 3 credit hours

General survey of major British literary masterpieces from the Anglo-Saxon period through the 18th century; reports and essays.

2308015135

ENGL2323 BRITISH LITERATURE II

Prerequisite: ENGL1302

48 lecture hours 3 credit hours

General survey of major British literary masterpieces from the beginning of the Romantic period to the present century; reports and essays.

2307015135

ENGL2327 AMERICAN LITERATURE I

Prerequisite: ENGL1302

48 lecture hours 3 credit hours

The study of major writers and their works from the colonial period through the Civil War Period, including the philosophical and cultural background to the works; reports and essays.

2307015135

ENGL2328 AMERICAN LITERATURE II

Prerequisite: ENGL1302

48 lecture hours 3 credit hours

The study of major writers and their works from the Civil War Period to the present, including the philosophical and cultural background to the works; reports and essays.

2303015235

ENGL2332 WORLD LITERATURE I

Prerequisite: ENGL1302

48 lecture hours 3 credit hours

Study of selected masterpieces of world literature from the ancient world through the Renaissance; reports and essays.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

2303015235

ENGL2333 WORLD LITERATURE II

Prerequisite: ENGL1302

48 lecture hours 3 credit hours
Study of selected masterpieces of world literature from the Neo-Classical period to the present day; reports and essays.

EQUINE SCIENCE

AGEQ1191 SPECIAL TOPICS I

16 lecture hours 1 credit hour
This course will address recently identified current events, skills, knowledge, and behaviors pertinent to the equine industry and relevant to the professional development of the student.

AGEQ1215 HORSE EVALUATION I

16 lecture hours + 32 laboratory hours 2 credit hours
Instruction in evaluation and selection of horses based on breed and performance criteria. Topics include basic anatomy and its relation to function, breed type, and characteristics. Emphasis will be given to breed standards and rules of judging performance horses.

AGAH1245 FARRIER SCIENCE

16 lecture hours + 32 laboratory hours 2 credit hours
Introduces the principles of hoof trimming and shoeing based on the anatomy of the skeletal system and foot structure of horses. Topics include anatomy of the foot and leg, tools and their use, and techniques of routine and corrective trimming and shoeing. Principles learned in class will be applied in the laboratory setting.

AGEQ1291 SPECIAL TOPICS 2

16 lecture hours + 32 laboratory hours 2 credit hours
This course will address recently identified current events, skills, knowledge, and behaviors pertinent to the equine industry and relevant to the professional development of the student.

AGEQ1301 EQUINE BEHAVIOR AND TRAINING I

16 lecture hours + 80 laboratory hours 3 credit hours
Instruction in basic equine behavior and training methods will be discussed. Topics will include safety, behavior, health care and management, and training methods. Students will use a systematic approach to training a weanling horse while learning proper safety and training techniques used in the industry.

AGEQ1305 EQUINE ENTERPRISE MANAGEMENT

48 lecture hours 3 credit hours
Course is designed as a business survey of the equine industry as a whole. Topics will include all areas involved directly and indirectly with the equine industry and the applied management techniques that are involved with these areas. Lecture will be supplemented with guest speakers and field trips to area farms and businesses.

AGEQ1319 HORSEMANSHIP I

16 lecture + 64 laboratory hours 3 credit hours
Instruction in basic horsemanship skills including handling, saddling, safety, proper riding techniques, and basic health care will be discussed. Emphasis will be given to use of aids and cues; and proper leg, seat, and hand position.

AGEQ1411 EQUINE SCIENCE I (HORSE PRODUCTION & MANAGEMENT)

48 lecture hours + 32 laboratory hours 4 credit hours
Provides the student with an introduction to the horse industry. Topics will include history, breeds, selection, identification, anatomy (health,) and basic management techniques and theories related to horses and horse facilities. Laboratory exercises will supplement lecture presentations.

AGEQ2215 HORSE EVALUATION II

16 lecture hours + 32 laboratory hours 2 credit hours
A study of the advanced concepts in evaluation and selection of horses. Students in this course will be part of the horse judging team and participate in judging contests on a state and national level. Students will also learn how to organize a judging contest, perfect oral reason presentation and learn to judge other's oral reasons. Students must be enrolled in this course to travel with the judging team. Prerequisites: AGEQ1215

AGEQ2301 EQUINE BEHAVIOR AND TRAINING II

Prerequisite: AGEQ1301; AGEQ1319

16 lecture hours + 80 laboratory hours 3 credit hours
A study of advanced concepts in equine behavioral patterns that is relevant to specific performance training strategies. Emphasis will be given to safety, and different training methods involved with working a young horse. Students will use a systematic approach to training a two-year old horse from the ground to working specified maneuvers and patterns.

AGEQ2305 EQUINE BUSINESS MANAGEMENT

48 lecture hours 3 credit hours
Instruction in the management of the equine business will be discussed. Topics will include record keeping, insurance and liability, promotion and sales, as well as employer relationships. Lectures will be supplemented with industry speakers and students will complete an in-depth business plan of their choice.

AGEQ2311 EQUINE SCIENCE II (ADVANCED HORSE PRODUCTION & MANAGEMENT)

48 lecture hours 3 credit hours
Course will present advanced concepts in horse production and management. Topics include advanced anatomy, physiology and nutrition of the horse as it relates to exercise and fitness. Discussion will focus on techniques and theories related to management of the horse for athletic events.

AGEQ2339 HORSEMANSHIP II

Prerequisites: AGEQ1319

16 lecture hours + 64 laboratory hours 3 credit hours
Instruction in advanced horsemanship skills including cues, lead changes, head set, side-pass, and pivots will be given. Emphasis will be given to proper use of cues, legs, and seat during maneuvers; as well as proper training concepts and methods of working horses for specific performance areas.

AGEQ2386 INTERNSHIP – EQUINE SCIENCE

16 lecture hours + 272 practicum hours 3 credit hours
Meets 8 weeks during the summer. Departmental approval required for registration in this course. Each student will be placed in the horse industry under the supervision of a prominent person who specializes in the student's main areas of interest. The Student's industry training will be supervised by the instructor as well as their immediate supervisor on the job. This course serves as the external or capstone experience.

AGEQ2470 EQUINE BREEDING MANAGEMENT

Prerequisites: AGEQ2305; AGAH1443, AGEQ2311

32 lecture hours + 64 laboratory hours 4 credit hours
Equine reproduction and the various breeding and management practices utilized on breeding farms will be discussed. Reproductive physiology of the mare and stallion, breeding management of the mare and stallion, foaling and care of the neonatal foal, principles of genetics and other practices associated with management of a breeding enterprise will be discussed. Students will learn all skills necessary to operate a breeding facility and assist in the college breeding program during the laboratory period. Semester project will involve developing an operating plan for a successful breeding facility.

Continued On Next Page

AGEQ1291 BASIC ENGLISH EQUITATION

16 lecture hours + 32 laboratory hours 2 credit hours
 Instruction in basic english equitation skills including handling, saddling, bridling, mounting, riding, safety, and care and management of the horse. Emphasis will be given to the history and use of english riding, proper use of equipment, and riding style.

AGEQ1291 FUNDAMENTALS OF RIDING INSTRUCTION

16 lecture hours + 32 laboratory hours 2 credit hours
 Students will develop basic skills needed to become an effective riding instructor. Through classroom and arena exercises students will gain skills in organization, development of lesson plans, and a variety of teaching techniques. Students will be working with first year students.

AGEQ1291 CUTTING

16 lecture hours + 32 laboratory hours 2 credit hours
 This course will provide students with the basic principles of cutting including: The history, development of the cutting horse, rules and regulations, judging, and mechanics of working a horse on cattle. Students will have the opportunity to meet people in the industry, as well as have guest lectures from top industry professionals.

