

Course Descriptions

ACADEMIC ACHIEVEMENT

AAA 090 ACADEMIC ACHIEVEMENT STRATEGIES 3 CREDITS

Students will develop personalized approaches to learning and succeed as they transition into college. Topics include goal-setting, time management, textbook reading strategies, note-taking, test-taking, listening techniques, concentration and memory devices, and critical thinking for student success.

PREREQUISITE(S): CPT reading score 60-79

AAA 103 COLLEGE ORIENTATION 1 CREDIT

This course is an orientation course designed for students new to higher education. Topics will include personal learning and study skill inventories, goal setting, educational planning and introductions to college services and procedures.

AAA 109 ADVANCED ACADEMIC ACHIEVEMENT 3 CREDITS

Students will examine theories and practices associated with successful learning and adopt those that enhance their college success. Critical areas for study include education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership and techniques for successful academic performance. This course is recommended for new and returning students.

PREREQUISITE(S): CPT reading score 80-120

ACCOUNTING

ACC 101 FUNDAMENTALS OF ACCOUNTING 3 CREDITS

This course presents the basic elements and concepts of accounting, with emphasis on the procedures used for maintaining journals, ledgers, and other related records, and for the completion of end-of period reports for small service and merchandising businesses. For non-accounting majors.

ACC 115 PAYROLL ACCOUNTING 3 CREDITS

A study of federal and state laws and their effects on personnel and payroll records. The course is non technical and is intended to give students a practical working knowledge of the current tax laws and actual experience in applying regulations. Student will be exposed to computerized payroll procedures.

PREREQUISITE(S): ACC 101 or 121, or enrolled concurrently, or instructor's permission

ACC 118 ANALYZING AND INTERPRETING FINANCIAL STATEMENTS 3 CREDITS

An introduction to accounting and its significant role in making sound business decisions. This course is designed to teach students how to use financial statements to be wise users of accounting information. The course will give practical experience using ratio analysis to make credit and equity decisions. Instructional methods include lecture, case studies, group interaction and internet research projects.

ACC 121 PRINCIPLES OF ACCOUNTING I 4 CREDITS

This course introduces the study of accounting principles to give the student an understanding of the theory and logic that underlie procedures and practices. Major topics include the accounting cycle for service and merchandising businesses, subsidiary ledgers, internal control principles and practices, notes and interest, inventory systems and costing, plant assets and intangible asset accounting, and depreciation methods and practices. This is the first course in the accounting sequence.

ACC 122 PRINCIPLES OF ACCOUNTING II 4 CREDITS

This course continues the study of accounting principles as they apply to corporations. Major topics include: stocks, bonds, investments, the cash flow statement, financial analysis, budgeting, and cost and managerial accounting.

PREREQUISITE(S): ACC 121 or equivalent; MAT 106, 111 or higher strongly recommended

ACC 125 COMPUTERIZED ACCOUNTING 3 CREDITS

This course introduces computerized accounting in a microcomputer environment. Topics include a review of basic accounting theory and training in both manual and computerized accounting procedures. By using a pre-designed accounting software package, students learn the principles and techniques required for computerized processing of accounting data and for generating accounting reports and financial statements. Students will have extensive hands-on experience with computerized systems.

PREREQUISITE(S): ACC 101 or ACC 131

ACC 131 INCOME TAX 1 3 CREDITS

This course is the study of basic concepts of federal income taxation, including gross income, deductions, accounting period and methods, and property transactions, with emphasis on individual taxation.

ACC 135 SPREADSHEET APPLICATION FOR ACCOUNTING 3 CREDITS

This course introduces spreadsheets as an accounting tool. Using an accounting perspective the student will apply fundamental spreadsheet concepts. The spreadsheet will be used as a problem-solving and decision making tool. This course involves a ten-key pad component.

PREREQUISITE(S): ACC 122, CIS 155 or spreadsheet experience (all required)

ACC 211 INTERMEDIATE ACCOUNTING I 4 CREDITS

Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines "real-world" financial analysis and reporting issues.

ACC 212 INTERMEDIATE ACCOUNTING II 4 CREDITS

Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions and leases. Includes income tax allocation, financial statement analysis, cash flow statements and accounting methods changes.

ACC 215 ACCOUNTING, INFORMATION SYSTEMS 3 CREDITS

Explores the concepts, tools and techniques for the design and analysis of accounting information systems and automated data processing methods, standard transaction cycles, data base management, internal controls, computer controls, auditing computer systems and networks, expert systems, e-commerce, current and future research in information technology, and the role of the accountant in the management of accounting information systems.

ACC 226 COST ACCOUNTING 3 CREDITS

This course is a study of the cost accumulation methods and management reports. The concepts and procedures of job order, process, standard and direct cost systems are covered; and budgeting, planning and control of costs are included.

PREREQUISITE(S): ACC 122

ACC 229 MANAGERIAL ACCOUNTING 3 CREDITS

The analysis of financial statements and other accounting data used by management in the planning and control functions. Includes a study of cost behavior, volume-cost-profit relationships, return on investment, and the budgetary process.

PREREQUISITE(S): ACC 122

ACC 235 COMPUTERIZED ACCOUNTING FOR SMALL BUSINESSES 3 CREDITS

This course introduces a microcomputer package, such as Quickbooks, One-write Plus or similar accounting application, for use in a small business. The student will learn how to install and start the application and how to convert a manual accounting system to an electronic accounting system. The course will focus upon an easy to use bookkeeping system that incorporates all daily transactions (checks, invoices, bills, and deposits) and summarizes bookkeeping records in reports to give a complete financial picture.

ACC 245 COMPUTERIZED ACCOUNTING WITH A PROFESSIONAL PACKAGE 3 CREDITS

This course integrates accounting principles and practices with a professional computerized accounting package such as Peachtree, Dac Easy, or other professional packages. Emphasis will be on computerized functions of the general ledger and integrated accounts payable, accounts receivable, invoicing, and payroll systems.

PREREQUISITE(S): ACC 121 or 101

ACC 275 SPECIAL TOPICS
VARIABLE CREDITS (1–6)

Description: Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ACC 285 INDEPENDENT STUDY
1–6 CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ACC 287 COOP EDUCATION
3 CREDITS

Description: Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives, and coordinate learning activities with the employer or work site supervisor. For Accounting majors only.

PREREQUISITE: Instructor's Permission

ACC 289 CAPSTONE **3 CREDITS**

Provides pending accounting graduates with the opportunity to evaluate analysis skills. Using the knowledge acquired from their academic studies, the student evaluates the financial standing of three different companies. Financial analysis using spreadsheet capabilities and written report skills are included. The student works independent of a traditional classroom setting.

PREREQUISITE(S): ACC 122, 135

ACTIVITY PROFESSIONALS' TRAINING

APT 101 BASIC ACTIVITY PROFESSIONALS' TRAINING PART I **4 CREDITS**

This course, along with APT 102, and APT 103, satisfies the requirements for state qualification as an accredited program for Activity Professionals. The topics covered include an overview of the activity profession, human development in the late adult years and methods of service delivery.

PREREQUISITE(S): High school diploma or GED.

APT 102 BASIC ACTIVITY PROFESSIONALS' TRAINING PART II **4 CREDITS**

This course, together with APT 101 and APT 103, satisfies the requirements for state qualification as an accredited training program for activities professionals. The topics covered include: standards of practice, practitioner behavior, regulations, activity care planning of quality of life.

PREREQUISITE(S): APT 101

APT 188 BASIC EDUCATION PRACTICUM **2 CREDITS**

This course is the practical experience portion of the APT 100 courses, which together comprise the Basic Education Course curriculum established by the National Certification Council for Activity Professionals and the National Association of Activity Professionals. The student will demonstrate an understanding of the activity program in a long-term care setting, and the ability to assist with the quality of life components with geriatric elderly through supervised learning experiences.

COREQUISITE(S): APT 101, 202

APT 201 ADVANCED DOCUMENTATION AND REGULATORY COMPLIANCE **2 CREDITS**

This course is one of four courses which together comprise the Advanced Management Curriculum established by the National Certification Council for Activity Professionals (NCCAP) and the National Association of Activity Professionals (NAAP). This course will include an in-depth analysis of documentation and the corresponding regulations. In addition, State and Federal regulations and survey process will be reviewed. This course builds on the skills learned in the APT 100 course; fine tuning care planning and documentation as well as teaches professional writing skills ie: writing proposals and legislative correspondence.

PREREQUISITE(S): APT 100 or instructor's permission

APT 202 ADMINISTRATIVE PRACTICES IN THE ACTIVITY PROFESSION **2 CREDITS**

This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course focuses on the practical issues in managing an activity department including: management and leadership techniques; personnel issues including recruiting, evaluation, and termination; management writing skills; and financial management are discussed.

PREREQUISITE(S): APT 100 or instructor's permission

APT 203 VOLUNTEER MANAGEMENT **2 CREDITS**

This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course covers the techniques needed by the Activity Coordinator to develop and manage an effective volunteer program. The student will learn how to recruit, interview, schedule, train, supervise, evaluate and motivate volunteers.

PREREQUISITE(S): APT 100 or instructor's permission

APT 204 COMMUNITY RELATIONS AND COMMUNICATION IN THE ACTIVITY DEPARTMENT **2 CREDITS**

This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course will focus on Public Relations and Community Relations. The student will learn how to sell their activity program to the community and raise the interest of the community. Students will learn effective communication techniques including public speaking, listening, and professional writing skills.

PREREQUISITE(S): APT 100 or instructor's permission

APT 275 SPECIAL TOPICS **1–6 CREDIT**

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

APT 285 INDEPENDENT STUDY **1–6 CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

APT 288 ADVANCED MANAGEMENT PRACTICUM **2 CREDITS**

This course is the practical experience portion of the APT200 courses which comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. The student will demonstrate an understanding of the management skills needed to be an activity professional through supervised learning experience in a geriatric based care enter.

PREREQUISITE(S): APT 100 and at least two of the following; APT 201, 202, 203, 204.

COREQUISITE(S): APT 201, 202, 203, 204

AIR FORCE ROTC

AIR 101 DEVELOPMENT OF AIR POWER **1 CREDIT**

This course is a study of air power from balloons and dirigibles through the jet age: a historical review of air power employment in military and nonmilitary operations in support of national objectives; a look at the evolution of air power concepts and doctrine; and an introduction to the development of communicative skills.

AIR 102 DEVELOPMENT OF AIR POWER II **1 CREDIT**

This course is a survey of the development of air power after World War II. Understand that the development of aviation is a multi-faceted tale of technological breakthroughs, politics, controversy and achievement. We will focus on the United States Air Force, its heritage and future.

AIR 201 THE AIR FORCE TODAY, I **1 CREDIT**

This course is a survey course which focuses on the organizational structure of the Air Force, and the missions of Air Force commands; officership and professionalism; and oral and written communicative skills. A weekly Leadership Laboratory consisting of Air Force customs and courtesies, Air Force environment, drill and ceremonies, is mandatory for those students pursuing and Air Force commission.

AIR 202 THE AIR FORCE TODAY, II **1 CREDIT**

This course focuses on the basic characteristics of air doctrine.; United States Air Force mission and organization; functions of United States strategic offensive and defensive forces; general purpose forces; aerospace support forces; professionalism and officership; and an assessment of communicative skills. A weekly 1 hour Leadership Lab consisting of Air Force customs and courtesies, Air Force environment, and drill and ceremonies is mandatory.

ALLIED HEALTH PROFESSIONS

SEE HEALTH PROFESSIONS

AMERICAN SIGN LANGUAGE

ASL 121 INTRODUCTION TO AMERICAN SIGN LANGUAGE 5 CREDITS

This course will expose the student to American Sign Language. Readiness activities will be conducted focusing on visual/receptive skills and basic communication. The direct experience method, using ASL, is used to enhance the learning process. This course is a prerequisite for ASL 122.

ASL 122 AMERICAN SIGN LANGUAGE II 5 CREDITS

In this course, the student will have an opportunity to develop syntactic knowledge of American Sign Language (ASL), basic vocabulary and basic conversational skills. Vital aspects of deaf culture and community will be incorporated. The direct experience method, using ASL, will be used to enhance the learning process. Students must successfully complete this course prior to being accepted into the Interpreting and Transliterating Preparations Program.

PREREQUISITE(S): ASL 121

ASL 275 SPECIAL TOPICS 1-6 CREDITS

Description: Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ASL 285 INDEPENDENT STUDY 1-6 CREDITS

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ANTHROPOLOGY

ANT 101 CULTURAL ANTHROPOLOGY 3 CREDITS

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 107 INTRODUCTION TO ARCHAEOLOGY 3 CREDITS

This course focuses upon the science of the recovering the human prehistoric and historic past through excavation, analysis and interpretation of material remains. It includes a survey of the archaeology of different areas of the old and new worlds. Also included are the works of selected archaeologists and discussions of major archaeological theories.

