Course Descriptions

This catalog reflects course descriptions detailed in THE ALABAMA COLLEGE SYSTEM COURSE DIRECTORY and addenda to that directory through May, 2007.

Basic courses (all 100 or below numbered courses) are noncredit and most likely nontransferable. For institutional accounting and for certain financial aids, these courses are counted toward a student's credit load. The courses are counted in semester grade point calculations, but will not count toward graduation requirements at Northeast.

The following courses descriptions have been coded in accordance with the AGSC Transfer Code Designations as explained below:

CODE A = AGSC approved transfer courses in Areas I-IV that are common to all institutions.

CODE B = Area V courses that are deemed appropriate to the degree and pre-major requirements of individual students.

CODE C = Potential Area V transfer courses that are subject to approval by respective receiving institutions.

TRANSFER CODE DESIGNATIONS

- *AGSC approved transfer courses coded "A" may be utilized to fulfill articulation requirements in respective approved programs of study.*
- *Courses coded "B" that appear in AGSC ratified templates may be utilized to fulfill articulation requirements in respective approved programs of study.*
- *Potential transfer courses coded "C" will satisfy Area V requirements or requirements designated on the home page of the receiving institution.*

Some courses may be offered through distance learning. Please check the schedule of courses each semester to identify these courses.

ART (ART)

ART 100. ART APPRECIATION.—3 hours. A

This course is designed to help the student find personal meaning in works of art and develop a better understanding of the nature and validity of art. Emphasis is on the diversity of form and content in original art work. Upon completion, students should understand the fundamentals of art, the materials used and have a basic overview of the history of art.

ART 113. DRAWING I.—3 hours. B

This course provides the opportunity to develop perceptional and technical skills in a variety of media. Emphasis is placed on communication through experimenting with composition, subject matter and technique. Upon completion, students should demonstrate and apply the fundamentals of art to various creative drawing projects.

ART 114. DRAWING II.—3 hours. B

PREREQUISITE: Drawing I.

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

ART 121. TWO-DIMENSIONAL COMPOSITION I. —3 hours. B

PREREQUISITE: Determined by instructor.

This course introduces the basic of concepts of two-dimensional design. Topics include the elements and principles of design with emphasis on the arrangements and relationships among them. Upon completion, students should demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions.

ART 127. THREE-DIMENSIONAL COMPOSITION. —3 hours. B

PREREQUISITE: ART 113 OR ART 121.

This course introduces art materials and principles of design that acquaint the beginner with the fundamentals of three-dimensional art. Emphasis is placed on the use of art fundamentals and the creative exploration of materials in constructing three-dimensional art works. Upon completion, students should demonstrate basic technical skills and a personal awareness of the creative potential inherent in three-dimensional art forms.

ART 203. ART HISTORY I.—3 hours. A

This course covers the chronological development of different forms of art, such as sculpture, painting, and architecture. Emphasis is placed on history from the ancient period through the Renaissance. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and of the impact of society on the arts.

ART 204. ART HISTORY II.—3 hours. A

This course covers a study of the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the Baroque to the present. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and of the impact of society on the arts.

ART 216. PRINTMAKING I.—3 hours. C

PREREQUISITE: ART 113.

This course introduces various printmaking processes. Topics include relief, intaglio, serigraphy, or lithography and the creative process. Upon completion, students should have a basic understanding of the creative and technical problems associated with printmaking.

ART 217. PRINTMAKING II.—3 hours. C

PREREQUISITE: ART 216 or permission.

This course provides the opportunity for the student to study a printmaking process beyond the introductory level. Emphasis is placed on creativity, composition, and technique

in the communication of ideas through printmaking. Upon completion, students should demonstrate an understanding of the printmaking process as a creative tool for the expression of ideas.

ART 231. WATERCOLOR PAINTING I.—3 hours. C
PREREQUISITE: ART 113, ART 121 or permission.