AGEQ1291 REINING

16 lecture hours + 32 laboratory hours 2 credit hours
 Basic fundamentals of working and riding a horse for reining will be discussed. Topics include history, development, rules, judging, and the mechanics of working and training a horse for reining. Class will be supplemented with guest lecturers and speakers from the industry.

FARM AND RANCH MANAGEMENT

AGAH1443 ANIMAL HEALTH

48 lecture hours + 32 laboratory hours 4 credit hours
 The broad field of animal health will be treated under such topics as internal and external parasites, principal diseases of livestock, their importance, identification and control, handling diseased animals, working with the veterinarian and preventive livestock medicine. Students will study basic anatomy and physiology of farm animals.

AGAH1453 BEEF CATTLE MANAGEMENT

48 lecture hours + 32 laboratory hours 4 credit hours
 A study of the beef cattle industry and the principles involved in breeding, feeding, management, disease/parasite control and marketing analysis of ranch and feedlot systems.

AGAH2270 ARTIFICIAL INSEMINATION

16 lecture hours + 32 laboratory hours 2 credit hours
 A course to train a person to artificially inseminate cattle. In addition to spending many hours learning the inseminating technique itself, various management practices to ensure a successful overall program will be presented. These subjects include handling of frozen semen and equipment, reproductive problems and diseases, heat detection, cycle control, nutrition and methods of bull evaluation for maximum genetics and conformation progress.

AGAH2313 FEEDS AND FEEDING

48 lecture hours 3 credit hours
 A study of the business and management aspects of agricultural operations. Subjects considered include: public and labor relations; publicity, promotion and advertising; public and governmental programs; farm and ranch organizations.

AGCR1419 SOIL SCIENCE

48 lecture + 32 laboratory hours 4 credit hours
 The principles of soil characteristics, properties and development. The relationship between crops and soils; practical use and conservation of soil and water and economic use of fertilizers.

AGCR1441 PASTURE MANAGEMENT

48 lecture hours + 32 laboratory hours 4 credit hours
 Adaptation, production and management of permanent and temporary pastures for this area. Including establishment, fertilization, weed control, grazing systems and over seeding. Identification of adapted plants and weed species will be covered.

AGCR1491 ENVIRONMENTAL AGRICULTURE

48 lecture hours + 32 laboratory hours 4 credit hours
 An introduction to the interrelationships between agriculture and the environmental sciences. Identification and management of ecosystems, land uses, regulations, and environmental ethics will be covered. The proper use of agricultural chemicals and integrated management with biologicals for pest control, fertilization and farmstead protection will be stressed. Additional topics of importance will be resource conservation, water and air quality factors and waste management.

AGME1449 FARM POWER AND MACHINERY

48 lecture hours + 32 laboratory hours 4 credit hours
 Operation, adjusting and servicing of farm engines and tractors. Adaptability, selection, economic utilization, construction, operation and adjustment of the principal tillage, planting, cultivating, harvesting and feed processing machines.

AGMG2301 RANCH BUSINESS

48 lecture hours 3 credit hours
 A study of the business and management aspects of agricultural operations. Subjects considered include: public and labor relations; publicity, promotion and advertising; public and governmental programs; farm and ranch organizations.

AGMG2480 COOPERATIVE EDUCATION

16 lecture hours + 336 practicum hours 4 credit hours
 Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. THIS COURSE SERVES AS THE EXTERNAL LEARNING EXPERIENCE OR CAPSTONE EXPERIENCE.

RELE1331 FARM & RANCH REAL ESTATE

48 lecture hours 3 credit hours
 A study of the basic principles and characteristics of rural real estate, soils, crops and pasture production, conservation and environmental concerns will be covered. Property surveys, land measurements, map interpretation, land use planning, basics of appraisal, and evaluation of rural properties and mortgage financing are topics to be addressed.

HORTICULTURE

0101035221

AGRI1131 THE AGRICULTURE INDUSTRY

16 lecture hours 1 credit hour

Insights into agriculture curricula from standpoint of professional and managerial careers in agriculture; survey of field of agriculture and vocational guidance. Recommended for all freshman agriculture majors.

0106015121

AGRI1415 HORTICULTURE

48 lecture hours + 32 laboratory hours 4 credit hours

Principles of propagating plants, including vegetables, ornamentals and fruits. Methods of handling seed; starting plants by the use of cuttings, layers, buds, grafts and bulbs; ways of propagating specific plants; factors influencing growth of plants after transplanting. Topics such as sites, soils, fertilizers, and varieties will be covered.

HALT1353 LANDSCAPE COMPUTER DESIGN

32 lecture hours + 32 laboratory hours 3 credit hours

A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software.

HALT1415 LANDSCAPING

48 lecture hours + 32 laboratory hours 4 credit hours

This course will acquaint the student with trees, shrubs, grasses, perennials and annuals suitable for landscaping the home grounds, churches, schools and parks. Biological classification, plant characteristics, best combinations, propagation methods, digging, bagging, transplanting, pruning and care will be studied.

HALT2302 GREENHOUSE CROP PRODUCTION

32 lecture hours + 32 laboratory hours 3 credit hours

Principles of fruit, nut and vegetable production in both home and commercial settings. Topics include soils, site selection, planting and management, harvesting and organic and IPM pest control. All major plants for the area will be covered.

HALT2304 GREENHOUSE/GARDEN CENTER MGT.

32 lecture hours + 32 laboratory hours 3 credit hours

A study of the production of plants in a green house environment. Emphasis will be placed on scheduling, planting, care and management, fertility and water management, pest control, and harvesting of plants. Post production display, care and seasonal sale of plant materials in a garden center setting will be covered.

HALT2312 TURF – INSTALLATION & MAINTENANCE

32 lecture hours + 32 laboratory hours 3 credit hours

An introduction to the major turf grasses used in the U.S. Emphasis will be placed on the selection, production, culture, and management for the home, commercial, and recreational setting. Installation, maintenance, fertility and water management will be studied.

HALT2314 PLANT PROPAGATION

32 lecture hours + 32 laboratory hours 3 credit hours

Principles of sexual and asexual propagation of plants used in horticulture. Topics to include propagation by seed, cuttings, grafting, budding, layering, division, and tissue culture. Environmental factors influencing rooting care, establishment and growth of propagated material will be covered.

HALT2480 COOPERATIVE EDUCATION

16 lecture hours + 336 practicum hours 4 credit hours

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. THIS COURSE SERVES AS THE EXTERNAL LEARNING EXPERIENCE OR CAPSTONE EXPERIENCE.

GOVERNMENT

4510025142

GOVT2305 AMERICAN NATIONAL GOVERNMENT

48 lecture hours 3 credit hours

A survey of the political system of the United States including: the United States Constitution, the three branches of the government; political theory, political parties, interest groups and the media. This course is required for graduation and teacher certification.

4510025142

GOVT2306 AMERICAN, STATE & LOCAL GOVERNMENT

48 lecture hours 3 credit hours

A survey of the state and local political structures of Texas including: the geographical and political environment of Texas, the three branches of state government, the federal system, county and municipal governments, special districts, the Texas Constitution and a comparison of Texas' political system with other states. This course is required for graduation and teacher certification.

GRAPHIC ARTS

GRPH1357 DIGITAL IMAGING II

Instructor approval required

32 lecture hours + 32 laboratory hours3 credit hours

An in-depth investigation of digital imaging on the computer using imaging editing and/or image creation software. Manipulation, creation, and editing of digital images. Topics include: image capture, high-end work stations, image bit-depth, interaction with service bureaus and printing industries.

GRPH1359 OBJECT-ORIENTED COMPUTER GRAPHICS

Instructor approval required

32 lecture hours + 32 laboratory hours 3 credit hours

Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use of the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included.