ANT 111 PHYSICAL ANTHROPOLOGY 3 CREDITS

Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variation, and ecology.

ANT 121 CULTURES OF THE SOUTHWEST 3 CREDITS

The American Southwest provides a natural laboratory for the study of human cultural development and adaptation, from the earliest lithic cultures (Clovis and Folsom Hunters) to the various Desert Cultures, settled villages, and modern cities. The scope of this study will include the major prehistoric cultures (Early Man, Desert Cultures, Anasazi, Hohokam, Mogollon, and Sinagua) and the historic cultures (Pueblos, Navajo, Apache, Pima, Papago, Spanish-Mexican, and Anglo-American). Recommended preliminary coursework: ANT 101 and ANT 107. Recommended subsequent coursework: ANT 215, Anthropology Field Studies, and Special Topics in Anthropology.

ANT 215 INDIANS OF NORTH AMERICA 3 CREDITS

This course studies Indians of North America from the origins of native peoples in the New World, through the development of geographic culture areas, to European contact and subsequent contemporary Native American issues.

ANT 275 SPECIAL TOPICS IN ANTHROPOLOGY 1-6 CREDIT

Provides opportunity for off-campus field experience or study of a special topic in anthropology. Field study may occur at archaeological sites, museums, host educational institutions, within ethnographic situations, or other anthropologically appropriate places. Study of special topic may include that derived from physical anthropology, cultural anthropology, archaeology, or other anthropological discipline.

ANT 280 AB SOUTHWEST FIELD EXPLORATION 2 CREDITS

Introduces the social, religious, economic and cultural development of the Anasazi. Major ruins, excavation sites and laboratory facilities in the Four Corners region are explored.

PREREQUISITE(S): College level reading

ANT 285 INDEPENDENT STUDY 1-6 CREDIT

This course allows the student to independently study certain aspects of anthropology. It provides opportunity to investigate an area of interest that developed in an introductory course.

ARABIC

ARA 101 CONVERSATIONAL ARABIC I 3 CREDITS

This is the first course in a sequence for beginning students who wish to understand and communicate in Arabic. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

ARCHITECTURAL DRAFTING, CONTRACTS & MATERIALS

ARC 101 INTRODUCTION TO ARCHITECTURAL DRAFTING 5 CREDITS

Introduces representations in architectural drafting: projections, sectioning, pictorial drawings, and architectural representations.

ARC 102 RESIDENTIAL ARCHITECTURE 5 CREDITS

Covers residential planning, wood frame construction, elements of working drawings, free hand sketching, building code requirements, detailing, and structural framing.

PREREQUISITE(S): ARC 101 and CAD 102

ARC 107 BLUEPRINT READING RESIDENTIAL/COMMERCIAL 3 CREDITS

The interpretation and reading of blueprints and related documents as used in the building trades industry and architect's office.

ARC 108 BLUEPRINT READING II (CIVIL) 3 CREDITS

The interpretation and reading of civil blueprints. The branch of Engineering dealing with the design and construction of highways, bridges, tunnels, and waterworks.

ARC 116 BUILDING MATERIALS 3 CREDITS

A general introduction to building materials and methods commonly in use today. Includes interior and exterior materials from foundations to roof systems.

PREREQUISITE(S): ARC 107 or 108

ARC 121 BUILDING STRUCTURE ANALYSIS 3 CREDITS

Analysis of structural components for buildings. Study of vertical and horizontal loadings, shear and moment diagrams, wood, laminated wood, and steel beams, wood and steel columns. Student will be able to solve simple structural engineering problems.

PREREQUISITE(S): MAT 116, 117

ARC 125 HISTORY OF ARCHITECTURE 3 CREDITS

A study of architectural styles, structures, architects, engineers, and artists from early times to present times. Emphasis is placed upon the influences which determined the architectural characteristics.

ARC 205 COMMERCIAL DRAWING PRACTICE I 4 CREDITS

A study of small commercial and multiple family dwellings. Construction techniques are discussed. Working drawings are prepared through extensive use of references and manufacturers catalog.

PREREQUISITE(S): ARC 102

ARC 215 ARCHITECTURAL GRAPHICS 3 CREDITS

This course is designed to assist the architectural student in developing techniques of graphic rendering using pencil, ink, and color media. Both freehand and mechanical methods are stressed.

ARC 216 ESTIMATING I 3 CREDITS

The student will develop skills in estimating the amount and cost of various types of construction. The student will demonstrate these skills by making estimates of material and labor quantities and costs for representative types of construction. Computer applications will be necessary.

PREREQUISITE(S): ARC 107 or ARC 108 with a C or better

ARC 218 SURVEYING 3 CREDITS

Course includes the fundamentals of plane surveying and the use of surveying instruments. It emphasizes construction related aspects of surveying and the development of skills in using surveying field information. Surveying problems are studied in coordinated class and laboratory assignments.

PREREQUISITE(S): MAT 116

ARC 226 CONSTRUCTION SCHEDULING 3 CREDITS

Students will discuss various methods of project scheduling. Emphasis will be placed on CPM techniques and strategies.

PREREQUISITE(S): ARC 107, or instructor's permission

ARC 228 CONTRACTS, BONDS & INSURANCE 3 CREDITS

A study of contracts, graphs, diagrams used in management of construction projects. Management control through the use of CPM will be covered, along with a brief introduction to construction management concepts.

ARC 231 BUILDING SERVICE SYSTEMS 3 CREDITS

An elementary study of the mechanical and electrical systems used in buildings to provide comfort and utility within the structure. Introduces the interrelationship of architecture and engineering considerations and functions.

PREREQUISITE(S): ARC 116

ARC 236 CODES/ZONING/ SPECIFICATIONS 3 CREDITS

A study is made of the restrictions, standards, and requirements which in the interest of public safety and welfare have been established by law to govern the construction of buildings and their materials. Specifications are developed to describe building materials to be furnished and how they are to be installed.

ARC 255 ARCHITECTURAL SEMINAR 1 CREDIT

Selected topics introduced for discussion of advanced architectural students. Topics will include employee expectations, interview techniques, resume preparation, interaction of office personnel, portfolio preparation, and job hunting strategies. Emphasis will be placed upon student interaction, participation and investigation.

PREREQUISITE(S): ARC 205

ARC 275 SPECIAL TOPICS IN ARCHITECTURAL TECHNOLOGY 1-6 CREDIT

These courses provide students with opportunities to study topics of special interest that may lie outside of the standard ARC program. A syllabus will specify the content of each course at the time it is offered.

ARC 285 INDEPENDENT STUDY 1-6 CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ARMY ROTC

ARM 103 ADVENTURES IN LEADERSHIP I 2 CREDITS

Familiarizes the student with the organization and role of the Army, leadership doctrine, land navigation, first aid, communication skills and ethical problem solving. Provides the student with knowledge about what career opportunities are available as an Army Officer in either the active or reserve component. No Army obligation is incurred in taking this course.

ARM 104 ADVENTURES IN LEADERSHIP II 2 CREDITS

Builds on what was learned in ARM 103. Continues the focus on the Army's leadership doctrine, land navigation, first aid and communication skills. This course teaches the student how to function as a member of a team, and introduces small unit military operations. Provides the student with knowledge of what career opportunities are available as an Army Officer in either the active or reserve component. No Army obligation is incurred in taking this course.

ARM 203 ADVENTURES IN LEADERSHIP III 2 CREDITS

Provides a basic foundation in leadership fundamentals as well as the basic military training foundations necessary to enter the US Army Reserve Officer Training Corps (ROTC) Advanced Course. This course familiarizes the student with the organization and role of the Army. In addition it provides a concept of career and training opportunities that are available as an Army Officer in either the active or reserve component to assist the student in deciding to enter the Advanced Course program. No Army obligation is incurred in taking this course.

ARM 204 ADVENTURES IN LEADERSHIP IV 2 CREDITS

This course is a continuation of ARM 203. Provides a basic foundation in leadership fundamentals as well as the basic military training foundations necessary to enter the US Army Reserve Officer Training Corps (ROTC) Advanced Course. This course familiarizes the student with the organization and role of the Army. In addition it provides a concept of career and training opportunities that are available as an Army Officer in either the active or reserve component to assist the student in deciding to enter the Advanced Course program. No Army obligation is incurred in taking this course.

ART

ART 110 ART APPRECIATION 3 CREDITS

This course is an introduction to the visual arts including language, concepts, process and history.

ART 111 ART HISTORY I 3 CREDITS

Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys the visual arts from the Ancient through the Medieval periods.

ART 112 ART HISTORY II 3 CREDITS

Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys the visual arts from the Renaissance through the Modern periods.

ART 121 DRAWING I 3 CREDITS

This course is an investigation of various approaches and media designed to develop drawing skills and visual awareness.

ART 122 DRAWING II 3 CREDITS

This course is a study of expression drawing techniques and development of individual expressive style.

PREREQUISITE(S): ART 121

ART 123 WATERCOLOR I 3 CREDITS

Provides an introduction to the basic techniques and unique aspects of materials involved in the use of either transparent or opaque water media or both. Color theory is included.

PREREQUISITE(S): ART 121, 131, its equivalency, or permission of the instructor.

COREQUISITES(S): None

ART 124 WATERCOLOR II 3 CREDITS

Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

PREREQUISITE(S): ART 123 or its equivalency

COREQUISITES(S): None

ART 131 DESIGN I 3 CREDITS

This course is a study of basic design elements, visual perception, form and composition.

ART 132 DESIGN II 3 CREDITS

This course covers the application of design elements and principles to both two and three dimensional problems.

PREREQUISITE(S): ART 131

ART 141 JEWELRY AND METALWORK I 3 CREDITS

This course is an introduction to the construction of jewelry designs in metals and small casting techniques.

ART 142 JEWELRY AND METALWORK II 3 CREDITS

This course emphasizes conceptual design development, using casting and specialized techniques.

PREREQUISITE(S): ART 141 or equivalent

ART 156 FIGURE DRAWING I 3 CREDITS

This course is an introduction to the basic techniques of drawing the human figure.

ART 161 CERAMICS I 3 CREDITS

This course is an introduction to traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel.

ART 162 CERAMICS II 3 CREDITS

This course is a continuation of Ceramics I with an emphasis on skills, techniques and form.

PREREQUISITE(S): ART 161 or equivalent

ART 205 MUSEUM PRACTICUM 3 CREDITS

Introductory course in basic museology involving lectures, field trips, and practical experience. This course examines various aspects of museum professions: art education, curatorial techniques, installation design, and conservation. This course will also train docents in teaching methods for both children and adults.

ART 210 LANDSCAPE PAINTING 3 CREDITS

Focuses on specific landscape concerns in the painting media of your choice.

ART 211 PAINTING I 3 CREDITS

This course covers color, composition, materials and techniques of studio painting.

PREREQUISITE(S): ART 121 or 131

ART 212 PAINTING II 3 CREDITS

This course emphasizes experimentation with materials, composition and color.

PREREQUISITE(S): ART 211

ART 213 PAINTING III 3 CREDITS

Advanced students develop a body of work for exhibition and focused inquiry within the painting medium.

PREREQUISITE(S): ART 211, 212 or instructor's permission

ART 215 MIXED MEDIA 3 CREDITS

Creative painting with watercolor, gouche, acrylic, inks and dry media, combined with resists and collage.

ART 220 LANDSCAPE PAINTING & DRAWING IN FRANCE 3 CREDITS

Focuses on specific landscape concerns in the painting media of your choice while working on location in southern France.

ART 230 SCULPTING THE FIGURE 1 CREDIT

This is a course for beginning through advanced students in sculpting the human figure using modeling techniques in clay.

ART 241 JEWELRY & METALWORK III 3 CREDITS

This course focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship.

PREREQUISITE(S): ART 142

ART 242 JEWELRY AND METALWORK IV 3 CREDITS

Provides continued study of the properties of metal and stone in creating decorative work. Students employ advanced design and techniques to explore original, personal expression. A variety of materials and approaches are used in discovering new and independently creative finished pieces.

ART 252 DOCUMENTARY PHOTOGRAPHY 3 CREDITS

In this course the class will work on a group project of comprehensively documenting a single place through photography.

PREREQUISITE(S): ART 151, 152

ART 256 ADVANCED FIGURE DRAWING II 3 CREDITS

This course provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual type.

PREREQUISITE(S): ART 156

ART 261 CERAMICS III 3 CREDITS

This course encourages students to develop an individual style of wheel thrown and hand built ceramic forms with continuing involvement in surface treatment.