This course introduces materials and techniques appropriate to painting on paper with water-based medium. Emphasis is placed on developing the technical skills and the expressive qualities of watercolor painting. Upon completion, students should be able to demonstrate a basic proficiency in handling the techniques of watercolor and how it can be used for personal expression.

ART 232. WATERCOLOR II.—3 hours. C
PREREQUISITE: ART 231.

This course advances the skills and techniques of painting on paper using water based medium. Emphasis is placed on exploring the creative uses of watercolor and developing professional skills. Upon completion, students should demonstrate and compile a body of original paintings that reflect a personal awareness of the media's potential.

ART 233. PAINTING I.—3 hours. B
PREREQUISITE: ART 113, ART 121, or permission.

This course is designed to introduce the student to fundamental painting processes and materials. Topics include art fundamentals, color theory, and composition. Upon completion, students should be able to demonstrate the fundamentals of art and discuss various approaches to the media and the creative processes associated with painting.

ART 234. PAINTING II.—3 hours. C
PREREQUISITE: ART 233.

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

ART 243. SCULPTURE I.—3 hours. C
PREREQUISITE: ART 113, ART 127 or permission.

This course provides a study of three-dimensional form by familiarizing students with sculpting media and techniques. Topics include the fundamentals of art, sculpting media with emphasis on the creative process. Upon completion, students should understand the fundamentals of art and three-dimensional form, as well as the various media and processes associated with sculpture.

ART 244. SCULPTURE II.—3 hours. C
PREREQUISITE: ART 243

This course is designed to sharpen skills in the media and processes of sculpture. Emphasis is placed on personal expression through three-dimensional form. Upon completion, students should be able to apply the fundamentals of art, their knowledge of form, and the sculptural processes to communicating ideas.

BANKING AND FINANCE (BFN)

BFN 100. PRINCIPLES OF BANKING.—2 hours. C

This course is an introduction to the broad area of banking. Topics include the evolution of banking, Federal Reserve System, documents and forms used, rudimentary laws and regulations, as well as a study of the specialized services offered. Upon completion of this course, the student will be able to perform basic banking functions.

BFN 101. LAW AND BANKING: PRINCIPLES.—2 hours. C

This course is an introduction to banking law and legal issues, with special emphasis on the Uniform Commercial Code. Topics include the role of regulators, torts, contracts, real estate, bankruptcy, and the legal implications of consumer lending. Upon completion of the course, the student will be able to work with basic banking documents.

BFN 110. MARKETING FOR BANKERS.—2 hours. C

This course is an introduction to basic marketing principals and how a bank develops a successful marketing plan. Topics include consumer behavior, market research, the planning process, public relations, advertising, and sales promotion. Upon completion of this course, the student will have the skills to bring in new business.

BFN 130. FUNDAMENTALS OF ANALYZING FINANCIAL STATEMENTS.—1 hour. C

This course is an introduction to basic financial statement analysis techniques. Topics include income statement, balance sheet, funds flow, working capital, projections, seasonalization, and monitoring problem loans. Upon completion of this course, the student will have the rudimentary skills to work with financial statements as they relate to the job description.

BFN 136. COMMERCIAL LENDING.—2 hours. C

This course is an introduction to the commercial lending process and how it contributes to bank profitability. Topics include a history of commercial lending, skills needed to become a successful loan officer, steps in the commercial loan process, and trends impacting the commercial lending process. Upon completion of this course, the student will have the skills to perform the commercial lending function.

BFN 146. LOAN COLLECTOR'S TRAINING.—1 hour. C

This course is an introduction to the bank's collection program. Topics include the nature of the collection process, telephone collection, collection letters, and how to handle delinquencies. Upon completion of this course the student will be able to handle loan collections.

BFN 220. DEPOSIT OPERATIONS.—2 hours. C

This course is an introduction to the U.S. payments system, banking law and regulation, and current industry practices. Topics include the payment mechanism, regulations affecting deposits, the paper payments system, the electronic system, deposit creation, and the bank services which interconnect with deposit operations. Upon completion of this course, the student will have the necessary knowledge to work in this area.