Continued On Next Page

HISTORY

4508025142

HIST1301 U.S. HISTORY TO 1865
48 lecture hours 3 credit hours
A general survey of American history from the earliest discovery period through the Civil War and Reconstruction. This course is required for graduation and teacher certification.

4508025142

HIST1302 U.S. HISTORY FROM 1865
48 lecture hours 3 credit hours
A continuation of HIST 1301. A general survey of American history from Reconstruction to the present. This course is required for graduation and teacher certification.

4508015342

HIST2321 HISTORY OF CIVILIZATION
48 lecture hours 3 credit hours
A general survey of the origins, development and significance of various cultures from prehistoric times to about 1650. This course is required for history majors and recommended for all education majors.

4508015342

HIST2322 HISTORY OF CIVILIZATION
48 lecture hours 3 credit hours
A continuation of HIST2321. A survey of the history of civilization from 1650 to the present, including the development of nationalism, imperialism and contemporary developments. This course is required for history majors and recommended for all education majors.

HUMANITIES

2401035135

HUMA1371 SPECIAL TOPICS/1 - COOKE COUNTY HISTORY, CULTURE AND ECONOMICS
48 lecture hours 3 credit hours
This is a non-traditional interdisciplinary course with an emphasis on local history. Classroom lecture will be minimal since this is primarily an activities course. Much of the student's grade will be based on a portfolio which the student will compile during the course. A student will need dependable transportation to visit various historic sites in Gainesville and rural areas of the county. Our "lab" will include cemeteries, public buildings, various resource persons, and the outdoors.

2401035135

HUMA1371 SPECIAL TOPICS/5 - LITERATURE IN FILM
48 lecture hours 3 credit hours
A study of film as a genre of modern literature. Students will watch a number of films and participate in discussions regarding the nature of modern literature; its evolution from simple text into complex multimedia expression. Counts as a Humanities elective.

2401035135

HUMA1371 SPECIAL TOPICS/2 - HOLLYWOOD DOES HISTORY
48 lecture hours 3 credit hours
A non-traditional look at history as seen through the eyes of Hollywood. Course activities will include viewing films and documentaries, library research, and evaluating the historical accuracy and analyzing the artistic merit of selected films.

2401035135

HUMA1371 SPECIAL TOPICS/3 - THE CYBERCITIZEN
48 lecture hours 3 credit hours
A look at the influence of the Internet on the political process. Course activities will include using the Internet to research the legislature, the courts and the presidency.

2401035135

HUMA1371 SPECIAL TOPICS/4 - WOMEN IN POLITICS
48 lecture hours 3 credit hours
A look at the women's movement in the 1990s and its influence on the American political process. Activities will include traditional and non-traditional research methods.

2401035135

HUMA1371 SPECIAL TOPICS - HUMAN RIGHTS/HUMAN WRONGS: THE HISTORY, PHILOSOPHY, LAW, ART & LITERATURE OF THE HUMAN RIGHTS MOVEMENT
48 lecture hours 3 credit hours

This course is a multidisciplinary study of the development of the human rights movement with an emphasis on the 20th century. Students will consider a variety of materials—historical documents, films, essays, songs, and the visual arts—that have contributed to the evolving concept of universal human rights. Activities will include using the Internet to explore national and international issues, collecting and evaluating samples of media coverage, and sharing relevant works from around the world. Students will develop semester projects presenting their own ideas and formulating their own expressions of the meaning of human rights and human dignity.

LAW ENFORCEMENT

CJCR1304 PROBATION AND PAROLE

48 lecture hours 3 credit hours
A survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines.

CJLE1327 INTERVIEWING AND REPORT WRITING FOR CRIMINAL JUSTICE PROFESSIONS

48 lecture hours 3 credit hours
Instruction and skill development in interviewing, note-taking, ad report writing in the criminal justice context. Development of skills to conduct investigations by witnesses, victims, and suspects properly. Organization of information regarding incidents into effective written reports.

CJSA1308 CRIMINALISTICS I

48 lecture hours 3 credit hours
Introduction to the field of criminalistics. The topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis.

CJSA1317 JUVENILE JUSTICE SYSTEM

48 lecture hours 3 credit hours
A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

CJCR1325 CRIMINOLOGY

48 lecture hours 3 credit hours

Current theories and empirical research pertaining to crime and criminal behavior and its causes, methods of prevention, systems of punishment, and rehabilitation.

CJSA1327 FUNDAMENTALS OF CRIMINAL LAW

48 lecture hours 3 credit hours

A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility. (TCLEOSE)

CJSA1342 CRIMINAL INVESTIGATION

48 lecture hours 3 credit hours

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. (TCLEOSE)

CJSA1348 ETHICS IN CRIMINAL JUSTICE

48 lecture hours 3 credit hours

A review of ethical practices and standards in the criminal justice field of study.

CJSA2300 LEGAL ASPECTS OF LAW ENFORCEMENT

48 lecture hours 3 credit hours

Police authority, responsibility, constitutional constraints, laws of arrest, search and seizure, and police liability. (TCLEOSE)

CJSA2334 CONTEMPORARY ISSUES IN CRIMINAL JUSTICE

48 lecture hours 3 credit hours

An analysis of current social problems encountered in the criminal justice field. Topics can vary. Course can be repeated with approval of Department Chair or Program Coordinator depending on topic covered.

CRIJ1301 INTRODUCTION TO CRIMINAL JUSTICE

48 lecture hours 3 credit hours

History and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of the criminal justice system; law enforcement; court system; prosecution and defense; trial process; and corrections. (TCLEOSE)

CJSA1306 COURT SYSTEMS AND PRACTICES

48 lecture hours 3 credit hours

Examination of the role of the judiciary in the criminal justice system. Topics include the structure of the American court system, prosecution, right to counsel, pretrial release, grand jury process, adjudication process, types and rules of evidence, and sentencing concepts. (TCLEOSE)

CRIJ2313 CORRECTIONAL SYSTEMS AND PRACTICES

48 lecture hours 3 credit hours

A study of the roles of corrections in the criminal justice system. Topics include organization and theory of correctional systems, institutional operations, management, alternatives to institutionalization, treatments and rehabilitation, and current and future issues.

CRIJ2328 POLICE SYSTEMS AND PRACTICES

48 lecture hours 3 credit hours

Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. (TCLEOSE)

MATHEMATICS (DEVELOPMENTAL)

(COURSE NUMBERS UNDER 1000):

Note: NCTC offers a number of courses (listed below) designed to help you acquire the skills necessary for success in college-level courses. The courses are widely offered in Texas community/junior colleges, and the policy statewide is that these will not transfer as college-level courses nor will they count toward graduation at accredited Texas colleges and universities. It is important that you understand that such courses are designed to help you overcome academic deficiencies that are likely to hinder you in your pursuit of a college degree.

3201045137

MATH0303 PRE-ALGEBRA

48 lecture hours 3 credit hours

This introductory course includes a general overview of basic arithmetic: fractions, decimals, and percent. Other topics include algebraic concepts, integers, solving equations, linear equations, graphing and polynomials. Simple geometric concepts are also discussed. This course is designed for those students with little or no algebra background. This course does not count toward graduation at NCTC.

3201045137

MATH0305 BEGINNING ALGEBRA

Prerequisite: MATH0303 passed with a "C" or better or satisfactory placement score.

48 Lecture hours 3 credit hours

This course includes basic algebraic concepts and notations; algebraic expressions and equations, factoring polynomials and graphing. Some algebra is required. This course does not count toward graduation at NCTC.

3201045237

MATH 0310 INTERMEDIATE ALGEBRA

Prerequisite: MATH0305 passed with a "C" or better or satisfactory placement score.