PREREQUISITE(S): ART 162

ART 277 STUDIO ART 3 CREDITS

Designed for advanced students interested in further exploring an art.

ART 286 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Provides an opportunity for student to undertake special projects or research in any of the disciplines involving the visual arts, including, but not limited to, gallery or museum administration, art history, graphic design, or other studio work. Instruction is provided by the instructor, and is totally based on the student's independent study agreement.

ASTRONOMY

AST 101 ASTRONOMY I 4 CREDITS

Studies the history of astronomy, the tools of the astronomer and the contents of the solar system: the planets, moons, asteroids, comets, and meteoroids. This course includes laboratory experience.

AST 102 ASTRONOMY II 4 CREDITS

Studies the structure and life cycles of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. This course includes laboratory experience.

AST 275 TOPICS IN ASTRONOMY 1-6 CREDITS

These courses will provide a variety of topics and learning activities for the student. Specific topics are not listed but will be offered as appropriate. Investigation of contemporary research and current events will be encouraged.

PREREQUISITE(S): AST 101 and instructor's permission

AST 285 INDEPENDENT STUDY 1-6 CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ATHLETICS

ATH 100 VARSITY SPORTS 1 CREDIT

Offers the varsity athlete the opportunity for refinement of skills involved in their respective sport. Emphasizes an understanding and application of skills of the individual sport in intercollegiate competition, team cooperation, and school spirit.

PREREQUISITE(S): Permission required by the Athletic Director.

ATH 150 VARSITY SPORTS II 1 CREDIT

Offers the varsity athlete the opportunity for refinement of skills involved in their respective sport. Emphasizes an understanding and application of skills of the individual sport in intercollegiate competition, team cooperation, and school spirit.

PREREQUISITE(S): ATH 100 and permission required by the Athletic Director.

ATH 200 VARSITY SPORTS III 1 CREDIT

Offers the varsity athlete the opportunity for refinement of skills involved in their respective sport. Emphasizes an understanding and application of skills of the individual sport in intercollegiate competition, team cooperation, and school spirit.

PREREQUISITE(S): ATH 150 and permission required by the Athletic Director.

ATH 250 VARSITY SPORTS IV 1 CREDIT

Offers the varsity athlete the opportunity for refinement of skills involved in their respective sport. Emphasizes an understanding and application of skills of the individual sport in intercollegiate competition, team cooperation, and school spirit.

PREREQUISITE(S): ATH 200 and permission required by the Athletic Director.

AUTOMOTIVE TECHNOLOGY

ASE 102 INTRODUCTION TO THE AUTOMOTIVE SHOP 2 CREDIT

Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 110 BRAKES I 3 CREDIT

Covers basic operation of automotive braking systems. Includes operation, diagnosis, and basic repair of disc brakes, drum brakes, and basic hydraulic systems.

PREREQUISITE(S): ASE-101

ASE 120 BASIC AUTOMOTIVE ELECTRICITY 2-15 CREDIT

Introduces automotive electricity and includes basic electrical theory, circuit designs, and wiring methods. Focuses on multi-meter usage and wiring diagrams.

ASE 123 AUTOMOTIVE BATTERY, STARTING, AND CHARGING SYSTEMS 2 CREDIT

Covers the operation, testing, and servicing of automotive battery, starting, and charging systems. Includes voltage and amperage testing of starter and generator, load testing and maintenance of a battery, and starter and generator overhaul.

PREREQUISITE(S): ASE 120

ASE 130 GENERAL ENGINE DIAGNOSIS 2 CREDIT

Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors.

ASE 132 IGNITION SYSTEM DIAGNOSIS AND REPAIR 2 CREDIT

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

PREREQUISITE(S): ASE 130

ASE 134 AUTOMOTIVE EMISSIONS 2 CREDIT

Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems.

PREREQUISITE(S): ASE 132

ASE 140 SUSPENSION AND STEERING I 3 CREDIT

Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems.

PREREQUISITE(S): ASE 132

ASE 150 AUTOMOTIVE U-JOINT & AXLE SHAFT SERVICE 2 CREDIT

Studies the operating principles and repair procedures relating to axle-shaft and universal joints.

ASE 151 AUTOMOTIVE MANUAL TRANSMISSION/TRANSAXLES 2 CREDIT

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles and clutches and related components.

ASE 152 DIFFERENTIALS & 4WD/AWD SERVICE 2 CREDIT

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all wheel drive units.

ASE 160 AUTOMOTIVE ENGINE REMOVAL & INSTALLATION 1 CREDIT

Focuses on lecture and laboratory experiences in the removal and installation procedures of the automotive engine from and into front wheel and rear wheel drive vehicles.

ASE 161 ENGINE, DISASSEMBLY DIAGNOSIS & ASSEMBLY 5 CREDITS

Focuses on lecture and laboratory experiences in the disassembly, diagnosis and reassembly of the automotive engine. Topics include the diagnostic and repair procedures for the engine block and head assemblies.

ASE 163 AUTOMOTIVE COMPONENT REMOVAL AND REPLACEMENT 3 CREDITS

Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt, and thread repair.

ASE 210 BRAKES II 3 CREDITS

Covers the operation and theory of the modern automotive braking systems. Includes operation, diagnosis, service, and repair of the anti-lock braking systems, power assist units and machine operations of today's automobile.

PREREQUISITE(S): ASE-110

ASE 220 SPECIALIZED ELECTRONICS TRAINING 2 CREDITS

Provides a systematic approach to automotive electrical systems. Builds from the basic electrical principles and concepts through semiconductors and microprocessors. Features on-bench exercises. Students practice diagnostic procedures that have applications to present and future automotive electronics and electrical systems.

PREREQUISITE(S): ASE 120

ASE 221 AUTOMOTIVE BODY ELECTRICAL 4 CREDIT

Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

PREREQUISITE(S): ASE 120

ASE 231 AUTOMOTIVE COMPUTERS 2 CREDIT

Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

PREREQUISITE(S): ASE 120, ASE 134, ASE 220

ASE 233 FUEL INJECTION AND EXHAUST SYSTEMS 4 CREDITS

Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

PREREQUISITE(S): ASE 120, ASE 134, ASE 231

ASE 235 DRIVEABILITY DIAGNOSIS 1 CREDIT

Emphasizes lecture and related laboratory experience in diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters and gas analyzers. Students diagnose live vehicle driveability problems.

PREREQUISITE(S): ASE 233

ASE 240 SUSPENSION AND STEERING II 3 CREDIT

Emphasizes lecture and related experiences in the diagnosis and service of electronic suspensions and steering systems and their components.

PREREQUISITE(S): Yes

ASE 250 AUTOMATIC TRANSMISSION/TRANSAXLE SERVICE 1 CREDIT

Focuses on practical methods of maintaining, servicing, and performing minor adjustments on an automatic transmission and transaxle.

PREREQUISITE(S): Automotive Shop Safety

ASE 251 AUTOMATIC TRANSMISSION/TRANSAXLE DIAGNOSIS AND ASSEMBLIES 5 CREDIT

Covers diagnosis, principles of hydraulics, principles of electronic components, power flow, theory of operation, removal of transmission/transaxle, tear down, replacement of components, measurement and subsequent adjustment of components and replacement of transmission/transaxle.

PREREQUISITE(S): ASE 250

COREQUISITE(S) ASE 250

ASE 265 AUTOMOTIVE HEATING AND AIR CONDITIONING 5 CREDIT

Emphasizes lecture and related laboratory experiences in the diagnosis and service of automotive heating and air conditioning systems and their components.

ASE 276 COOPERATIVE EDUCATION 1-9 CREDIT

Develops practical objectives assigned by an automotive employer providing an on-the-job learning experience at an approved automotive repair facility.

PREREQUISITE(S): 24 credit hours of automotive classes

ASE 277 INDEPENDENT STUDY 1-9 CREDIT

Provides laboratory experiences with a variety of work in the areas that the student received training during previous automotive classes.

PREREQUISITE(S): None

COREQUISITE(S): Students must be enrolled in automotive courses totaling at least 6 credit hours.

**ASE 280 CO-OP/INTERNSHIP;
BASIC ELECTRICAL AND
ENGINE PERFORMANCE
1 CREDIT**

Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (iF.A.S.T.i) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track. PREREQUISITE(S): ASE-106 Electrical & Fuel System Shop Safety

**ASE 281 CO-OP/INTERNSHIP;
BASIC HEAVY DUTY AND
POWER TRAIN 1 CREDIT**

Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (iF.A.S.T.i) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track. PREREQUISITE(S): AUT-160 Chassis & Power Train Shop

**ASE 282 CO-OP/INTERNSHIP;
GENERAL (SUMMER)
1 CREDIT**

Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (iF.A.S.T.i) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

**ASE 283 CO-OP/INTERNSHIP;
ADVANCED ELECTRICAL
& ENGINE PERFORMANCE
1 CREDIT**

Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (iF.A.S.T.i) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track. The student registers for and takes the (ASE) Automotive Service Excellence based tests for engine performance and electrical systems.

**ASE 284 CO-OP/INTERNSHIP;
ADVANCED HEAVY DUTY &
POWER TRAIN 1 CREDIT**

Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (iF.A.S.T.i) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track they are enrolled in. The student registers for and takes the ASE-Automotive Service Excellence based test for brake systems and suspension and steering.

**ASE 285 INDEPENDENT STUDY
1-6 CREDIT**

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Permission of the instructor

ASEP COURSES

**ASP 190 GM SPECIALIZED
ELECTRONICS 4 CREDITS**

Course builds from the electrical principles and concepts through automotive semi-conductors to micro-processors. The use of electrical measurement devices and wire repairing, including copper/aluminum and weather pack service techniques is emphasized. On-bench and on-car practical exercises are features of the classroom activities. Students will practice diagnostic procedures having application to present and future automotive electronic systems.

PREREQUISITE(S): AUT 180

**ASP 196 GM ELECTRONIC NEW
PRODUCT 2 CREDITS**

This course is an advanced study in body electrical components. Included are the studies of supplemental inflatable restraint systems and applied automotive electronics. This course is designed to upgrade hands on diagnostic skills by the use of a DVOM and a lab oscilloscope.

**ASP 269 GM ENGINE SERVICE
2 CREDITS**

The study of service procedures for major and minor repairs includes actual removal and replacement of a GM engine from a late model GM vehicle.

**ASP 271 GM AUTOMATIC
TRANSMISSION OVERHAUL
6 CREDITS**

An extensive study of the operation and repair of high production late model General Motors Automatic Transmissions.

**ASP 285 INDEPENDENT STUDY
1-6 CREDIT**

Course designed to meet the individual needs of students. PREREQUISITE(S): Instructor's permission.

ATEC COURSES

**ATC 261 DRIVESHAFT AND
UNIVERSAL JOINT SERVICE
1 CREDIT**

The advanced study of the operating principles and repair procedures relating to driveshafts and universal joints.

**ATC 263 STEERING SUSPENSION
ALIGNMENT SERVICE
2 CREDITS**

Familiarizes the student with the operating, repair and alignment characteristics of the modern automobile.

PREREQUISITE(S): AUT 162

ATC 269 ENGINE SERVICE 2 CREDITS

The study of service procedures for major, minor and short block service. Includes removal and replacement of an engine from a late model vehicle.

**ATC 271 AUTOMATIC TRANSMISSION
OVERHAUL 5 CREDITS**

An extensive study in automatic transmission overhaul and repair of both conventional and transaxle design. PREREQUISITE(S): AUT 170 or instructor's permission

**ATC 285 INDEPENDENT STUDY
VARIABLE CREDIT**

Course designed to meet the individual needs of students. PREREQUISITE(S): Instructor's permission

**AUT 235 MANUAL TRANSAXLE
1 CREDIT**

A study in manual transaxle design and service as it differs from manual transmissions of conventional design.

PREREQUISITE(S): AUT 161, 172, or instructor's permission

**AUT 270 AUTOMATIC TRANSMISSION
PRINCIPLES AND SERVICE
1 CREDIT**

The study of the theory, operation and service procedures of automatic transmissions. Safety procedures and precision measurement will also be included.

**AUT 272 STANDARD TRANSMISSIONS
AND CLUTCHES 2 CREDITS**

A study of the theory and operation of standard transmissions and clutches.

**AUT 274 VIBRATION DIAGNOSIS
1 CREDIT**

Systematic diagnosis, checks and adjustments of the vehicles components that can contribute to vibration conditions.