BFN 226. SECURITIES PROCESSING.—2 hours. C

This course is an introduction to the securities business. Topics include types of securities offered and traded, where they are traded, the importance of automation, laws and regulations, clearing and settlement mechanisms, trust accounts, and the impact of computer technology. Upon completion of this course, the student will be qualified to work with securities in a bank setting.

BFN 236. ANALYZING FINANCIAL STATEMENTS. —2 hours. C

This course is an elaboration of BFN 130. It provides an introduction of how financial data are generated and their limitations. Topics include techniques for analyzing the flow of business's funds, methods for selecting and interpreting financial ratios, and analytical tools for prediction and testing assumptions about a firm's future performance. Upon completion of this course the student will have the necessary skill to work with financial statements.

BFN 280. REAL ESTATE FINANCE.—2 hours. C

This course provides an introductory background to the varied real estate mortgage credit operations of commercial banks. Topics include the residential lending process, mortgage market, fund flows, the role of the government in mortgage financing, and the important aspects of income-producing real estate. Upon completion of this course, the student will have the necessary skill to work in this area.

BASIC SKILLS READING (BSR)

BSR 090. INTRODUCTION TO COLLEGE READING. —2 hours.

Introduction to College Reading introduces effective reading and inferential thinking skills. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. The course also includes review of word attack skills, vocabulary study using root words, prefixes and suffixes, and basic decoding skills.

BASIC STUDY SKILLS (BSS)

BSS 090. BASIC STUDY SKILLS.—1-3 hours. C

Basic Study Skills is designed to teach students the necessary skills of "how to study." This course will offer a metacognitive approach that sequentially develops students' awareness of their thought processes and will guide them through changes in their study strategies, attitudes, and habits. Skills are then immediately transferable, through guided application, to students' texts in other classes. Students will also demonstrate strategies in vocabulary building, memory retention, test-taking skills, and library research. To complete BSS 090, the student must finish the course with a minimum grade of "C" or 70%.

BIOLOGY (BIO)

BIO 103. PRINCIPLES OF BIOLOGY I.—4 hours. A

This is an introductory course for science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific method, basic principles of evolution, and an overview of the diversity of life with emphasis on viruses, prokaryotes, and protist. A 120 minute laboratory is required.

BIO 104. PRINCIPLES OF BIOLOGY II.—4 hours. A

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

BIO 201. HUMAN ANATOMY AND PHYSIOLOGY I. —4 hours. B

Human Anatomy and Physiology I covers the structure and function of the human body. Included is an orientation of the human body, basic principles of chemistry, a study of cells and tissues, metabolism, joints, the integumentary, skeletal, muscular, and nervous systems, and the senses. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120 minute laboratory is required.

BIO 202. HUMAN ANATOMY AND PHYSIOLOGY II. —4 hours. B

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

BIO 220. GENERAL MICROBIOLOGY.—4 hours. B
(RECOMMENDED 4 SEMESTER HOURS OF CHEMISTRY).

This course includes historical perspectives, cell structure and function, microbial genetics, infectious diseases, immunology, distribution, physiology, culture, identification, classification, and disease control of microorganisms. The laboratory experience includes micro-techniques, distribution, culture, identification, and control. Two 120 minute laboratories are required.

BIO 230. HUMAN PATHOPHYSIOLOGY.– 4 hours. C
PREREQUISITE: BIO 201, BIO 202, AND BIO 220.

Human Pathophysiology covers the nature, etiology, prognosis, prevention, and therapeutics of human disease. A 120 minute laboratory is required.

BUSINESS (BUS)

BUS 150. BUSINESS MATH.—3 hours. C

This course is a study of practical business mathematics. Topics include fundamental processes of arithmetic with emphasis on decimals, percentages, markup, discounts, bank reconciliation, simple and compound interest discounting notes, depreciation methods, and present values.