48 Lecture hours 3 credit hours

Concepts instructed in this course are algebraic expressions including polynomials and rational expressions, linear expressions and inequalities, exponents and radicals, quadratic equations and inequalities, functions and relations, conic sections, and systems of equations and inequalities. This course does not count toward graduation at NCTC.

MATHEMATICS (COLLEGE-LEVEL)

(COURSE NUMBERS ABOVE 1000):

2701015437

MATH1314 COLLEGE ALGEBRA

Prerequisite: MATH0310 or satisfactory placement test score

48 lecture hours 3 credit hours

Equations and inequalities; functions and graphs; polynomial functions; exponential and logarithmic functions; systems of equations; sequences and series; applications.

2701015337

MATH1316 TRIGONOMETRY

Prerequisite: MATH1314 or satisfactory placement test score

48 lecture hours 3 credit hours

Trigonometric functions and graphs; radian measure; identities; equations; solution of right and oblique triangles; inverse trigonometric functions; vectors; complex numbers; applications.

Continued On Next Page

2703015237
MATH1324 MATHEMATICS FOR BUSINESS ANALYSIS
Prerequisite: MATH0310 or satisfactory placement test score
 48 lecture hours 3 credit hours
 Designed for a four-year degree in Business Administration. Equations and inequalities; functions and graphs; exponential and logarithmic functions; matrix algebra; linear programming; sets and probability; mathematics of finance; applications.

2703015237
MATH1325 BUSINESS CALCULUS
Prerequisite: MATH 1324 or MATH1314
 48 lecture hours 3 credit hours
 Limits and derivatives; indefinite and definite integrals; curve sketching; optimization and other applications.

2701015137
MATH1332 COLLEGE MATHEMATICS
Prerequisite: MATH0310 or satisfactory placement test score
 48 lecture hours 3 credit hours
 Sets; logic; number systems; number theory; functions; measurement; geometric concepts; introductory probability and statistics.

2705015137
MATH1342 ELEMENTARY STATISTICS
Prerequisite: MATH0310 or satisfactory placement test score
 48 lecture hours 3 credit hours
 Presentation and interpretation of data; sampling; analysis of variance; probability; binomial and normal distributions; estimation and testing of hypotheses; correlation and regression; the use of statistical software.

2701015537
MATH1348 ANALYTIC GEOMETRY
Prerequisite: MATH2412 or both MATH1314 and MATH1316
 48 lecture hours 3 credit hours
 Lines, circles and other conic sections; vectors, transformation of coordinates; curve sketching; polar coordinates; parametric equations; solid analytic geometry; cylindrical and spherical coordinates; applications.

2701015537
MATH2412 PRE-CALCULUS MATHEMATICS
Prerequisite: MATH0310 or satisfactory placement test score
 80 lecture hours 4 credit hours
 Polynomial and rational functions; exponential and logarithmic functions; trigonometric functions; graphs and introductory analytic geometry; applications. A course to prepare science and engineering majors for the study of calculus.

2701015937
MATH2413 CALCULUS I
Prerequisite: MATH2412 or both MATH1314 and MATH1316
 64 lecture hours 4 credit hours
 Limits and continuity; differentiation and integration of algebraic and trigonometric functions; applications of differentiation; approximation and numerical integration; Fundamental Theorem of Calculus.

2701015937
MATH2414 CALCULUS II
Prerequisite: MATH2413
 64 lecture hours 4 credit hours
 A continuation of MATH2413. Applications of integration; differentiation and integration of transcendental functions; techniques of integration; sequences and series; plane analytic geometry.

2701015937
MATH2415 CALCULUS III
Prerequisite: MATH2414
 64 lecture hours 4 credit hours
 A continuation of MATH2414. Vectors in 2 and 3 dimensions; vector-valued functions and motion in space; partial differentiation and multiple integration and applications; 3-dimensional analytic geometry; polar, cylindrical and spherical coordinates.

MUSIC

NOTE: Music majors are advised to consult with major instructor before registration.

5009045630
MUSI1116 SIGHT SINGING & EAR TRAINING I
Prerequisite: MUSI1301 or satisfactory score on placement exam.
 Must be taken concurrently with MUSI1311 and MUSI1174 or 1274.
 32 lecture hours 1 credit hour
 Reinforcement of theoretical concepts presented in MUSI1311 via singing, ear training, keyboard skills, and conducting experiences.

5009045630
MUSI1117 SIGHT SINGING & EAR TRAINING II
Prerequisites: MUSI1311 and MUSI1116
 Must be taken concurrently with MUSI1312 and MUSI1174 or 1274
 32 lecture hours 1 credit hour
 Reinforcement of theoretical concepts presented in MUSI1312 via singing, ear training, keyboard skills, and conducting experiences.

5009036130
MUSI1159 MUSIC THEATER WORKSHOP
 32 lecture hours + 48 laboratory hours 1 credit hour
 A course established to give the young singing actor practical experience in the performance of operas, operettas or musicals; study of the integration of music, acting and staging.

5009085330
MUSI1262 DICTION I
 32 lecture hours 2 credit hours
 Study of the International Phonetic Alphabet and the phonetics of English and Italian to promote the ability to sing in those languages.

5009045430
MUSI1300 METHODS & MATERIALS OF MUSIC
Prerequisite: MUSI1301
 48 lecture hours 3 credit hours
 A study of the child's voice, music reading, rhythmic development, creative music for children and some of the standard music literature and material that might be used by the elementary teacher in the classroom.

5009045530
MUSI1301 MUSIC FUNDAMENTALS
 48 lecture hours 3 credit hours
 Introduction to elements of music, staff, clefs, key signatures, scales, time signatures and notation; meter and rhythm; theory applications at keyboard. Credit in this course may not be applied to a music degree. Primarily designed to meet the needs of elementary education majors, this course is open to all interested students.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

5009025130

MUSI1306 MUSIC APPRECIATION

48 lecture hours 3 credit hours

An introductory course for non-music majors covering elements of music, a brief study of musical forms, historical periods and composers. An effort is made to develop the listening repertoire. This is not a performance course, and the ability to read music is not required.

5009025230

MUSI1308 MUSIC LITERATURE

48 lecture hours 3 credit hours

A survey of music literature in all styles and periods with detailed study of selective works, followed by a study of composers and an analysis of standard repertoire from the ancient Greeks to the Renaissance.

5009025230

MUSI1309 MUSIC LITERATURE

48 lecture hours 3 credit hours

A survey of music literature in all styles and periods with detailed study of selective works, followed by a study of composers and an analysis of standard repertoire from the Renaissance to the present.

5009045130

MUSI1311 THEORY I

Prerequisite(s): MUSI1301 or satisfactory score on placement exam.

Must be taken concurrently with MUSI1116 and MUSI1174 or 1274.

48 lecture hours 3 credit hours

Introduction to analysis, part writing, figured bass realization, and harmonization beginning with melody and three- or four-part exercises.

5009045130

MUSI1312 THEORY II

Prerequisite(s): MUSI1311 and MUSI1116

Must be taken concurrently with MUSI1117 and MUSI1174 or 1274

48 lecture hours 3 credit hours

Continuation of analysis, part writing, figured bass realization, and harmonization covering harmonic vocabulary of 18th Century music and smaller forms of the Baroque period.

5009045730

MUSI2116 ADVANCED SIGHT SINGING & EAR TRAINING I

Prerequisite(s): MUSI1312 and MUSI1117

Must be taken concurrently with MUSI2311 and MUSI1174 or 1274

16 lecture hours 1 credit hour

Reinforcement of theoretical concepts presented in MUSI2311 via singing, ear training, keyboard skills, and conducting experiences.

5009045730

MUSI2117 ADVANCED SIGHT-SINGING & EAR-TRAINING II

Prerequisite(s): MUSI2311 and MUSI2116

Must be taken concurrently with MUSI2312 and MUSI1174 or 1274

16 lecture hours 1 credit hour

Reinforcement of theoretical concepts presented in MUSI2312 via singing, ear training, keyboard skills, and conducting experiences.