**AUT 285 INDEPENDENT STUDY
VARIABLE CREDIT**

Course designed to meet the individual needs of students. PREREQUISITE(S): Instructor's permission

**AUT 290-293 COOP EDUCATION
CAREER TRAINING
3 CREDITS**

**AUT 294-295 COOP EDUCATION
CAREER TRAINING
6 CREDITS**

**AUT 296 COOP EDUCATION
CAREER TRAINING
9 CREDITS**

**AUT 297 COOP EDUCATION
CAREER TRAINING
12 CREDITS**

**AUT 298 COOP EDUCATION
CAREER TRAINING
1 CREDIT**

See Cooperative Education Section or detailed description.

BIOLOGY

BIO 100 INTRO TO ANATOMY AND PHYSIOLOGY 1 CREDIT

This five or seven week module is designed for students who are required or wish to take Biology 201, Human Anatomy and Physiology I, and have never taken nor recently been exposed to courses dealing with Anatomy and Physiology, Elementary Chemistry (Inorganic and Organic), The Metric System, and Cells.

BIO 105 SCIENCE OF BIOLOGY 4 CREDITS

Designed for non-science students. Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Biology as a science—process of gaining new knowledge is explored as is the impact of biological science on society. This course includes laboratory experiences.

BIO 111 GENERAL COLLEGE BIOLOGY WITH LAB 5 CREDITS

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function, and the metabolic processes of respiration, and photosynthesis, as well as cell reproduction and basic concepts of heredity. This course includes laboratory experience.

BIO 112 GENERAL COLLEGE BIOLOGY II WITH LAB 5 CREDITS

A continuation of Biology I. Includes ecology, evolution, classification, structure and function in plants and animals. This course includes laboratory experience.

PREREQUISITE(S): BIO 111

BIO 115 HUMAN GENETICS 3 CREDITS

This course is a study of the inheritance of human traits. It is a non-mathematical study for the non-science major. Topics include Mendelian, non-Mendelian, sex-linked, blood type traits, inherited diseases and ethics.

BIO 116 HUMAN BIOLOGY 3 CREDITS

This course is an introduction to human anatomy and physiology for students who have little or no background in science. It does not substitute for a one year anatomy and physiology course with a lab. Topics covered are atoms, molecules, cells, energetics, genetics, and a brief survey of systems.

BIO 143 ECOLOGY OF COLORADO 3 CREDITS

Studies the natural environments in Colorado. Explores the vast natural environments of Colorado and the plants and animals that inhabit the life zones of our majestic plains, mountains, and valleys. Discovers the interrelationships of man and his Colorado environment—past, present, and future. Through an inquiry approach, the student examines the changing needs and roles of our environments. Field trips include Roxborough State Park, Garden of the Gods, Mt. Evans, Pikes Peak, Deer Creek Canyon, Daniels Park, Barr Lake or others.

BIO 201 HUMAN ANATOMY AND PHYSIOLOGY I 4 CREDITS

Focuses on an integrated study of the human body including the histology, anatomy, and physiology of each system. Examines molecular, cellular, and tissue levels of organization plus integuments, skeletal, articulations, muscular, nervous, and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations, and dissection. This is the first semester of a two-semester sequence.

PREREQUISITE(S): BIO 111 or equivalent, or permission of Dept. chair.

BIO 202 HUMAN ANATOMY AND PHYSIOLOGY II 4 CREDITS

Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive, and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations, and dissection. This is the second semester of a two-semester sequence.

PREREQUISITE(S): BIO 201 or equivalent, or permission of Dept. chair.

BIO 208 GENERAL COLLEGE MICROBIOLOGY 5 CREDITS

Designed for biology and health science majors. Surveys microorganisms with an emphasis on their structure, development, physiology, classification, and identification. Includes microbial diversity, functional anatomy, biochemistry, genetics, ecology, and disease. Mandatory hands-on laboratory experience covers sterile technique, microscopy, culture procedures, and biochemical and genetic analysis.

BIO 220 GENERAL ZOOLOGY 5 CREDITS

Focuses on the study of invertebrate and vertebrate animals and examines structure, evolutionary development, ecology, classification, physiology, reproduction, and zoogeography. A survey of zoological diversity emphasizes the characteristics, zoological contributions, and classification of animal phyla and major classes. Requires hands-on laboratory and field experience. Designed for biology majors.

PREREQUISITE(S): BIO 111 or equivalent, or permission of department chair.

BIO 221 BOTANY 5 CREDITS

This course is designed for biology majors. It is a study of nonvascular and vascular plants. It emphasizes photosynthetic pathways, form and function, reproduction, physiology, genetics, diversity, evolution, and ecology. This course requires mandatory hands-on laboratory and field experience.

PREREQUISITE(S): BIO 111 or equivalent, or permission of department chair.

BIO 224 GENETICS 4 CREDITS

Studies the fundamental laws of heredity and their application to living organisms. Covers the basics of genetics. Focuses on the laws of Mendel, linkage, mutation concepts, and molecular genetics.

PREREQUISITE(S): BIO 111 or equivalent or permission of Department chair.

BIO 275 TOPICS IN BIOLOGY 1-6 CREDITS

These short courses will provide a variety of topics and learning activities for the student. Although specific topics are not listed in the catalogue, some examples include human sexuality, edible plants, spring wild flowers, identification of birds, identification of trees, human body, biomedicine, sports physiology, etc. Investigation of con temporary research and current events will be encouraged.

BIO 290-293 COOP EDUCATION CAREER TRAINING 3 CREDITS

BIO 294-295 COOP EDUCATION CAREER TRAINING 6 CREDITS

See Cooperative Education section for detailed description.

PREREQUISITE(S): Instructor's permission.

BIO 285 INDEPENDENT STUDY 1-6 CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

BUSINESS

BUS 115 INTRO TO BUSINESS **3 CREDITS**

Survey of the operation of the American Business System: fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business, and social responsibilities. Guaranteed Business Transfer.

BUS 116 PERSONAL FINANCE **3 CREDITS**

Course is designed to cover the major topics of earning and allocating money, saving and borrowing money, getting more for what you spend, safeguarding personal income and property.

BUS 125 CAREER STRATEGIES **3 CREDITS**

A course designed to teach students how to manage their careers by teaching them how to market themselves to prospective employers, clients, professional groups, and audiences of all types. Emphasis will be placed on skills used to gain employment (resumes, interviewing skills, and professional appearance and bearing), and on skills used to achieve continued personal success, such as professional behavior and attitude.

BUS 203 INTRO TO INTERNATIONAL BUSINESS **3 CREDITS**

Course will provide student with an understanding of the interdisciplinary nature of international business. Course will cover the development of international business; theories and methods of international trade; financing mechanism and terms used in export documentation and export finance; the effects of economics, political and cultural environment on international business and trade; impact of geography in business transactions; legal aspects of international business; and developing an effective international marketing strategy.

BUS 216 LEGAL ENVIRONMENT OF BUSINESS **3 CREDITS**

This course emphasizes public law, regulation of business, ethical considerations, and various relationships which exist within society, government, and business. Specific attention will be devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, environmental concerns and an introduction to contracts. Students will develop an understanding of the roll of law in social, political, and economic change. Guaranteed Business Transfer.

BUS 217 BUSINESS COMMUNICATION AND REPORT WRITING **3 CREDITS**

The course emphasizes effective business writing: letters, memoranda, reports, application letters, and resumes. Also, the course will include the fundamentals of business communication and an introduction to international communication. Guaranteed Business Transfer.

BUS 226 BUSINESS STATISTICS **3 CREDITS**

Course is intended for business major and covers statistical study, descriptive statistics, probability and binomial distribution, index numbers, time series, decision theory, confidence intervals, hypothesis testing, testing of two-sample means, chi-square and ANOVA, linear regression, and correlation. Guaranteed Business Transfer.

PREREQUISITE(S): MAT 132 or instructor's permission

BUS 241 CULTURAL DIVERSITY IN BUSINESS **3 CREDITS**

The business person's guide to cultural, travel and information resources needs in the international arena. Specifics in negotiation, communications verbal and non-verbal, networking, and understanding what individual countries needs are in a business culture.

BUS 275 SPECIAL TOPICS IN BUSINESS **1-6 VARIABLE CREDITS**

This course is designed to provide students with a vehicle to pursue special topics of interest in business. The content of this course is designed on an individual needs basis "by arrangement between the instructor's and the student." The course may be designed to allow the student to acquire credit for projects in current events. instructor's approval of material is required.

BUS 285 INDEPENDENT STUDY **1-6 VARIABLE CREDIT**

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

BUS 287 COOP EDUCATION/ INTERNSHIP **1-6 VARIABLE CREDITS**

See Cooperative Education section for detailed description.

BUSINESS TECHNOLOGIES

BTE 100 COMPUTER KEYBOARDING **1 CREDIT**

Designed for students who have minimal or no keyboarding skills. Introduces the touch method of keyboarding, as well as the basic operation and functions of the equipment. Emphasizes learning the alphanumeric keyboard, proper technique, and speed control.

BTE 102 KEYBOARDING APPLICATIONS I **2 CREDITS**

Designed for students with minimal keyboarding skills. Introduces letters, tables, memos, and manuscripts. Emphasizes speed and accuracy.

PREREQUISITE(S): Ability to Keyboard 20 wpm or permission of instructor

BTE 103 KEYBOARDING APPLICATIONS II **3 CREDITS**

Reinforces basic keyboarding formats and procedures. Productivity and decision-making skills are exercised. Emphasizes speed and accuracy.

PREREQUISITE(S): BTE 102

BTE 108 TEN KEY BY TOUCH **1 CREDIT**

An introduction to touch control of a ten-key pad. The class emphasizes the development of speed and accuracy using proper technique.

BTE 111 KEYBOARDING SPEEDBUILDING I **2 CREDITS**

Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

PREREQUISITE(S): Ability to keyboard by touch or permission of instructor

BTE 112 KEYBOARDING SPEED BUILDING II **2 CREDITS**

Continues the skill building sets from BTE 111. This course is designed to further increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

BTE 120 ELECTRONIC OFFICE PROCEDURES **2 CREDITS**

Provides instruction in the latest electronic office procedures using business technologies which include: e-mail, FAX, Windows, DOS, presentation graphics, telephone techniques, internet, electronic calendaring and appointment scheduling

BTE 125 RECORDS MANAGEMENT **3 CREDITS**

Instructs on how records are created, stored, and retrieved. Covers the basic filing rules—classifying, indexing, coding, storing, and retrieving as applied to basic methods—alphabetic, chronological, subject, numeric, and geographic. Emphasizes 'hands-on' records management through the use of simulations, which includes manual and/or computer software.

PREREQUISITE(S): acceptable keyboarding proficiency

BTE 156 BUSINESS MATHEMATICS WITH CALCULATORS **4 CREDITS**

Covers basic business mathematics using the touch system on electronic calculators to solve business problems.

BTE 166 BUSINESS EDITING SKILLS **3 CREDITS**

Provides proofreading techniques and reviews spelling, punctuation, grammar, and word processing formats on various types of business documents and worksheets.

BTE 202 OFFICE SIMULATION II
3 CREDITS

Provides the student the opportunity to demonstrate and perfect the computer skills, organizational skills, and communication skills required to secure employment and/or advancement in the workplace.

PREREQUISITE(S): experience with adv word processing, spreadsheets, or permission of instructor

BTE 209 BASICS OF MACHINE TRANSCRIPTION
1 CREDIT

Provides a working knowledge for transcribing from machine dictation using word processing and proficient levels of punctuation, spelling, and grammar.

PREREQUISITE(S): Keyboarding and word processing skills or instructor's permission

BTE 225 ADMINISTRATIVE OFFICE MANAGEMENT
3 CREDITS

Presents new developments, technology, procedures, organization, and contemporary terminology used in effective office management. Emphasizes decisionmaking and application of administrative skills.

BTE 238 LEGAL OFFICE PROCEDURES
3 CREDITS

Designed for students who will be working in a legal office either in the private or the public sector. The course covers fundamental office procedures found in both general and specialized law offices.

BTE 275 SPECIAL TOPICS
1-6 CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BTE 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

BTE 287 COOP EDUCATION/ INTERNSHIP
1-6 VARIABLE CREDITS

Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

PREREQUISITE(S): Instructor's permission

CAREER DEVELOPMENT

PSY 110 CAREER DEVELOPMENT
3 CREDITS

This course assists students in recognizing their career potential, and provides tools for making realistic decisions concerning educational and occupational objectives. This course also helps students develop skills needed for job search, employer search, employer search and resume development.

ECG 102 EMPLOYMENT SEMINAR
1 CREDIT

This seminar is designed to assist students in developing skills that are needed in searching for and acquiring a job. Topics include job search, employer research, job application, cover letter, resume development and interviewing.