BUS 175. RETAILING.—3 hours. C

This course is a study of the principles and practices of retailing. Topics include planning, policies and procedures of distribution, store design, layout and location, the economic and social role of retailing, competitive strategies, and retail management.

BUS 176. PROMOTIONAL STRATEGIES.– 3 hours. C

This course provides an overview of the tools and techniques used by businesses in their promotional strategies. Topics include variables affecting promotional decision, information needed to access these variables, the strengths and limitations of methods and strategies, and the fundamentals of managerial decision making.

BUS 177. SALESMANSHIP.—3 hours. C

This course provides an introduction to the principles and practices of ethical salesmanship. Topics include industrial and retail selling methods of market analysis, professional salesmanship and sales methods, consumer types, attitudes, and behavior.

BUS 178. PURCHASING.—3 hours. C

This course provides an overview of the principles of purchasing for resale. Topics include buying techniques, market buying systems, financial management of purchasing department, market information systems, and problems confronting retail and wholesale buyers.

BUS 186. ELEMENTS OF SUPERVISION.— 3 hours. C

This course is an introduction to the fundamentals of supervision. Topics include the functions of management, responsibilities of the supervisor, management-employee relations, organizational structure, project management, and employee training and rating.

BUS 215. BUSINESS COMMUNICATION.— 3 hours. C

This course covers written, oral and nonverbal communications. Topics include the application of communication principles to the production of clear, correct, and logically organized faxes, e-mail, memos, letters, resumes, reports, and other business communications.

BUS 241. PRINCIPLES OF ACCOUNTING I.— 3 hours. B

This course is designed to provide a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is placed on financial accounting, including the accounting cycle, and financial statement preparation analysis.

BUS 242. PRINCIPLES OF ACCOUNTING II.— 3 hours. C

PREREQUISITE: BUS 241.

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

BUS 263. THE LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS.—3 hours. B

This course provides an overview of the legal and social environment for business operations with emphasis on contemporary issues and subsequent impact on business. Topics include the Constitution, the Bill of Rights, the legislative process, civil and criminal law, administering agencies, trade regulations, consumer protection, contracts, employment and personal property.

BUS 271. BUSINESS STATISTICS I.—3 hours. B

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

BUS 272. BUSINESS STATISTICS II.—3 hours. B

PREREQUISTE: BUS 271.

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

BUS 275. PRINCIPLES OF MANAGEMENT.— 3 hours. B

This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing, and controlling with emphasis on practical business applications.

BUS 276. HUMAN RESOURCE MANAGEMENT.— 3 hours. C

This course provides an overview of the responsibilities of the supervisor of human resources. Topics include the selection, placement, testing, orientation, training, rating, promotion, and transfer of employees.

BUS 279. SMALL BUSINESS MANAGEMENT.— 3 hours. C

PREREQUISITE: As required by program.

This course provides an overview of the creation and operation of a small business. Topics include buying a franchise, starting a business, identifying capital resources, understanding markets, managing customer credit, managing accounting systems, budgeting systems, inventory systems, purchasing insurance, and the importance of appropriate legal counsel.

BUS 284. ECONOMIC LABOR RELATIONS.— 3 hours. B

This is a basic management course in the field of labor. Topics include psychological and institutional factors, economic factors and economic analysis in such areas of the labor-management relations.

BUS 285. PRINCIPLES OF MARKETING.—3 hours. B

This course provides a general overview of the field of marketing. Topics include marketing strategies, channels of distribution, marketing research, and consumer behavior.

CHEMISTRY (CHM)

CHM 104. INTRODUCTION TO INORGANIC CHEMISTRY.—4 hours. A

PREREQUISITE: MTH 098 or equivalent mathematics placement score.

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

CHM 111. COLLEGE CHEMISTRY I.—4 hours. A

PREREQUISTE: MTH 112 or equivalent mathematics placement score.