5009085330

MUSI2262 DICTION II

32 lecture hours 2 credit hours

Study of the International Phonetic alphabet and the phonetics of French and German to promote the ability to sing in those languages.

5009045230

MUSI2311 THEORY III

Prerequisite(s): MUSI1312 and MUSI1117

Must be taken concurrently with MUSI2116 and MUSI1174 or 1274

48 lecture hours 3 credit hours

Analysis, part writing, figured bass realization and harmonization covering harmonic vocabulary of the late eighteenth and nineteenth centuries, larger forms of the Baroque era and forms of the Classic and Romantic eras.

5009045230

MUSI2312 THEORY IV

Prerequisite(s): MUSI2311 and MUSI2116

Must be taken concurrently with MUSI2117 and MUSI1174 or 1274

48 lecture hours 3 credit hours

Analysis, part writing and harmonization covering musical practice of the late Romantic and Twentieth Century periods.

Music – Applied Instruction

NOTE: All Applied Instruction music classes require the following: For one-semester-credit-hour course 16 one-half hour lessons and 96 practice hours per semester. For two-semester-credit-hour course 16 one-hour lessons and 160 practice hours per semester. EACH COURSE MAY BE REPEATED FOR CREDIT.

5009035430

MUSI1172 Applied Guitar 1 credit hour

MUSI1272 Applied Guitar 2 credit hours

MUSI1173 Applied Strings 1 credit hour

MUSI1273 Applied Strings 2 credit hours

MUSI1174 Applied Piano 1 credit hour

MUSI1274 Applied Piano 2 credit hours

MUSI1175 Applied Organ 1 credit hour

MUSI1275 Applied Organ 2 credit hours

MUSI1176 Applied Voice 1 credit hour

MUSI1276 Applied Voice 2 credit hours

MUSI1177 Applied Brass 1 credit hour

MUSI1277 Applied Brass 2 credit hours

MUSI1178 Applied Percussion 1 credit hour

MUSI1278 Applied Percussion 2 credit hours

MUSI1179 Applied Woodwinds 1 credit hour

MUSI1279 Applied Woodwinds 2 credit hours

Music – Class Instruction

5009075130

MUSI1181 BEGINNING CLASS PIANO

32 lecture hours 1 credit hour

Notation, clefs, key signatures, scales, time signatures, meter and rhythm, major and minor chords. Emphasis is placed on piano ensemble and solo literature of the simple type for the student's own pleasure. Open to all students and designed to meet the individual needs of the student.

5009075130

MUSI1182 ADVANCED CLASS PIANO

32 lecture hours 1 credit hour

Interpretation and a larger music vocabulary; opportunity to increase repertoire of piano ensemble literature to the student.

Continued On Next Page

5009085130

MUSI1183 CLASS VOICE

May be repeated for credit.

32 lecture hours 1 credit hour
 Notation, clefs, key signatures, scales, time signatures, meter and rhythm, major and minor chords. Emphasis is placed on the basic mechanics of good voice production, i.e., proper breath support, resonance and diction. Open to all students and designed to meet the individual needs of the student.

5009035130

MUSI1192 BEGINNING CLASS GUITAR

32 lecture hours 1 credit hour
 Notation, key signatures, scales, time signatures, meter and rhythm, major and minor chords. Emphasis is placed on guitar ensemble and solo literature of the simple type for the student's own pleasure. Open to all students and designed to meet the individual needs of the student.

5009035130

MUSI1193 ADVANCED CLASS GUITAR

32 lecture hours 1 credit hour
 Interpretation and a larger music vocabulary; opportunity to increase repertoire of guitar ensemble literature pleasing to the student.

Music – Performing Organizations

5009035630

MUSI1131 WIND ENSEMBLE

48 lecture hours 3 credit hours
 Study and performance of a wide range of wind instrument repertoire (woodwind, brass, and percussion) from the Renaissance through the Twentieth Century. Open to all students (audition required). May be repeated for credit. Satisfies the college core curriculum requirement.

5009035730

MUSI1141 NORTH CENTRAL TEXAS CHORUS

48 laboratory hours 1 credit hour
 May be repeated for credit. Open to all students. Study and performance of choral music concentrating especially on major works for chorus and orchestra.

5009035830

MUSI1151 COLLEGE ENSEMBLE

48 laboratory hours 1 credit hour
 May be repeated for credit. Entrance by audition only from College Singers. This group will perform in connection with public relations activities and recruitment for the College. Travel in the service area will be required.

5009035830

MUSI1154 COLLEGE SINGERS

48 laboratory hours 1 credit hour
 May be repeated for credit. Entrance by audition only. Study and performance of a broad range of music from Renaissance motets and madrigals to pop and show. This group will be involved in public relations activities for the college.

5009035530

MUSI1171 JAZZ BAND

48 laboratory hours 1 credit hour
 Consisting of 16-21 instrumentalists, the band performs both traditional and contemporary jazz literature. A number of performances are given both on and off campus (including some travel). Open to all students (audition required). May be repeated for credit. Satisfies the college core curriculum requirement.

NURSING

RNSG1163 CLINICAL – PSYCHIATRIC NURSING

48 clinical hours 1 credit hour
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Emphasis is on nursing skills essential for the care of clients along the mental health/mental illness continuum.

RNSG1219 INTEGRATED NURSING SKILLS I

Concurrent with: RNSG1523 and RNSG1361
 16 clinical hours; 32 lecture hours 2 credit hours
 Study of the concepts and principles essential for demonstrating competence in the performance of basic nursing skills for care of diverse clients across the life span. Topics include knowledge, judgement, skills, and professional values within a legal/ethical framework.

RNSG1227 TRANSITION FROM VOCATIONAL TO PROFESSIONAL NURSING

Prerequisite: Must be a currently licensed vocational/practical nurse and must have been accepted into the Associate Degree Nursing program.

Concurrent with: RNSG1262, RNSG2504
 16 lecture hours; 32 laboratory hours 2 credit hours
 Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework throughout the life span.

RNSG1262 CLINICAL NURSING FOR TRANSITION STUDENTS

Prerequisite: Must be a currently licensed vocational/practical nurse or certified paramedic and must have been accepted into the Associate Degree Nursing program.

Concurrent with RNSG1227
 128 clinical hours 2 credit hours
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Emphasis is on preparation for transition from vocational to professional nursing.

RNSG1361 CLINICAL NURSING I

Concurrent with: RNSG1523 and RNSG1219
 144 clinical hours 3 credit hours
 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Emphasis is on a systematic, problem-solving process to provide basic nursing care.

RNSG1523 INTRODUCTION TO PROFESSIONAL NURSING FOR INTEGRATED PROGRAMS

Concurrent with: RNSG1219, RNSG1361
 64 lecture hours; 64 laboratory hours 5 credit hours
 Introduction to the profession of nursing including the roles of the registered nurse with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; the application of a systematic, problem-solving process to provide basic nursing care to diverse clients across the life span; and applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

RNSG1562 CLINICAL NURSING II

Concurrent with: RNSG2504

256 clinical hours 5 credit hours

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Provides the student with nursing skills essential for care of clients with common health care needs.

RNSG2504 INTEGRATED CARE OF THE CLIENT WITH COMMON HEALTH CARE NEEDS

Concurrent with: RNSG1562

64 lecture hours; 32 laboratory hours 5 credit hours

Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework.

RNSG2514 INTEGRATED CARE OF THE CLIENT WITH COMPLEX HEALTH CARE NEEDS

Concurrent with: RNSG2561

64 lecture hours; 32 laboratory hours 5 credit hours

Application of a systematic problem solving process and critical thinking skills to provide comprehensive nursing care to diverse clients/families across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary disease prevention, health maintenance/restoration and collaboration with members of the multidisciplinary health care team. Topics include the role of the nurse as client advocate and coordinator of care and applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework.