ECG 115 PERSONAL GROWTH AND CULTURAL AWARENESS
2 CREDITS

Topics include social class structure in terms of its social, economic, and cultural roles. Areas to be discussed include monetary system and handling of finances, dating and marriage, laws and violations, personal hygiene, medical services, course load, Immigration and Naturalization Services, insurance and apartment leases. Course also provides English and math testing.

ECG 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

CARPENTRY

CAR 101 BASIC SAFETY
1 CREDITS

An overview of safety concerns and procedures in the construction field.

COREQUISITE(S): CAR 101

CAR 102 HAND AND POWER TOOLS
1 CREDITS

Focuses on basic hand and power tools including stationary tools. Emphasizes a hands-on approach to proper and safe use of these tools as it applies to the construction environment and is taught in conjunction with a lab or framing class.

COREQUISITE(S): CAR 101

CAR 105 JOB SITE LAYOUT AND BLUEPRINT READING
1 CREDITS

Introduces blue-print reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

CAR 115 FORM & FOUNDATION SYSTEMS
1 CREDITS

Covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as re-bar and welded-wire fabric.

COREQUISITE(S): Core framing labs

CAR 121 FLOOR FRAMING
1 CREDITS

Covers framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials.

CAR 122 WALL FRAMING
1 CREDITS

Focuses on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, construction corners and partition Ts, bracing walls and ceilings, and applying sheathing.

CAR 123 ROOF FRAMING
1 CREDITS

Describes the various kinds of roofs and focuses on instructions for laying out rafters for gable roofs, hip roofs and valley intersections. Covers both stick-built and truss-built roofs.

CAR 125 ROOFING MATERIALS METHODS
1 CREDITS

Covers application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing.

CAR 130 WINDOWS AND EXTERIOR DOORS
1 CREDITS

Describes the various types of windows, skylights, and exterior doors and provides instructions for installing them. Includes instructions for installing weather-stripping and locksets.

CAR 131 EXTERIOR TRIM
1 CREDITS

Teaches cornice and rake construction, corner, window and door trim, installation of soffit, frieze, fascia and similar trim items and includes estimation and proper selection.

CAR 135 THERMAL AND MOISTURE METHODS AND MATERIALS
1 CREDIT

This course focuses on selection and installation of various types of insulating materials in walls, floors, and attics. Covers the uses and installation practices for vapor barriers and waterproofing materials.

CAR 145 INTERIOR FINISHES – GENERAL
1 CREDITS

Presents an overview of interior finishes. Covers installation and finishing of drywall, suspended ceilings, and general painting and other wallcovering.

CAR 146 INTERIOR FINISHES – DRYWALL CONSTRUCTION
1 CREDITS

Covers the use of gypsum wall board and the techniques of concealing joints and fasteners, construction methods, estimation and a variety of texture finishes.

CAR 151 INTERIOR TRIM– DOORS & TRIM
1 CREDITS

Covers interior doors and trim with focus on material choices, methods of work, and estimation. Teaches in conjunction with a construction lab experience to provide application of techniques covered in classroom environment.

COREQUISITE(S): CAR172 Construction Lab II

**CAR 153 INTERIOR TRIM –
CABINET/COUNTERTOPS
1 CREDITS**

Covers the selection/ installation/terminology of factory built cabinets and countertops. Includes various types and design and examines estimation of cost.

**CAR 160 FLOOR FINISHES
1 CREDITS**

Covers installation and finishing of hardwood floors, laminate/engineered floors, and tile. Includes discussion on advantages and disadvantages of various choices available.

PREREQUISITE(S): Permission of instructor

**CAR 215 FORM AND FOUNDATION
SYSTEMS II
1 CREDITS**

Builds on course CAR 115 and expands on theories and concepts from the first year class. Offers opportunities to explore more complex systems and form requirements.

**CAR 221 ADVANCED FLOOR
SYSTEMS
2 CREDITS**

Expands upon skills and knowledge learned in CAR 121 and focuses on an in-depth look at floor framing. Allows students to hone skills previously learned.

PREREQUISITE(S): CAR 121 or permission of instructor

COREQUISITE(S): CAR 170

**CAR 222 ADVANCED WALL SYSTEMS
2 CREDITS**

Expands upon those skills and knowledge learned in CAR 122. Covers complex wall framing issues and leadership/foreman responsibilities.

PREREQUISITE(S): CAR 122 or permission of instructor

COREQUISITE(S): CAR 270

**CAR 223 ADVANCED ROOFING
SYSTEM
2 CREDITS**

Builds on those skills learned in CAR 123. Offers an opportunity for students to hone skills and apply knowledge to more complex systems of roof framing.

PREREQUISITE(S): CAR 123 or permission of instructor

COREQUISITE(S) Framing Lab Car 270

**CAR 250 ADVANCED INTERIOR
TRIM-GENERAL
2 CREDITS**

Expands upon the material covered in CAR150 and includes more advanced techniques and in-depth discussion of various material choices. Covers estimating and efficiency studies.

PREREQUISITE(S): CAR 150

**CAR 251 ADVANCED INTERIOR
TRIM-DOORS 2 CREDITS**

Expands upon material covered in CAR151. Includes in-depth study of premium interior doors and trim, including full mortise lock sets, furniture grade trim, and techniques for matching existing high-end and antique woodworking.

PREREQUISITE(S): CAR 151 or permission of instructor

COREQUISITE(S) CAR 272 Construction Lab II

**CAR 254 ADVANCED INTERIOR
TRIM-SPECIAL 2 CREDITS**

Explores the craftsmanship and fine woodworking involved in many fine homes. Includes mantel and various fireplace designs, custom shelves and closets, and custom moulding.

PREREQUISITE(S): CAR 154, or permission of instructor

COREQUISITE(S) CAR 272 construction lab

**CAR 275 SPECIAL TOPIC
1-6 CREDITS**

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CHEMISTRY

**CHE 101 INTRO TO CHEMISTRY I
5 CREDITS**

For non-science majors, students in occupational and health programs, or students with no chemistry background. Includes the study of measurements, atomic theory, chemical bondings, nomenclature, stoichiometry, solutions, acid and base, gas laws, and condensed states. Laboratory experiments demonstrate the above concepts qualitatively and quantitatively.

PREREQUISITE(S): MAT 060

**CHE 102 INTRO TO CHEMISTRY II
5 CREDITS**

Includes the study of hybridization of atomic orbitals for carbon; nomenclature of organic compounds; properties of different functional groups, nomenclature of various important biological compounds, their properties and their biological pathways. Laboratory experiments demonstrate the above topics quantitatively and qualitatively.

**CHE 111 GENERAL COLLEGE
CHEMISTRY I 5 CREDITS**

For science and engineering majors. Includes the study of measurements, atomic theory, chemical bonding, stoichiometry, gases, condensed states, solutions, and thermochemistry. Also includes the problem solving skills and descriptive contents for these topics. Laboratory techniques used in the experiments will demonstrate the above concepts as well as the qualitative and quantitative analytical techniques involved in chemistry.

PREREQUISITE(S): 1 year high school chemistry or equivalent

COREQUISITE(S) MAT 121 or instructor's permission

**CHE 112 GENERAL COLLEGE
CHEMISTRY II 5 CREDITS**

Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, acid-base equilibrium, ionic equilibrium, electrochemistry, nuclear chemistry, and organic chemistry. Also includes the problem solving skills and descriptive contents for these topics. Organic chemistry may be included if time permits. The laboratory experiments will demonstrate both the qualitative and quantitative analytical techniques.

PREREQUISITE(S): CHE 111

**CHE 211 ORGANIC CHEMISTRY I
5 CREDITS**

The topics of this course include structure and reactions of aliphatic hydrocarbons and selected functional group families. Nomenclature of organic compounds, stereochemistry, reaction mechanisms will be covered. Laboratory will demonstrate the above concepts and laboratory techniques.

PREREQUISITE(S): CHE 112

**CHE 212 ORGANIC CHEMISTRY II
5 CREDITS**

The topics in this course include structure, reactions, and reaction mechanisms of aromatic compounds and continuation of functional group families from CHE 211. Introduction to the chemistry of heterocycles, and biologically related compounds will be covered if time permits. Laboratory will demonstrate the above concepts and laboratory techniques.

PREREQUISITE(S): CHE 211

**CHE 275 SPECIAL TOPICS IN
CHEMISTRY
1-6 VARIABLE CREDIT**

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

**CHE 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT**

Provides the opportunity for the highly motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member.

PREREQUISITE(S): Instructor's permission

COMPUTER AIDED DESIGN/DRAFTING

CAD 101 COMPUTER AIDED DRAFTING I 3 CREDITS

Provides an introduction to the use of the microcomputer as a drafting tool. Computer literacy, CAD/D technology and the use of one CAD/D system will be emphasized. AutoCAD software is introduced. PREREQUISITE(S): CIS 103

CAD 102 COMPUTER AIDED DRAFTING II 3 CREDITS

Provides an opportunity for in-depth training using a microcomputer CAD/D system as an automated drafting tool. AutoCAD software will be emphasized. PREREQUISITE(S): CAD 101

CAD 105 AUTOCAD FOR INTERIORS 4 CREDITS

This course will provide an opportunity for the Interior Design student to obtain the basic skills necessary to operate Computer Aided Design (CAD) software. AutoCAD software will be emphasized.

PREREQUISITE(S): CIS 118; IND 111; OR instructor's permission

CAD 201 COMPUTER AIDED DRAFTING/CUSTOM 3 CREDITS

This course allows the student an opportunity to develop an understanding and skill in the use of the AutoCAD program as used on a micro-based CAD/D system. Students will demonstrate their competency by plotting completed projects

PREREQUISITE(S): CAD 102 or permission

CAD 202 COMPUTER AIDED DRAFTING/3D 3 CREDITS

This course examines 3-D drawing techniques. Students will develop 3-D drawings and construct 3-D models. Student drawings will be plotted. Mechanical and architectural applications will be emphasized.

PREREQUISITE(S): CAD 102 or instructor's permission

CAD 217 3D STUDIO VIZ 3 CREDITS

Focuses on introductory level basic features of the software using the latest version of 3D Studio VIZ. Includes creation and modification of primitive and complex shapes, Boolean constructions, creation and modification of lights, applying materials to objects, creation and modification of backgrounds, creation and adjustment of cameras, rendering, and animation by keyframing.

PREREQUISITE(S): CAD 202 or 225

CAD 225 ARCHITECTURAL DESKTOP/AUTODESK 3 CREDITS

This course provides students with the software application training in Architectural desktop necessary to produce 3D Architectural drawings utilizing students 2D drafting skills.

PREREQUISITE(S): CAD 102 or instructor's permission

NOTE: The student MUST have a solid working knowledge of AutoCAD 2000 or AutoCAD 2000i, especially the use of polylines, XREFs and plotting. The instructor will NOT provide remedial instruction on these subjects. A working knowledge of AutoCAD 3D principles and techniques is recommended, but is not required. Additionally, the student MUST have a solid working knowledge of one of the following Microsoft Windows operating systems: Windows 98, Windows NT4.0 or Windows 2000 Among the required skills, the student must know how to create, move, rename and delete files using the Windows Explorer. This is also an area where the instructor will NOT provide remedial instruction.

CAD 231 LAND DESKTOP/AUTODESK 3 CREDITS

Focuses on the basic command structure and applications of civil mapping concepts utilizing a civil software, to include data collection files, symbols libraries, setting attributes, COGO, layer control, surface modules, road calc, and site design. All course work is completed on a CAD system.

PREREQUISITE(S): CAD 102, or Permission of instructor

CAD 249 AUTOLISP PROGRAMMING 3 CREDITS

This course will introduce the students to the development of the AutoLisp programming language. The course covers techniques and concepts needed to utilize the AutoCad software programming capabilities.

PREREQUISITE(S): CAD 102

CAD 254 MECHANICAL DESKTOP/AUTODESK 3 CREDITS

This course examines 3D Parametric Solid modeling techniques. Students will construct solid models and generate 2D mechanical drawings utilizing these models.

PREREQUISITE(S): CAD 102 or instructor's permission

CAD 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

CAD 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

COMPUTER INFORMATION SYSTEMS

Please note: due to a statewide initiative, a number of CIS course have been re-numbered and/or re-named. If you have questions about specific course numbers or titles, please check with the Department Chair, or an advisor.

CIS 103 WINDOWS SHORT COURSE 1 CREDIT

This course will meet prerequisite requirements for CIS 118, CIS 168, CIS 145, and CIS 155. It is intended for the student with no previous computer experience in the Windows operating system. Windows fundamentals, accessories, file management, and customizing will be covered. Familiarity with the keyboard recommended. This course does not apply to degrees or certificates.