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

CHM 112. COLLEGE CHEMISTRY II.—4 hours. A

PREREQUISTE: CHM 111.

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

CHM 221. ORGANIC CHEMISTRY I.—4 hours. B

PREREQUISTE: CHM 112.

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

CHM 222. ORGANIC CHEMISTRY II.—4 hours. B

PREREQUISTE: CHM 221.

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

CHILD DEVELOPMENT (CHD)

CHD 100. INTRODUCTION TO EARLY CARE AND EDUCATION OF CHILDREN.—3 hours.

PREREQUISITE: As required by program.

This course introduces the child care profession including the six functional areas of the Child Development Associate (CDA) credential. Emphasis is placed on using positive guidance techniques, setting up a classroom and planning a schedule. Upon completion students should be able to create and modify children's environments to meet individual needs, use positive guidance to develop positive relationships with children, and promote children's self-esteem, self-control, and self-motivation.

CHD 201. CHILD GROWTH AND DEVELOPMENT PRINCIPLES.—3 hours.

PREREQUISITE: As required by program.

This course is a systematic study of child growth and development from conception through early childhood. Emphasis is placed on principles underlying physical, mental, emotional, and social development, and on methods of child study and practical implications. Upon completion, studentsshould be able to use knowledge of how young children differ in their development and approaches to learning to provide opportunities that support the physical, social, emotional, language, cognitive, and aesthetic development of children.

CHD 202. CHILDREN'S CREATIVE EXPERIENCES. —3 hours.

PREREQUISITE: As required by program.

This course focuses on fostering creativity in preschool children and developing a creative attitude in teachers. Topics include selecting and developing creative experiences in language arts, music, science, math, and movement with observation and participation with young children required. Upon completion, students should be able to select and implement creative and age-appropriate experiences for young children.

CHD 203. CHILDREN'S LITERATURE AND LANGUAGE DEVELOPMENT.—1-3 hours.

PREREQUISITE: As required by program.

This course surveys appropriate literature and language arts designed to enhance young children's speaking, listening pre-reading and writing skills. Emphasis is placed on developmental appropriateness as related to language. Upon completion, students should be able to create, evaluate, and demonstrate activities which support a language-rich environment for young children.

CHD 204. METHODS AND MATERIALS FOR TEACHING CHILDREN.—1-3 hours.

PREQUISITE: As required by program.

This course introduces basic methods and materials used in teaching young children. Emphasis is placed on students

compiling a professional resource file of activities used for teaching math, language arts, science, and social studies concepts. Upon completion students should be able to demonstrate basic methods of creating learning experiences using appropriate techniques, materials, and realistic expectations.

CHD 205. PROGRAM PLANNING FOR EDUCATING YOUNG CHILDREN.—3 hours.

PREREQUISITE: As required by program.

This course is designed to give students practice in lesson and unit planning, writing behavioral objectives, and evaluating activities taught to young children. Emphasis is placed on identifying basic aspects of cognitive development and how children learn. Upon completions students should be able to plan and implement developmentally appropriate curriculum and instructional practices based on knowledge of individual differences and the curriculum goals and content.

CHD 206. CHILDREN'S HEALTH AND SAFETY.—3 hours.

PREREQUISITE: As required by program.

This course introduces basic health, nutrition, and safety management practices for young children. Emphasis is placed on setting up and maintaining a safe, healthy environment for young children including specific procedures for infants and toddlers and procedures regarding childhood illnesses and communicable diseases. Upon completion, students should be able to prepare a healthy, safe environment, plan nutritious meals and snacks, an recommend referrals if necessary.

CHD 208. ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS.—3 hours.

PREREQUISITE: As required by program.

This course includes appropriate administrative policies and procedures relevant to preschool programs. Topics include local, state and federal regulations; budget planning; record keeping; personnel policies; and parent involvement. Upon completion, students should be able to identify elements of a sound business plan, develop familiarity with basic recordkeeping techniques, and identify elements of a developmentally appropriate program. Course may include practice in record keeping.