RNSG2535 INTEGRATED CLIENT CARE MANAGEMENT

Concurrent with: RNSG2562

64 lecture hours; 32 laboratory hours 5 credit hours

Application of critical assessment skills, critical thinking, and independent nursing interventions to care for diverse clients/families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical decision-making, nursing leadership skills, and client management. Topics include the significance of professional development, trends in nursing and health care, and applicable knowledge, judgement, skills, and professional values within a legal/ethical framework.

RNSG2561 CLINICAL NURSING III

Concurrent with: RNSG2514

256 clinical hours 5 credit hours

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Provides the student with nursing skills essential for care of patients/clients with complex health care needs.

RNSG2562 CLINICAL NURSING IV

Concurrent with: RNSG2535

256 clinical hours 5 credit hours

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Provides the student with nursing skills essential for prioritizing, managing and integrating the care of clients with health care needs that are difficult to predict. Emphasis is on collaborative clinical decision-making, nursing leadership skills, and client management.

OFFICE SYSTEMS TECHNOLOGY

52.0302

ACNT 1303 INTRODUCTION TO ACCOUNTING I

48 Lecture Hours 3 credit hours

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll.

52.0101

BUSG1307 LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS

48 lecture hours 3 credit hours

The role of law in business and society including government regulations of business, legal reasoning, sources of law, social policy, legal institutions, antitrust, security regulations, consumer protection, environmental laws, worker health and safety, employment discrimination, and other laws affecting business.

11.0301

ITSW1310 INTRODUCTION TO PRESENTATION GRAPHICS SOFTWARE

32 lecture hours + 32 laboratory hours 3 credit hours

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development.

11.0301

ITSW2337 DATABASES

Prerequisite: POFT1329 and COSC1400, or departmental permission

32 lecture hours + 32 laboratory hours 3 credit hours

Introduction to database theory and the practical applications of a database.

52.0407

POFI1349 SPREADSHEETS

32 lecture hours + 32 laboratory hours 3 credit hours

In-depth coverage in the use of a spreadsheet software application.

52.0407

POFI2301 WORD PROCESSING

32 lecture hours + 32 laboratory hours 3 credit hours

In-depth coverage of word processing software application.

52.0407

POFI 2331 DESKTOP PUBLISHING FOR THE OFFICE

32 lecture hours + 32 laboratory hours 3 credit hours

In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays.

Continued On Next Page

52.0407

**POFI1191 SPECIAL TOPICS IN INFORMATION PROCESSING -
COMPUTER FUNDAMENTALS**

16 lecture hours 1 credit hour
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

52.0401

**POFI2280 COOPERATIVE EDUCATION - ADMINISTRATIVE
ASSISTANT AND SECRETARIAL SCIENCE**

16 lecture hours + 112 laboratory hours 2 credit hours
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

52.0501

POFT 2312 BUSINESS CORRESPONDENCE & COMMUNICATION

48 lecture hours 3 credit hours
Compose and produce effective business documents appropriate to meet industry standards; apply critical evaluation techniques to business documents; and demonstrate the importance of coherent, ethical communication principles in business and industry.

52.0401

POFT1309 ADMINISTRATIVE OFFICE PROCEDURES I

48 lecture hours 3 credit hours
Study of current office procedures, duties, and responsibilities applicable to an office environment.

52.0401

POFT 1319 RECORDS AND INFORMATION MANAGEMENT I

48 lecture hours 3 credit hours
Introduction to basic records information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules.

52.0408

POFT 1325 BUSINESS MATH AND MACHINE APPLICATIONS

48 lecture hours 3 credit hours
Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard.

52.0408

POFT 1329 KEYBOARDING AND DOCUMENT FORMATTING

48 lecture hours 3 credit hours
Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels formatting basic documents.

52.0408

POFT1331 BUSINESS MACHINE APPLICATIONS

48 lecture hours 3 credit hours
Skill development in the operation of machines used in a business environment. Emphasis on the development of skills in using electronic calculators and other office machines.

52.0401

POFT 1349 ADMINISTRATIVE OFFICE PROCEDURES II

Prerequisite: POFT 1309 Administrative Office Procedures I, or Departmental Approval

48 lecture hours 3 credit hours
Advanced office application with special emphasis on decision-making, goal setting, management theories, and critical thinking.

ORIENTATION

32010152

ORIE1000 ORIENTATION

8 lecture hours + 32 laboratory hours 0 credit hours
This course is designed to assist students in improving their study skills, in planning their academic programs and in researching their career fields.

PHYSICAL EDUCATION & RECREATION

NOTE: All students are encouraged to take four semesters of physical education activity courses at NCTC. Level-I activity courses teach the fundamentals, rules, etc. of the activity. Level-II activity courses deal with advanced skills and techniques of the activity. All activity courses meet for 48 activity hours and earn 1 credit hour.

PHED1200 PHYSICAL FITNESS AND WELLNESS

16 lecture hours + 32 laboratory hours 2 credit hours
This course will introduce the basic concepts of fitness, nutrition, exercise physiology, psychology, epidemiology, health promotion and disease prevention. The students will gain knowledge to make intelligent choices that contribute to a healthy lifestyle. The course will incorporate both lecture and physical activity laboratories.

3601085128

PHED1102 CONDITIONING I

PHED1103 CONDITIONING II

HED1104 VOLLEYBALL I

PHED1105 VOLLEYBALL II

PHED1106 TENNIS I

PHED1107 TENNIS II

PHED1108 BOWLING I

PHED1109 BOWLING II

PHED1110 GOLF I

PHED1111 GOLF II

PHED1113 TENNIS AND BADMINTON II

PHED1179 TENNIS AND BADMINTON I

PHED1114 VARSITY SPORTS I

PHED1115 VARSITY SPORTS II

PHED1116 VARSITY CONDITIONING I

PHED1117 VARSITY CONDITIONING II

PHED1118 JOGGING/WALKING I

PHED1119 JOGGING/WALKING II

PHED1120 AEROBIC DANCE I

PHED1121 AEROBIC DANCE II

PHED1124 WEIGHT TRAINING I/JOGGING

PHED1125 WEIGHT TRAINING II/JOGGING

PHED1126 MARTIAL ARTS I

PHED1127 MARTIAL ARTS II

PHED1128 HORSEBACK RIDING

PHED1130 FUNDAMENTALS OF SPORTS & FITNESS I

PHED1131 FUNDAMENTALS OF SPORTS & FITNESS II

PHED1132 COUNTRY-WESTERN DANCE I

PHED1133 COUNTRY-WESTERN DANCE II

PHED2100 RACQUETBALL I

PHED2101 RACQUETBALL II

3601085328

PHED1122 SCUBA DIVING I

PHED1123 SCUBA DIVING II

NORTH CENTRAL TEXAS COLLEGE

3601085128

PHED1134 PHYSICAL ACTIVITIES-SPECIAL TOPICS

48 laboratory hours 1 credit hour
Instruction and participation in physical and recreational activities. Physical education majors may have the option of 8 credit hours.

3601085128

PHED1135 PHYSICAL ACTIVITIES-SPECIAL TOPICS

48 laboratory hours 1 credit hour
Instruction and participation in physical and recreational activities. Physical education majors may have the option of 8 credit hours.

3105015228

PHED1301 FOUNDATIONS OF PHYSICAL EDUCATION

48 lecture hours 3 credit hours
Designed to orient the student in the field of health, physical education and recreation through presentation of the scope and organization of professional activities, vocational opportunities offered in the field and essential qualifications of members of the profession.