CIS 112 MICROSOFT WORD LEVEL 1 5 CREDITS

This course is designed to give students a basic understanding of Microsoft Word's capabilities. Students will learn to create, modify, print documents, and use Word's tools.

PREREQUISITE(S): Windows 2000 or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CIS 113 MICROSOFT WORD LEVEL 2 5 CREDITS

This course is designed to extend the student's knowledge of Microsoft Word and its features. It covers topics such as how to enhance your documents with bullets and numbering, sections, tables and graphics

PREREQUISITE(S): CIS 112

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CIS 115 INTRO TO COMPUTER INFORMATION SYSTEMS 3 CREDITS

This is an overview of the needs for and roles of computer information systems. Emphasis is on computer requirements in organizations, history, hardware functions, programming, systems development, and computer operations. Hands-on experience with applications and programming will be included.

CIS 118 INTRO TO PC APPLICATIONS 3 CREDITS

This course introduces computer concepts and components as well as coverage of application suite software and the Internet. Included are descriptions of and hands-on experience with word processors, spreadsheets, databases, presentation graphics, operating environments and other common PC application packages.

PREREQUISITE(S): CIS 103, CIS 115 or familiarity with MS Windows

**CIS 120 MICROSOFT WORD
LEVEL 3 .5 CREDITS**

This course is designed to teach students many of Word's advanced features. Students will create their own templates and styles; work with long, complex documents utilizing desktop publishing, and mail merge tools.

PREREQUISITE(S): CIS 113

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 121 MICROSOFT WORD
LEVEL 4 .5 CREDITS**

This course increases the student's knowledge of Microsoft Word's features. Students work with fields to create online forms, customizing Word, sharing document in workgroups and utilizing data from other Microsoft Applications

PREREQUISITE(S): CIS 120

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 123 MICROSOFT WORD
LEVEL 5 .5 CREDITS**

This course further increases a student's knowledge of Microsoft Word. Upon completion of the course, students will learn to insert and manage a variety of Word fields; design, write and debug a Word Visual Basic macro; create a dialogue box and suitable control structures and use an automated template to create a custom application.

PREREQUISITE(S): CIS 121

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 124 INTRO TO OPERATING
SYSTEMS 3 CREDITS**

Introduces concepts, terminology and hands-on skills in the use of DOS and Windows. Emphasizes navigation, file manipulation, file creation and troubleshooting.

**CIS 125 MICROSOFT
POWERPOINT LEVEL 1 .5 CREDITS**

This course instructs students on most of PowerPoint's features. Students will customize and style presentations, create sophisticated on-screen shows and print presentations.

PREREQUISITE(S): Windows 2000 or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 126 MICROSOFT
POWERPOINT LEVEL 2 .5 CREDITS**

This course expands on the student's knowledge of Microsoft PowerPoint. It instructs students on how to create sophisticated presentations using PowerPoint's advanced features.

PREREQUISITE(S): CIS 125

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 127 MICROSOFT
POWERPOINT LEVEL 3 .5 CREDITS**

This course shows students how to customize PowerPoint, enhance on-screen presentations, share information with other users, and conduct on-line presentations.

PREREQUISITE(S): CIS 126

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 128 WINDOWS COMPLETE
2 CREDITS**

Introduces the functions and capabilities of Microsoft Windows. Includes configuring and modifying the operating system environment.

**CIS 130 INTRO TO INTERNET
1 CREDIT**

Enhances the student's knowledge of the Internet and its resources. Individuals learn terminology in dealing with the Internet. Includes privacy and copyright issues with information retrieved from the Internet. Students experience the use of e-commerce, multimedia and e-mail. Explores searching the Internet and credibility of information obtained with searches.

**CIS 131 WORD PROCESSING I
1 CREDIT**

This course is designed to give the student an introductory working knowledge of Microsoft WORD for Windows. Using the Windows environment and mouse, the student will create, edit, format, save and print documents. The student will use spell check and thesaurus features. The student will format text, paragraphs, and pages, as well as create envelopes including Postnet bar codes.

PREREQUISITE(S): BTE 100 or minimal keyboarding skills recommended

**CIS 132 WORD PROCESSING II
1 CREDIT**

This course is designed to increase the student's working knowledge of Microsoft WORD for Windows. In this module the student will learn to use the find and replace function and the merge function. The student will create multiple page reports using headers, footers, footnotes, endnotes, and page numbers and will create documents using columns and tables.

PREREQUISITE(S): BTE 100 or minimal keyboarding skills recommended; CIS 131 or instructor's permission

**CIS 133 WORD PROCESSING III
1 CREDIT**

This course is the third in a series of modules designed to increase the student's working knowledge of Microsoft WORD for Windows. In this module the student will learn to use borders, drawing, word art and graphics. The student will create macros, charts, outlines, styles, fill-in forms. The student will also select and sort records.

PREREQUISITE(S): CIS 131, 132 or instructor's permission

**CIS 134 MICROSOFT ACCESS
LEVEL 1 5 CREDITS**

This course is designed to give students an understanding of some of the major features and functions within Access. This course is an introduction to database theory and practice plus hints and tips on good database design techniques.

PREREQUISITE(S): None

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 135 WEB SITE DESIGN AND
MANAGEMENT 3 CREDITS**

This class is designed for the student who has experience with HTML and basic site building. This class focuses on user interface, navigation design, and information architecture. With a strong emphasis on community service and group learning, teams of students design and build fully functioning Web sites. This course is intended to prepare future Web designers, producers and interactive media artists entering the Digital Media Industry.

PREREQUISITE(S): CIS 131, 133; GDI 102

**CIS 136 MICROSOFT OFFICE
SPECIALIST CERTIFICATION:
WORD 1 CREDIT**

Prepares students for the Microsoft Office Specialist Certification examination for Word. Students will use software to determine strengths and weaknesses and elect to review and prepare for either the Core of expert level certification exam. the actual Microsoft office Specialist certification exam is not included in this course.

PREREQUISITE(S): CIS 131 or instructor permission based on prior experience

**CIS 137 MICROSOFT ACCESS
LEVEL 2 5 CREDITS**

This course is designed to give existing Access users additional skills and knowledge on using the many features and functions of this software to make them more efficient and effective when processing data with Access. It gives students experience in producing database applications and the ability to create a variety of data views, queries, and reports.

PREREQUISITE(S): CIS 134

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 140 MICROSOFT OUTLOOK
1 CREDIT**

This course introduces the functions used in Microsoft Outlook including e-mail messages, calendaring, contacts, tasks, journals and notes.

**CIS 144 MICROSOFT ACCESS
LEVEL 3 5 CREDITS**

This course is designed to give existing users an insight into some of the more advanced features in Access. Gives students a further understanding of database design principles, advanced forms, reports and query design, including using calculations

PREREQUISITE(S): CIS 137

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 145 COMPLETE PC DATABASE
3 CREDITS**

Explores a complete array of database skills. Includes table, query, form, and report creation and modification. Other topics include application integration and automation of database tasks within the database.

**CIS 147 MICROSOFT ACCESS
LEVEL 4 .5 CREDITS**

This course is designed to give advanced users an understanding of customizing databases through command buttons, macros and menus and using the database management tools.

PREREQUISITE(S): CIS 144

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 148 MICROSOFT ACCESS
APPLICATION .5 CREDITS**

This course will help students become proficient database application developers by using the features of Microsoft Access and Visual Basic for Applications

PREREQUISITE(S): CIS 147

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 149 MICROSOFT OFFICE
SPECIALIST CERTIFICATION
PREP: ACCESS 1 CREDIT**

Prepares students for the Microsoft Office Specialist certification examination for Access. Students use software to determine strengths and weaknesses and elect to review and prepare for the Core level Certification exam.

PREREQUISITE(S): CIS 145 or instructor permission based on prior experience

**CIS 150 MICROSOFT EXCEL
LEVEL 1 .5 CREDITS**

This course is designed to give students a basic understanding of Microsoft Excel's main features and understand the advantages of using electronic spreadsheets. Students will learn to create and modify actual spreadsheets.

PREREQUISITE(S): Windows 2000 or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 154 MICROSOFT EXCEL
LEVEL 2 .5 CREDITS**

This course builds on a student's knowledge Microsoft Excel's functions and features. Students will learn to create and modify actual spreadsheets, enhance charts and graphics, and use more advanced formulae.

PREREQUISITE(S): CIS 150

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 155 PC SPREADSHEET
CONCEPTS: EXCEL
3 CREDITS**

Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis on using it as a business tool. Includes fundamentals and terms, creating and saving workbooks, entering and using formulas, formatting, printing, multiple-page workbooks, creating charts, entering and using functions, managing lists, and simple macros.

**CIS 157 MICROSOFT EXCEL
LEVEL 3 5 CREDITS**

This course focuses on the advanced features of Microsoft Excel and the advantages of using an electronic spreadsheet. Students will use advanced features of Excel to manage, automate and customize workbooks.

PREREQUISITE(S): CIS 154

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 158 MICROSOFT EXCEL VBA
PROGRAMMING 1 CREDIT**

This course is for those students who want to strengthen their Microsoft Excel skills through Visual Basic Applications (VBA). Students will utilize VBA language and delegates to write programs to quickly edit and update spreadsheets.

PREREQUISITE(S): CIS 157

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 159 MICROSOFT OFFICE
SPECIALIST CERTIFICATION
1 CREDIT**

Prepares students for the Microsoft Office Specialist certification examination for Excel. Students use software to determine strengths and weaknesses and elect to review and prepare for either the Core or Expert level Certification exam. The MOUS test is not included in this course.

PREREQUISITE(S): CIS 155 or Instructor permission

**CIS 167 DESKTOP PUBLISHING
3 CREDITS**

Introduces the concepts and applications for desktop publishing using work processing software. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents.

PREREQUISITE(S): Knowledge of Word Processing

**CIS 168 PRESENTATION GRAPHICS
1 CREDIT**

Introduces the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication.

PREREQUISITE(S): CIS 103 or familiarly with MS Windows.

**CIS 169 MICROSOFT OFFICE
SPECIALIST CERTIFICATION
1 CREDIT**

Prepares students for the Microsoft Office Specialist certification examination for PowerPoint. Students use software to determine strengths and weaknesses and elect to review and prepare for the Core level Certification exam.

PREREQUISITE(S): CIS 168 or instructor permission based on prior experience

**CIS 202 AUTOMATED PROJECT
MANAGEMENT: MS
PROJECT 3 CREDITS**

Provides an in depth exploration of project management techniques that use software to automate the project management processes. The course emphasizes project management strategies, goal setting and communication with team members, management and vendors. Critical thinking, discussion, and real world projects will be used to explore the creation of a task list, resource assignment and leveling.

**CIS 218 ADVANCED PC
APPLICATIONS 3 CREDITS**

This course covers the advanced capabilities of a microcomputer software applications suite. Emphasis is placed on solving business problems by integrating data from all of the software applications, and creating macros and Visual Basic procedures that facilitate the production of useful information. Printed documents, reports screen forms, slides, and web pages are produced to communicate information.

PREREQUISITE(S): CIS 118 or CIS 136, 145, 155, and CIS 131 or equivalent experience

**CIS 220 FUNDAMENTALS OF UNIX
3 CREDITS**

Covers the structure and fundamentals of the UNIX operating system. Includes the files system and file processing, various utility programs, and shell, multi-user operation, text processing and communications.

**CIS 222 UNIX SYSTEM
ADMINISTRATION 3 CREDITS**

Introduces the UNIX/Linux operating system and covers the skills required to install, configure and operate a UNIX/Linux system.

PREREQUISITE(S): CIS 220, 232

**CIS 232 UNIX SHELL
PROGRAMMING 3 CREDITS**

This course builds upon the skills from CIS 220. covers simple scripts to automate frequently executed commands followed by an explanation of adding conditional logic, user interaction, loops, menus, traps and functions to enhance the productivity and effectiveness of the user. in addition, students explore in detail Bourne and Korn shell scripting languages.

PREREQUISITE(S): CIS 220

CIS 235 LINUX+ 3 CREDITS

Linux+ covers basic installation, operating, and troubleshooting services for the Linux operating system and hardware on workstations and servers. It also covers basic system administration tasks. Prepares the student to take the CompTIA Linux+ exam.

PREREQUISITE(S): WFD 140 or WFD 141, or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 240 DATABASE DESIGN AND
DEVELOPMENT 3 CREDITS**

Introduces the basic concepts of relational databases, data storage, and retrieval. Covers database design, data modeling, transaction processing, and introduces the Structured Query Language for databases.