CHD 209. INFANT AND TODDLER EDUCATION PROGRAMS.—1-3 hours.

PREREQUISITE: As required by program.

This course focuses on child development from infancy to thirty months of age with emphasis on planning programs using developmentally-appropriate material. Emphasis is placed on positive ways to support an infant's social, emotional, physical, and intellectual development. Upon completion, students should be able to plan an infant-toddler program and environment that is appropriate and supportive of the families and the children.

CHD 210. EDUCATING EXCEPTIONAL YOUNG CHILDREN.—1-3 hours.

PREREQUISITE: As required by program.

This course explores the many different types of exceptionalities found in young children. Topics include speech, language, hearing, and visual impairments; gifted and talented children; mental retardation; emotion, behavioral, and neurological handicaps. Upon completion, students should be able to identify appropriate strategies for working with young exceptional children.

CHD 215. SUPERVISED PRACTICAL EXPERIENCE IN CHILD DEVELOPMENT.—1-3 hours.

PREREQUISITE: As required by program.

This course provides a minimum of 90 hours of hands-on, supervised experience in an approved program for young children. Emphasis is placed on performance of daily duties which are assessed by the college instructor and the cooperating teacher. Upon completion, students should be able to demonstrate competency in a child care setting.

CHD 221. FAMILY CHILD CARE.—3 hours.

PREREQUISITE: As required by program.

This course introduces methods for providing a developmentally-appropriate child care program in a home setting to include organizing home environments, establishing a daily schedule with children of different ages, building partnerships with parents, and helping children learn through play, etc. A special instruction addresses family care as a small business operation with emphasis being placed on budgeting and tax requirements.

CHD 223. CDA INTERSHIP.—2 hours.

PREREQUISITE: As required by program.

This course, part of the CDA track, provides for the formal assessment experience. Emphasis is placed on performance of daily task utilizing the CDA 13 functional areas, which are assessed by the college instructor. Upon completion, students should be able to demonstrate competency in a childcare setting. This observation instrument may be used by the student when applying to the Council for Early Childhood Professional Recognition for the National CDA Credential.

CHD 224. SCHOOL AGE CHILD CARE.—1-3 hours.

PREREQUISITE: As required by program.

The course designed for caregivers/teachers proving for children age 5 - 12 in their after school care needs. The course provides information on developmental profiles, discusses family concerns, and includes a variety of activities that caregivers can adopt to provide an educational and stimulating program.

COMPUTER SCIENCE (CIS)
COMPUTER SCIENCE TECHNOLOGY CIS)

CIS 110. INTRODUCTION TO COMPUTER LOGIC AND PROGRAMMING.—3 hours. C

PREREQUISITE: As required by program.

This course includes logic, design and problem solving techniques used by programmers and analysts in addressing and solving common programming and computing problems. The most commonly used techniques of flowcharts, structure charts, and pseudocode will be covered and students will be expected to apply the techniques to designated situations and problems. This is a CORE course.

CIS 111. WORD PROCESSING SOFTWARE APPLICATIONS.—3 hours. C

PREREQUISITE: As required by program.

This course provides students with hands-on experience using word processing software. Students will develop skills common to most word processing software by developing a wide variety of documents. Emphasis is on planning, developing, and editing functions associated with word processing.

CIS 113. SPREADSHEET SOFTWARE APPLICATIONS. —3 hours. C

PREREQUISITE: As required by program.

This course provides students with hands-on experience using spreadsheet software. Students will develop skills common to most spreadsheet software by developing a wide variety of spreadsheets. Emphasis is on planning, developing, and editing functions associated with spreadsheets.

CIS 115. PRESENTATIONS GRAPHICS SOFTWARE APPLICATIONS.—3 hours. C

PREREQUISITE: As required by program.