5103015328

PHED1306 FIRST AID

48 lecture hours 3 credit hours
Study of first aid and safety education as recommended by the American Red Cross, together with the methods of prevention and care of injuries occurring in physical education and athletics.

1202045128

PHED1308 SPORTS OFFICIATING

48 lecture hours 3 credit hours
A study of the rules, their interpretations, the mechanics of officiating of both major and minor sports with emphasis on football, basketball, volleyball and softball rules. This course is designed as an elective course for all students who desire a broader knowledge of several different sports.

1313145528

PHED1321 COACHING BASKETBALL

48 lecture hours 3 credit hours
The theory and practice of basketball coaching. Methods of coaching are studied through lectures, demonstrations, practices and reading of present-day literature on the sport.

1313145528

PHED1322 COACHING FOOTBALL

48 lecture hours 3 credit hours
The theory and practice of football coaching. Methods of coaching are studied through lectures, demonstrations, practices and reading of present-day literature on the sport.

1313145328

PHED1331 CONCEPTS OF HEALTHFUL LIVING

48 lecture hours 3 credit hours
Health fundamentals dealing with personal hygiene and teacher guidance of public school students in healthful living.

PHYSICAL SCIENCE

4002015139

PHYS1412 DESCRIPTIVE ASTRONOMY

48 lecture hours + 16 laboratory hours 4 credit hours
A survey course in general astronomy. History of astronomy; celestial coordinates; time keeping; light and the telescope; the solar system; constellations; stellar motion and spectra; variable stars; star clusters; galaxies. The course makes use of the NCTC Planetarium.

PHYS1415 PHYSICAL SCIENCE

48 lecture hours + 32 laboratory hours 4 credit hours
An introduction to the principles and applications of mechanics, heat, sound, light, electricity and atomic nature of matter. Recommended for elementary education majors and business majors.

PHYSICS

4008015339

PHYS1401 GENERAL PHYSICS I

Prerequisite: Background in algebra AND trigonometry
Offered during the fall semester.

48 lecture hours + 48 laboratory hours 4 credit hours

General introductory physics for students majoring in biology, dentistry, medicine, pharmacy and veterinary medicine and others who require a two-semester course in physics. A study of mechanics, heat and sound.

4008015339

PHYS1402 GENERAL PHYSICS II

Prerequisite: PHYS1401
Offered during the spring semester.

48 lecture hours + 48 laboratory hours 4 credit hours

A continuation of PHYS1401, including the study of thermodynamics, wave motion, electricity and magnetism, light and optics.

4008015439

PHYS2425 ENGINEERING PHYSICS I

Prerequisite: MATH2413 (or concurrent enrollment in MATH2413)
Offered during the fall semester.

48 lecture hours + 48 laboratory hours 4 credit hours

For pre-engineering, physics, mathematics and chemistry majors. A study of mechanics.

4008015439

PHYS2426 ENGINEERING PHYSICS II

Prerequisite: PHYS2425 and MATH 2414 (or concurrent enrollment in MATH2414)

48 lecture hours; 48 laboratory hours 4 credit hours

A continuation of PHYS2425. Heat and thermodynamics; electricity; magnetism.

PSYCHOLOGY

4201015140

PSYC2301 INTRODUCTION TO GENERAL PSYCHOLOGY

48 lecture hours 3 credit hours

An introduction to the scientific study of human and animal behavior, with the emphasis on the basic processes of learning, perception, motivation, emotion, personality and adjustment.

Continued On Next Page

4201015342
PSYC2306 HUMAN SEXUALITY
 48 lecture hours 3 credit hours
 The study of psychological, sociological, and physiological aspects of human sexuality.

4207015140
PSYC2314 DEVELOPMENTAL PSYCHOLOGY
 48 lecture hours 3 credit hours
 A study of physical, cognitive, personality and interpersonal development of a person from conception to the end of the life cycle, with an emphasis on developmental principles and tasks.

4215015140
PSYC2319 SOCIAL PSYCHOLOGY
 48 lecture hours 3 credit hours
 A study of the social and cultural bases of human behavior, interpersonal influences, group membership and the relations between persons and social systems.

4201015540
PSYC2371 CURRENT ISSUES IN PSYCHOLOGY
 48 lecture hours 3 credit hours
 An in-depth study of specific contemporary issues in psychology such as gerontology, sex-roles, and death and dying.

READING (DEVELOPMENTAL)

Note: NCTC offers a number of courses (listed below) designed to help you acquire the skills necessary for success in college-level courses. The courses are widely offered in Texas community/junior colleges, and the policy statewide is that these will not transfer as college-level courses nor will they count toward graduation at accredited Texas colleges and universities. It is important that you understand that such courses are designed to help you overcome academic deficiencies that are likely to hinder you in your pursuit of a college degree.

3201085235
READ0300 READING TECHNIQUES I
 48 lecture hours 3 credit hours
 A course designed to raise the reading level of students reading on grades four through six. Emphasis is placed on the development of word attack skills, word recognition, basic vocabulary, pronunciation, and reading comprehension. Guidance in language arts is presented. Seventh-grade reading level is required for satisfactory completion. Does not count toward graduation at NCTC.

3201085235
READ0305 READING TECHNIQUES II
Prerequisite: Satisfactory placement score.
 48 Lecture hours 3 credit hours
 A course designed to enable students to become better readers and to develop strategies and skills to meet the demands of reading intensive academic courses. Emphasis is placed on the reading process: preview reading, study reading, and critical reading and thinking. Further course topics include: vocabulary development, comprehension techniques, identifying main ideas and supporting details in a reading selection, time management, note taking skills, test taking strategies, and recognition of organizational patterns in reading selections. This course does not count toward graduation at NCTC.

SOCIOLOGY

4511015142
SOCI1301 INTRODUCTION TO SOCIOLOGY
 48 lecture hours 3 credit hours
 A study of the nature of human society, cultural heritage, collective behavior, community and social organizations, nature of social change and methods and processes of social control.

4511015242
SOCI1306 CONTEMPORARY SOCIAL PROBLEMS
 48 lecture hours 3 credit hours
 The sociological analysis of current social problems such as crime and delinquency, community problems, race relations, drug addiction and population, etc.

4511015442
SOCI2301 MARRIAGE AND FAMILY RELATIONS
 48 lecture hours 3 credit hours
 A study of marriage and family life including the problems of courtship, mate selection and marriage adjustment.

4511015342
SOCI2319 CULTURAL DIVERSITY
 48 lecture hours 3 credit hours
 An in-depth study of diversity in the modern world, including race, gender, class, and cross-cultural issues.

4511015742
SOCI2371 CURRENT ISSUES IN SOCIOLOGY
 48 lecture hours 3 credit hours
 An in-depth study of specific contemporary topics in sociology such as sociobiology, urban society, gerontology, death and dying, or sex-roles.

SPANISH

SPAN1411 ELEMENTARY SPANISH I
 48 lecture hours + 32 laboratory hours 4 credit hours
 Emphasis on the development of elementary listening, speaking, reading and writing skills applied to present situations and events relevant to students' lives and to the understanding of Spanish-speaking communities.

SPAN1412 ELEMENTARY SPANISH II
Prerequisite: SPAN14111 or one year of high school Spanish
 48 lecture hours + 32 laboratory hours 4 credit hours
 Continuation of SPAN1411 with emphasis on elementary listening, speaking, reading and writing skills applied to two main communicative goals: narration of present or past situations and events, and expression of feelings, hypotheses and opinions. Daily life situations and events and the understanding of the Spanish-speaking communities main thematic components of the course.