**CIS 250 AS 400 OPERATION/AS 400
COMMANDS 3 CREDITS**

This course is an introduction to operation and use of IBM iSeries AS/400 and the OS/400, operating system. this course covers OS/400 architecture, system security, the user interface, work (job) management, message handling, printing functions, device configuration, backup and restore (disaster recover) strategies, installing and maintaining OS/400 software, applying PTFs (software "fixes"), PC client access administration, and basic problem determination techniques.

**CIS 252 QUERYING A
MICROSOFT SQL SERVER
2000 WITH TRANSACT-SQL
3 CREDITS**

Provides students with the technical skills required to write basic Transact-SQL queries for Microsoft SQL.

PREREQUISITE(S): CIS 251 or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

**CIS 253 PROGRAMMING A
MICROSOFT SQL SERVER
DATABASE 3 CREDITS**

Provides students with the technical skills required to program a database solution by using Microsoft SQL Server 2000.

PREREQUISITE(S): equivalent knowledge and experience

**CIS 254 INTERMEDIATE
PHP/MYSQL SOFTWARE
6 CREDITS**

This is an intermediate level programming/database management course designed for Open Source Applications. the course provides a structured learning environment with hands-on experience installing, configuring, and implementing PHP and MySQL software.

PREREQUISITE(S): Basic understanding of programming concepts, database knowledge, and operating systems, or with instructor's approval

**CIS 255 ORACLE DEVELOPMENT
APPLICATION I 3 CREDITS**

Create database structures and stores, retrieve, and manipulate data in a relational database. a student will learn SQL, which is a set of statements that all users and programmers must use to access data in an Oracle database; use SQL + to manipulate SQL statements and perform additional tasks. Students will have knowledge of SQL that will allow them to create tables, enter and manipulate tables, query data in tables, and format the results of those queries.

PREREQUISITE(S): CIS 240 or instructor permission

**CIS 256 ORACLE APPLICATION
DEVELOPMENT II 4 CREDITS**

This is a continuation of CIS 243. Students will have a strong understanding of Oracle variables, contrl structures, cursors, and exceptions among other programming concepts.

PREREQUISITE(S): CIS 255 or instructor's permission

**CIS 258 8AS 400 ADVANCED
OPERATION/ AS400
COMMANDS 4 CREDITS**

This course is an introduction to the operations of the AS/400 midrange computer system. Topics covered are the user interface, displays, online help, object management concepts, CL commands, message handling, security & authorization, work management concepts and controlling jobs on job & output queues.

**CIS 266 TOPICS IN COMPUTING
3 CREDITS**

Explores social, ethical and legal issues related to computer use in business and within an international context. Incorporates some of the philosophical challenges posed by emerging technologies.

**CIS 267 MANAGEMENT OF
INFORMATION SYSTEMS
3 CREDITS**

Introduces the concepts and techniques of managing computer-based information resources. Includes hardware, software, personnel, control techniques, and the placement and integration of information systems resources within the organization.

**CIS 268 SYSTEMS ANALYSIS AND
DESIGN I 3 CREDITS**

Introduces the student to the materials, techniques, procedures and human interrelations involved in developing computer information systems. Topics covered include the systems approach, fact gathering techniques, forms design, input/output, file design, file organization, various charting techniques, system audits on controls, project management, implementation and evaluation.

**CIS 287 COOP EDUCATION
CAREER TRAINING
3 CREDITS**

This course is designed to provide students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. the instructor s will work with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. Attendance at seminars and/or interaction with the instructor is required.

COMPUTER NETWORKING

CNG 101 INTRO TO NETWORKING **3 CREDITS**

Focuses on underlying concepts of data communications, telecommunications and networking. Emphasizes the terminology and technologies in current networking environments and provides a general overview of the field of networking as a basis for continued study in the field.

COREQUISITE(S): CIS 118, or instructor's permission

CNG 102 LOCAL AREA NETWORKS **3 CREDITS**

Introduces Local Area Networking. Focuses on discussions and demonstrations of planning, installing, and supporting networks.

PREREQUISITE(S): CNG 101

CNG 103 WIDE AREA NETWORKS **3 CREDITS**

Provides the student with conceptual and working knowledge of how Local Area Networks communicate over a wide area. Introduces telephony—the technology of switched voice communications. Provides students with an understanding of how communication channels of the public switched telephone networks are used for data communications and how voice data communications have become integrated.

PREREQUISITE(S): CNG 102, or instructor's permission

CNG 104 INTRO TO TCP/IP **3 CREDITS**

Outlines four important networking architectures in corporate environments today—TCP/IP, SNA, AppleTalk, and DNA. Focuses on the major components and functions of each of these architectures as well as methods used to connect different architectures. Provides students with concepts that are important to the field of systems integration, as well as a conceptual basis for understanding network architectures.

COREQUISITE(S): CNG 102

CNG 108 NETWORK ANALYSIS AND DESIGN **3 CREDITS**

Provides advanced instruction for networking professionals and students who grasp the basic concepts of networking but would like to understand methods used to analyze, design and manage LAN's point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

PREREQUISITE(S): CNG 101 or equivalent experience

CNG 118 SECURITY + **3 CREDITS**

This course is designed to meet the increasing needs of individuals and organizations to understand, prepare for, respond to and recover from threats to infrastructures. Students will be provided with a comprehensive awareness of existing and potential security threats, vulnerabilities and defensive methods so critical for today's business and technology professionals. Successful completion of this course will prepare the student for the CompTIA Security + exam. Students taking this course may be required to undergo a background check at the student's expense.

CNG 121 COMPUTER TECHNICIAN I: **A+ 4 CREDITS**

Introduces personal computer hardware to gain the skills and knowledge for a successful entry-level computer service technician. Provides extensive hands-on work with computer systems. Includes PC setup and configuration, floppy and hard drive installation and basic maintenance and troubleshooting. Successful completion prepares the student for the core hardware service technician portion of the CompTIA A+ Certification Exam.

CNG 122 COMPUTER TECHNICIAN II **A+ 3 CREDITS**

Focuses on operating systems as well as installation of modems, tape backups, CD-ROM drives, and SCSI subsystems. Covers operating systems, Windows 9x, Windows NT and Windows 2000 installation, configuration and upgrading. Includes laser printers and backup power systems. This course prepares the student for the CompTIA A+ OS Technologies Exam.

PREREQUISITE(S): CNG 121 or Approval of Instructor

CNG 123 SERVER + **3 CREDITS**

Provides students who are preparing for roles as network support technicians with skills training in the support of multi-processor computers and high capacity data storage systems typical of servers used in medium to large-scale networks. Prepares students to take the CompTIA Server+ certification exam

PREREQUISITE(S): None

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CNG 124 NETWORKING I: **NETWORK + 3 CREDITS**

Provides students with the knowledge necessary to understand, identify and perform necessary tasks involved in supporting a network. Covers the vendor-independent networking skills and concepts that affect all aspects of networking, such as installing and configuring the TCP/IP. This course also prepares students for the Networking II: Network + course. Students taking this course may be required to undergo a background check at the student's expense.

CNG 125 NETWORKING II: **NETWORK + 3 CREDITS**

Continues to provide students with the knowledge necessary to implement and support a network. Focuses on the vendor-independent networking skills and concepts that affect all aspects of networking. The Networking I and II: Network + courses prepare students for the Network + certification.

PREREQUISITE(S): CNG 124

Students taking this course may be required to undergo a background check at the student's expense.

CNG 129 NETWORK CABLING **2 CREDITS**

Prepares the student to install and troubleshoot cable, connectors, connecting blocks, 88patch panels and related hardware as needed to support a local area network.

CNG 137 I-NET + **3 CREDITS**

i-Net+ provides the student with the skills necessary to pursue a career as an Internet specialist. This course prepares the student to take the CompTIA i-Net+ certification exam.

PREREQUISITE(S): CNG 125

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CNG 208 INSTALLING, CONFIGURING, AND ADMINISTERING MICROSOFT WINDOWS 2000 SERVER **3 CREDITS**

This course covers Windows 2000 Server operating system, installation, administration, support, and troubleshooting. Prepares student to take the Windows 2000 exam #70-215

PREREQUISITE(S): CNG 209 or instructor's permission

CNG 210 WINDOWS 2000 NETWORK AND OPERATING ESSENTIALS **3 CREDITS**

Provides individuals new to Microsoft Windows 2000 with the knowledge necessary to understand and identify the tasks involved in supporting Windows 2000 networks. introduces an overview of networking concepts and how they are implemented in Windows 2000. Provides students with the prerequisite knowledge and skills required for course CNG 212, Implementing Windows 2000 Professional and server. Prepares student to take the Microsoft R Certified Systems Engineer Exam 70-210 or Exam 70-215.

CNG 211 WINDOWS XP CONFIGURATION **3 CREDITS**

Provides students with the knowledge and skills necessary to address the implementation and desktop support needs of customers who are planning to deploy and support Microsoft Windows XP Professional in a variety of network operating system environments. Prepares student to take the Microsoft Certified Systems engineer Exam 70-270.

PREREQUISITE(S): CIS 104 or instructor's permission

CNG 212 MANAGE A MS WINDOWS ENVIRONMENT **4 CREDITS**

This course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server environment. (Exam 70-290)

PREREQUISITE(S): CNG 118, 124, 125, 225, 251, 252, 253, 254, 257

CNG 213 IMPLEMENTING A WINDOWS 2000 NETWORK INFRASTRUCTURE

3 CREDITS

This course is for support professionals who are new to Microsoft Windows 2000 and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows 2000 Server products. It also provides students with the prerequisite knowledge and skills required for course CNG 214 Implementing and Administering Windows 2000 Directory Services.

CNG 215 MANAGING A MICROSOFT WINDOWS NETWORK ENVIRONMENT

3 CREDITS

Provides the knowledge required to implement, manage and troubleshoot existing network and server environments based on the Microsoft WindowsÆ platform. These skills are generally required in medium to large size organizations that maintain 200 to 26,000 user desktops and servers, spanning 2 to 100 physical locations via Large Area Networks (LANs) and the Internet or Intranets.

PREREQUISITE(S): CNG 216

CNG 216 PLAN A MS WINDOWS SERVER ACTIVE DIRECTORY INFRASTRUCTURE

4 CREDITS

This course provides students with the knowledge and skills to successfully plan, implement, and troubleshoot a Microsoft Windows Server Active Directory service infrastructure. The course focuses on a Windows Server directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user, group, and computer account strategies. (Exam 70-294)

CNG 217 IMPLEMENTING MICROSOFT SITE SERVER 3.0

3 CREDITS

This course covers basic web site development tasks requiring knowledge of hypertext, markup language (HTML) and Microsoft visual Basic R Scripting Edition. It provides students with the Knowledge and skills necessary to implement, support maintain, optimize, and troubleshoot web sites using Site Server. Prepares student to take the Microsoft Certified Professional Exam 70-057.

PREREQUISITE(S): student should be familiar with internet protocols and services, administer IIS with Microsoft Management Console, Visual Basic Scripting, or with instructor's approval

CNG 222 DESIGNING A WINDOWS SECURE NETWORK

3 CREDITS

Provides students with the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks by using Microsoft Windows technologies. Students learn to secure access to Local Network Users, Remote Users and Remote Offices, Partners, and to secure access between private and public networks.

PREREQUISITE(S): CNG 216 or instructor approval

CNG 223 DESIGNING A WINDOWS NETWORK INFRASTRUCTURE

3 CREDITS

Provides students with information and skills needed to create a networking services infrastructure design that supports the required network applications. Each module provides a solution based on the needs of the organization. Covers Windows network solutions that require a single technology, such as DHCP, to provide Internet Protocol (IP) address configurations support. Examines several technology options such as Open Shortest Path First (OSPF), Routing Information Protocol (RIP), and Internet Group Management Protocol (IGMP) to design an IP routing scheme. Prepares student to take the Microsoft Certified Systems Engineer Exam 70-221.

PREREQUISITE(S): CNG 214 or instructor's permission

CNG 224 MICROSOFT WINDOWS WIRELESS NETWORK

3 CREDITS

Provides the student with the Microsoft official curriculum from the Microsoft Regional Academy. Offers detailed instruction on the foundation concepts and technologies of wireless data networking. Upon completion of this course, students are prepared to take the Certified Wireless Network Administrator (CWNP) Certification Exam.

PREREQUISITE(S): CNG 101 or instructor consent

CNG 225 WIRELESS NETWORK SECURITY

3 CREDITS

This course offers detailed instruction on the security issues related to wireless data networking. Topics include vulnerabilities and attacks, hardware and software solutions, prevention and countermeasures, and implementation and management. Upon completion of this course, students should be prepared to take the certified Wireless security Expert (CWSE) Certification Exam.