This course provides students with hands-on experience using presentation graphics software. Students will develop skills common to most presentation graphics software by developing a wide variety of presentations. Emphasis is on planning, developing, and editing functions associated with presentations.

CIS 117. DATABASE MANAGEMENT SOFTWARE APPLICATIONS.—3 hours. C

PREREQUISITE: As required by program.

This course provides students with hands-on experience using database management software. Students will developskills common to most database management software by developing a wide variety of databases. Emphasis is on planning, developing, and editing functions associated with database management.

CIS 146. MICROCOMPUTER APPLICATIONS.—3 hours. B

PREREQUISITE: As required by program.

This course is an introduction to the most common microcomputer software applications. These software packages should include typical features of applications, such as word processing, spreadsheets, database management, and presentation software. Upon completion, students will be able to utilize selected features of these packages. This course will help prepare students for the MOS and IC 3 certification. This course or an equivalent is CORE for the AAT and AAS CIS programs.

CIS 147. ADVANCED MICRO APPLICATIONS.—3 hours. B

PREREQUISITE: As required by program.

This course is a continuation of CIS 146 in which students utilize the advanced features of topics covered in CIS 146. Advanced functions and integration of word processing, spreadsheets, database, and presentation packages among other topics are generally incorporated into the course and are to be applied to situations found in society and business. Upon completion, the student should be able to apply the advanced features of selected software appropriately to typical problems found in society and business. This course will help prepare students for the MOS certification.

CIS 149. INTRODUCTION TO COMPUTERS.—3 hours. C

PREREQUISITE: As required by program.

This course is an introduction to computers and their impact on society. The course covers the development of computers, their impact on society, as well as future implications of development of computer and related communication technologies. This course introduces programming and computer operating systems. Upon completion, students will have basic knowledge of computer technology and will be able to perform basic functions with a computer system. The course will help prepare students for the IC 3 certification.

CIS 207. INTRODUCTION TO WEB DEVELOPMENT. —3 hours. C

PREREQUISITE: As required by program.

At the conclusion of this course, students will be able to use specified markup languages to develop basic Web pages.

CIS 212. VISUAL BASIC PROGRAMMING.—3 hours. B

PREREQUISITE: As required by program.

This course emphasizes BASIC programming using a graphical user interface. The course will emphasize graphical user interfaces with additional topics on such topics as advanced file handling techniques, simulation, and other selected areas. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

CIS 249. MICROCOMPUTER OPERATING SYSTEMS.—3 hours. C

PREREQUISITE: As required by program.

This course provides an introduction to microcomputer operating systems. Topics include a description of the operating system, system commands, and effective and efficient use of the microcomputer with the aid of its system programs. Upon completion, students should understand the function and role of the operating system, its operational characteristics, its configuration, how to execute programs, and efficient disk and file management.

CIS 251. C++ PROGRAMMING.—3 hours. B

PREREQUISITE: As required by program.

This course is an introduction to the C++ programming language including object oriented programming. Topics include: problem solving and design; control structures; objects and events; user interface construction; and document and program testing.

CIS 255. JAVA PROGRAMMING.—3 hours. B

PREREQUISITE: As required by college.

This course is an introduction to the Java programming language. Topics in this course include object-oriented programming constructs, Web page applet development, class definitions, threads, events and exceptions. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

CIS 268. SOFTWARE SUPPORT.—3 hours. C
PREREQUISITE: As required by college.

This course provides students with hands-on practical experience in installing computer software, operating systems, and trouble-shooting. The class will help to prepare participants for the A+ Certification sponsored by CompTIA.

CIS 269. HARDWARE SUPPORT.—3 hours. C
PREREQUISITE: As required by college.

This course provides students with hands-on practical experience in installation and troubleshooting computer hardware. The class will help to prepare participants for the A+ Certification sponsored by CompTIA.

CIS 273. INTRODUCTION TO NETWORKING COMMUNICATIONS.—3 hours. C
PREREQUISITE: As required by college.