SPAN2311 INTERMEDIATE SPANISH I
Prerequisite: SPAN1412 or two years of high school Spanish
 48 lecture hours 3 credit hours
 Emphasis on conversation about present or past situations and events, and on the expression of feelings, hypotheses and opinions. Gradual introduction to composition and the reading of authentic texts in Spanish, taken from literature, history or a variety of disciplines. Practice of listening to conversations and speeches in Spanish from audio-visual sources.

Continued On Next Page

NORTH CENTRAL TEXAS COLLEGE

SPAN2312 INTERMEDIATE SPANISH II

Prerequisite: SPAN2311 or three years of high school Spanish

48 lecture hours 3 credit hours

Equal emphasis on systematic conversation and oral presentations, the reading of authentic texts, the writing of compositions and the listening to conversations and speeches from audio-visual sources. A variety of topics are included in this course and the level of complexity is average.

SPEECH

2310015135

SPCH1315 PUBLIC SPEAKING

48 lecture hours 3 credit hours

The process of oral communication and its relation to communication in general. Emphasis is placed on developing the students' abilities in organization and presentation of ideas. Specific activities include group discussion, oral interpretation of literature and extemporaneous speaking. There is evaluation of both listening and speaking experiences.

2310015435

SPCH1318 INTERPERSONAL COMMUNICATION

48 lecture hours 3 credit hours

Introduces communication concepts and provides speech interaction in one-to-one and small group situations. Provides experiential settings for a variety of environments, for the reduction of communication barriers, for conflict resolution, and for leadership and decision-making. Emphasizes interpersonal perception and listening skills related to self-concept.

SPCH1321 BUSINESS AND PROFESSIONAL SPEECH

48 lecture hours 3 credit hours

Study of the theory and practice of speech communication in business and professional situations. Emphasis is placed on interpersonal communication technique, leadership strategy, small group communication, conflict management, and the skills necessary to conduct successful interviews, build teams (problem solving), and formal presentations.

SURGICAL TECHNOLOGY

SRGT1201 MEDICAL TERMINOLOGY

2 lecture hours 2 credit hours

Study of the basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment in the allied health care field.

SRGT1505 INTRODUCTION TO SURGICAL TECHNOLOGY

64 lecture hours + 32 laboratory hours 5 credit hours

Orientation to surgical technology theory, surgical pharmacology and anesthesia technological sciences, and patient care concepts.

SRGT1509 FUNDAMENTALS OF PERIOPERATIVE CONCEPTS AND TECHNIQUES

64 lecture hours + 32 laboratory hours 5 credit hours

In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field.

SRGT1441 SURGICAL PROCEDURES I

48 lecture hours + 32 laboratory hours 4 credit hours

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.

SRGT1442 SURGICAL PROCEDURES II

48 lecture hours + 32 laboratory hours 4 credit hours

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.

SRGT1261 CLINICAL – SURGICAL/OPERATING ROOM TECHNICIAN (INTRODUCTORY)

96 clinical hours 2 credit hours

A basic type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.

SRGT1661 CLINICAL – SURGICAL/OPERATING ROOM TECHNICIAN (INTRODUCTORY)

288 clinical hours 6 credit hours

An intermediate type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.

SRGT1662 CLINICAL – SURGICAL/OPERATING ROOM TECHNICIAN (INTRODUCTORY)

288 clinical hours 6 credit hours

An advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.

VNSG1420 ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH

48 lecture hours + 32 laboratory hours 4 credit hours

Introduction to the normal structure and function of the body, including an understanding of body systems in maintaining homeostasis. Principles of microbiology also included.

VOCATIONAL NURSING

NOTICE: The Vocational Nursing Program reserves the right to change the curriculum and program requirements as deemed necessary for maintenance of high quality education.

VNSG1219 PROFESSIONAL DEVELOPMENT

Prerequisite: Successful completion of all courses in Level I and Level II
 32 lecture hour 2 credit hours
 Study of the importance of professional growth. Topics include the role of the LVN in the multidisciplinary healthcare team, professional organizations, continuing education, delegating authority, résumé writing, and job interviewing.

VNSG1227 ESSENTIALS OF MEDICATION ADMINISTRATION

Prerequisite: Admission to the Vocational Nursing Program
 32 lecture hours 2 credit hours
 General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement.

VNSG1230 MATERNAL-NEONATAL NURSING

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360 in fall admission. For spring admission, successful completion of all courses in Level I and Level II
 32 lecture hours 2 credit hours
 Utilization of the nursing process in the assessment and management of the childbearing family. Emphasis on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonatal period including abnormal conditions.

VNSG1234 PEDIATRICS

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360 in fall admission. For spring admission, successful completion of all courses in Level I and Level II
 32 lecture hours 2 credit hours
 Study of childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process.

VNSG1323 BASIC NURSING SKILLS

Prerequisite: Admission to the Vocational Nursing Program
 80 lecture hours + 32 laboratory hours 3 credit hours
 Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation for all nursing interventions. Related aspects of nutrition, pharmacology, and medical terminology included.

VNSG1331 PHARMACOLOGY

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360
 48 lecture hours 3 credit hours
 Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions associated with the various pharmacotherapeutic agents.

VNSG1360 CLINICAL I

Prerequisite: Admission to the Vocational Nursing Program
 240 clinical hours3 credit hours
 This course provides clinical experience in fundamental nursing skills. The nursing process is applied to provide individualized care designed to meet a client's particular needs. The geriatric client is the focus of care.

VNSG1363 CLINICAL II – SPRING ADMISSION

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360
 240 clinical hours 3 credit hours
 This course is offered in the summer semester for the January admission class. It provides a continuation of Clinical I with the emphasis on utilizing the nursing process in providing individualized care of the client in all stages of development. The principles of safety in medication administration and other care are closely monitored.

VNSG1400 NURSING IN HEALTH AND ILLNESS I

Prerequisite: Admission to the Vocational Nursing Program
 80 lecture hours 4 credit hours
 Introduction to general principles of growth and development, primary health care needs of the client across the life span, and therapeutic nursing interventions.

VNSG1420 ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH

64 lecture hours 4 credit hours
 Introduction to the normal structure and function of the body, including an understanding of body systems in maintaining homeostasis. Principles of microbiology also included.

VNSG1463 CLINICAL II – FALL ADMISSION

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360
 336 clinical hours 4 credit hours
 This course is offered in the spring semester for the August admission class. It provides a continuation of Clinical I with the emphasis on utilizing the nursing process in providing individualized care of the client in all stages of development. The principles of safety in medication administration and other care are closely monitored.

VNSG1509 NURSING IN HEALTH AND ILLNESS II

Prerequisite: Successful completion of VNSG1420, VNSG1323, VNSG1227, VNSG 1400, VNSG1360
 80 lecture hours 5 credit hours
 Introduction to common health problems requiring medical and surgical interventions.

VNSG1510 NURSING IN HEALTH AND ILLNESS III

Prerequisite: Successful completion of all Level I and Level II courses
 80 lecture hours 5 credit hours
 Continuation of Nursing in Health and Illness II. Further study of common medical-surgical health problems of the client.

VNSG2360 CLINICAL III – FALL ADMISSION

Prerequisite: Successful completion of all Level I and Level II courses
 240 clinical hours 3 credit hours
 This course is offered in the summer semester for the August admission class. It assists the student in the continued development of their knowledge and skill in the role and functions of the vocational nurse. It provides learning experiences in the clinical setting focusing on further refinement of the nursing process in caring for clients exhibiting health-illness continuum through the life span.

VNSG2460 CLINICAL III – SPRING ADMISSION

Prerequisite: Successful completion of all Level I and Level II courses
 336 clinical hours 4 credit hours
 This course is offered in the fall semester for the January admission class. It assists the student in the continued development of their knowledge and skill in the role and functions of the vocational nurse. It provides learning experiences in the clinical setting focusing on further refinement of the nursing process in caring for clients exhibiting health-illness continuum through the life span.