This course is designed to introduce students to basic concepts of computer networks. Emphasis is placed on terminology and technology involved in implementing selected networked systems. The course covers various network models, topologies, communications protocols, transmission media, networking hardware and software, and network troubleshooting. Students gain hands-on experience in basic networking. This course further helps prepare students for certification.

CIS 276. SERVER ADMINISTRATION.—3 hours. C
PREREQUISITE: As required by college.

This course introduces network operating system administration. Topics included in this course are network operating system software installation, administration, monitoring, and maintenance; user, group, and computeraccount management; shared resource management; and server hardware management. Students gain hands-on experience in managing and maintaining a network operating system environment.

CIS 285. OBJECT ORIENTED PROGRAMMING.—3 hours. B
PREREQUISITE: As required by college.

This course is a advanced object-oriented programming course and covers advanced program development techniques and concepts in the context of an object-oriented language, such as C++ or Java. Subject matter includes object-oriented analysis and design, encapsulation, inheritance, polymorphism (operator and function overloading), information hiding, abstract data types, reuse, dynamic memory allocation, and file manipulation. Upon completion, students should be able to develop a hierarchical class structure necessary to the implementation of an object-oriented software system.

CIS 299. DIRECTED STUDIES IN COMPUTER SCIENCE.—3 hours. C
PREREQUISITE: As required by college.

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

COSMETOLOGY (COS)

COS 111. COSMETOLOGY SCIENCE & ART.—3 hours.
PREREQUISITE: As required by program.
COREQUISITE: COS 112 and/or as required by program.

In this course, students are provided a study of personal and professional image, ethical conduct, sanitation, hair styling, and nail care. Topics include personal and professional development, bacteriology, decontamination, infection control, draping, shampooing, conditioning, hair shaping, and hair styling. Upon completion, students should be able to apply safety rules and regulations and write procedures for skills identified in this course. ***NDC*, CORE**

COS 112. COSMETOLOGY SCIENCE & ART LAB.—3 hours.
PREREQUISITE: As required by program.
COREQUISITE: COS 111 and/or as required by program.

In this course, students are provided the practical experience for sanitation, shampooing, hair shaping, hairstyling, and nail care. Emphasis is placed on sterilization, shampooing, hair shaping, hairstyling, manicuring, and pedicuring. Upon completion, the student should be able to perform safety and sanitary precautions, shampooing, hair shaping, hairstyling, and nail care procedures. ***NDC*, CORE**

COS 113. CHEMICAL METHODOLOGY.—3 hours.
PREREQUISITE: As required by program.
COREQUISITE: COS 114 and/or as required by program.

This course focuses on the theory of hair and scalp disorders, permanent waving, chemical relaxers, and the composition of the hair. Topics include disorders and analysis of the scalp and hair, permanent waving, chemical hair relaxing, and soft curling. Upon completion, the student should be able to write procedures for permanent waving and chemical relaxing, identify the composition of the hair, safety and sanitary precautions and steps for scalp and hair analysis as well as the disorders. ***NDC*, CORE**

COS 114. CHEMICAL METHODOLOGY LAB.—3 hours.
PREREQUISITE: As required by program.
COREQUISITE: COS 113 and/or as required by program.

In this course, students are provided the practical experience of permanent waving, chemical relaxing, and hair analysis. Topics include permanent waving, chemical relaxing, soft curl, and scalp and hair analysis. Upon completion, the student should be able to analyze the scalp and hair and perform these chemical services using safety and sanitary precautions. ***NDC*, CORE**

COS 121. COLORIMETRY.—3 hours
PREREQUISITE: As required by program.
COREQUISITE: COS 122 and/or as required by program.

In this course, students learn the techniques of hair coloring and hair lightening. Emphasis is placed on color application, laws, levels and classifications of color and problem solving. Upon completion, the student should be able to identify all phases of hair coloring and the effects of the hair. ***NDC*, CORE**