PREREQUISITE(S): CNG 224, CWNA Certification, or equivalent documented knowledge and skill level.

Students taking this course may be required to undergo a background check at the students expense.

CNG 226 IMPLEMENTING AND MANAGING MS EXCHANGE

3 CREDITS

Provides the knowledge and skills necessary to install, configure, and administer Microsoft Exchange. Students learn to use Exchange in medium to very large computing environments that typically have multiple physical locations, mixed client connection protocols, and internet messaging connectivity.

PREREQUISITE(S): CNG 214

CNG 227 ADMINISTERING A MICROSOFT SQL SERVER DATABASE

3 CREDITS

Provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of MicrosoftÆ SQL Server.

PREREQUISITE(S): CNG 214

CNG 228 DEISGNING A MICROSOFT WINDOWS 2000 MIGRATION STRATEGY

3 CREDITS

Designing a Microsoft Windows 2000 Migration Strategy provides students with the knowledge and skills necessary to select and design a strategy to migrate from a Microsoft Windows NT server 4.0 directory services infrastructure to a Microsoft Windows 2000 Active Directory TM directory service infrastructure by describing the planning processes and implications involved. Prepares the student to take the Microsoft Certified Systems Engineer Exam 70-222.

PREREQUISITE(S): CNG 221 or 214, working knowledge of Active Directory planning and design, experience evaluating forest and site designs for upgrading purposes; or instructor's permission

CIS 250 AS400 OPERATION/AS400 COMMANDS

3 CREDITS

This course is an introduction to operation and use of IBM iSeries AS/400 and the OS/400, operating system. This course covers OS/400 architecture, system security, the user interface, work (job) management, message handling, printing functions, device configuration, backup and restore (disaster recovery) strategies, installing and maintaining OS/400 software, applying PTFs (software "fixes"), PC client access administration, and basic problem determination techniques

CNG 251 ANTI VIRUS CONCEPTS

3 CREDITS

Prepares the student for virus eradication. Focuses on how viruses work, how they are designed and how viruses are written. Emphasizes virus eradication and cleaning.

PREREQUISITE(S): CNG 101 or instructor consent

Students taking this course may be required to undergo a background check at the students expense.

CNG 252 SECURITY MODELING

3 CREDITS

Designs various security models using rights and permissions. Covers Microsoft, CISCO, Novell Netware and UNIX, and Standard based security calls. Focuses on security theory with some practical security applications.

PREREQUISITE(S): CNG 261 or instructor consent

Students taking this course may be required to undergo a background check at the students expense.

CNG 253 FIREWALLS AND HOW THEY WORK

3 CREDITS

Introduces students to the design and implementation of firewalls. Covers such topics as firewalls using CISCO Routers, Microsoft server platform and UNIX platform. Focuses on how firewalls function in these environments and the basic steps to plan and implement firewalls.

PREREQUISITE(S): CNG 261 or instructor consent

Students taking this course may be required to undergo a background check at the students expense.

**CNG 254 DATA ENCRYPTION
3 CREDITS**

Exposes the student to data encryption models. Examines the differences between data storage including Microsoft, Novell Netware and UNIX. Includes encryption and data transmission. Covers encryption over various networks including the Internet.

PREREQUISITE(S): CNG 261 or instructor consent

Students taking this course may be required to undergo a background check at the students expense.

**CNG 255 INDUSTRY CERTIFICATION
3 CREDITS**

Provides the student with a comprehensive preparation for recognized industry certification exams in personal computer and network technology. Features alternative methods for delivery of instruction, including self-paced instruction assisted by technology.

**CNG 260 CISCO NETWORK
ASSOCIATE I 5 CREDITS**

Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks) and basic network design.

PREREQUISITE(S): CNG 101 or instructor permission

**CNG 261 CISCO NETWORK
ASSOCIATE II 5 CREDITS**

Focuses on router theory and technologies, including router configurations, protocols, network management and introductory LAN switching.

PREREQUISITE(S): CNG 260

**CNG 262 CISCO NETWORK
ASSOCIATE III 5 CREDITS**

Focuses on advanced routing and switching configurations, LAN switching, network management and advanced network design.

PREREQUISITE(S): CNG 261

**CNG 263 CISCO NETWORK
ASSOCIATE IV 5 CREDITS**

Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNG 260, 261 and 262 prepare students for the CISCO Certified Network Associate (CCNA) certification exam .

PREREQUISITE(S): CNG 262

**CNG 265 CISCO NETWORK
PROFESSIONAL I 5 CREDITS**

Focuses on using Cisco routers connected in LANs and WANs typically found at medium to large network sites. Emphasizes selection and implementation of the appropriate Cisco IOSTM services required to build a scalable, routed network. Includes theories and tasks that network managers and administrators need to use and perform when managing access and controlling overhead traffic in growing, routed networks once connectivity has been established. This course is the first in a series of four semesters pertaining to CCNP Certification.

PREREQUISITE(S): Current Cisco CCNA Certification or Department Approval

**CNG 266 CISCO NETWORK
PROFESSIONAL II 5 CREDITS**

Focuses on using and configuring Cisco routers remotely connected in WANs found in medium to large network sites. Emphasizes how to select WAN topologies, devices, protocols, and implement the appropriate Cisco IOS services required for remotely accessing network resources. Includes selecting WAN components, configuring asynchronous modems, PPP, Frame Relay and ISDN protocols, NAT, X.25; TACACS+ Server, Dial Backup, and Managing Network Performance with Queuing and Compression together with requisite router configurations. This is the second course in a series of four semesters pertaining to CCNP Certification.

PREREQUISITE(S): CNG 265

**CNG 267 CISCO NETWORK
PROFESSIONAL III 5 CREDITS**

Focuses on using and configuring Cisco routers and switches to connect LANs and WANs found at medium to large network sites. Covers the selection and implementation of the appropriate Cisco IOS services required to build scalable, routed, switched and multi-layered switched networks. Includes theories and tasks that network managers and administrators need to perform when managing access and controlling overhead traffic in growing, routed networks once connectivity has been established. This is the third course in a series of four semesters pertaining to CCNP Certification.

PREREQUISITE(S): CNG 226

**CNG 268 CISCO NETWORK
PROFESSIONAL IV 5 CREDITS**

Focuses on methodologies that provide systematic and efficient approaches to troubleshooting and support of networks and network components. Emphasizes troubleshooting tools, software testing products, protocol overviews, TCP/IP features, LAN switching, VLAN broadcasts and security, routing and switching architectures, Frame Relay, ISDN, Novel IPX, AppleTalk, EIGRP, OSPF, and BGP. This is the fourth course in a series of four semesters pertaining to CCNP Certification.

PREREQUISITE(S): CNG 265, CNG 266 and CNG 267

COMPUTER SCIENCE

**CSC 116 LOGIC AND PROGRAM
DESIGN 3 CREDITS**

Introduces computer program design using concepts of structured programming and logic. Includes pseudocode, flowcharts, and structure charts. Covers variables, data types, control structures, looping, program breaks, and arrays.

**CSC 150 VISUAL BASIC
PROGRAMMING 3 CREDITS**

This course introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basics for Windows.

PREREQUISITE(S): CIS 116 or equivalent experience or instructor's permission

**CSC 151 ADVANCED VISUAL BASIC
PROGRAMMING 3 CREDITS**

This course is a continuation of CSC 150. You will develop more involved applications, work with more advanced controls, and deal with more advanced topics.

PREREQUISITE(S): CSC 150 or instructor's permission

**CSC 156 VISUAL BASIC.NET
PROGRAMMING 4 CREDITS**

Students are introduced to the Visual Basic.NET programming language. All syntactical components of the language are covered, including arrays, structures, functions, and classes. Content will focus on writing clear properly structured, and well-documented programs using Visual Basic.NET and object oriented methodology.

PREREQUISITE(S): Familiarity with Visual Basic 6 or instructor's permission. CSC 116 recommended.

**CSC 157 ADVANCED VISUAL BASIC
.NET PROGRAMMING 4 CREDITS**

This course continues the structured Algorithm Development and problem solving techniques begun in CSC 156. The more advanced features of the Visual Basic .NET programming language are introduced. This course will explore the relationships between VISUAL BASIC.NET and the .NET framework and introduces some important .NET services. Collections, copying and comparing objects, and how the .NET framework interfaces to XML will be introduced. Content will focus on writing clear, properly structured, and well-documented programs using VISUAL BASIC .NET and object oriented methodology.

PREREQUISITE(S): CSC 156

**CSC 160 COMPUTER SCIENCE I
(JAVA) 4 CREDITS**

This course will introduce students to the discipline of computer science. Topics covered will include algorithm development, data representation, arithmetic and logical expressions, sub-programs and input/output operations using a structured programming language.

PREREQUISITE(S): CIS 116 and MAT 132 or instructor's permission

**CSC 161 COMPUTER SCIENCE II
(JAVA OR C++ OR C) 4 CREDITS**

This course continues the structured algorithm development and problem solving techniques begun in CSC 160. Data structures will be emphasized. Intensive computer laboratory experience required. 45 hours lecture, 30 hours lab.

PREREQUISITE(S): CSC 160

**CSC 170 LINUX /APACHE / MYSQL /
PHP(LAMP) 4 CREDITS**

This course introduces the movement of deploying Open Source Software (OSS) into the personal, academic, and business servers and applications arenas. The course provides a structured learning environment with hands-on experience installing, securing, and implementing one of the most popular and cost-effective web integration solutions.

CSC 225 COMPUTER ORGANIZATION 4 CREDITS

This course introduces the student to the organization of a computer at the logic level. Topics covered will include numbering systems, digital logic, digital systems, machine level representation of data, assembly language programming, machine organization and memory system organization. 45 hours lecture, 30 hours lab.

CSC 230 C LANGUAGE PROGRAMMING 3 CREDITS

Students are introduced to the C programming language, which is a "mid-level" language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a "low level".

PREREQUISITE(S): MAT 160 and any programming language course

CSC 233 OBJECT-ORIENTED PROGRAMMING IN C++ 4 CREDITS

Students are introduced to the C++ programming language. All syntactical components of the language are covered, including arrays, structures, pointers, functions, and classes. Content will focus on writing clear properly structured, and well-documented programs using C++ and object oriented methodology. PREREQUISITE(S): CSC 116 and MAT 132 or instructor's permission

CSC 234 C++ PROGRAMMING 4 CREDITS

This is an advanced level computer programming course. Although it teaches C++ as a complete language, it presumes knowledge of at least one similar language such as C or Pascal. Prior knowledge of C at an advanced level as well as fundamental concepts of algorithms and data structures is highly recommended. PREREQUISITE(S): CSC 233 or instructor's permission

CSC 236 C# PROGRAMMING 4 CREDITS

Students are introduced to the C# programming language. All syntactical components of the language are covered, including arrays, structures, functions, and classes. Content will focus on writing clear properly structured, and well-documented programs using C# and object oriented methodology.

PREREQUISITE(S): Familiarity with the C++ programming language or permission of the instructor.

CSC 237 ADVANCED C# PROGRAMMING 4 CREDITS

This course continues the structured algorithm development and problem solving techniques begun in CSC 236. Students are introduced to more advanced features of the c# programming language. This course will explore the relationships between C# and the .NET Framework and introduces some important .NET services. Students will learn collections, copying and comparing objects, and how the .NET framework interfaces to XML. Content will focus on writing clear properly structured, and well documented programs using C# and object oriented methodology.

PREREQUISITE(S): familiarity with the C# Programming Language or instructor's permission

CSC 238 INTRODUCTION TO C++.NET 4 CREDITS

Students are introduced to the C++.NET programming language. All syntactical components of the language are covered, including arrays, structures, functions, classes, memory management, object manipulation, inheritance, Windows programming, and MFC. Content will focus on writing clear properly structured and well-documented programs using C++.NET and object oriented methodology.

CSC 249 JAVA FOR THE ENTERPRISE 4 CREDITS

Presents advanced topics in the development of applications on the Java platform. Emphasizes the use of Java's J2EE distributed processing in the development of server-side programs and develops skills in streaming and multithreading.

CSC 253 DEVELOPING MICROSOFT ASP .NETWEB APPLICATIONS USING VISUAL STUDIO.NET 3 CREDITS

Teaches programmers and beginning Web developers the fundamentals of Web application site implementation by using Microsoft ASP.NET platform to create an ASP.NET Web application that delivers dynamic content to a Web site. Prepares student to take the Microsoft Certified Professional Exam 70-305 and Exam 70-315.

PREREQUISITE(S): CSC 251, 261 or instructor's permission

CSC 254 ASP.NET PROGRAMMING 3 CREDITS

Teaches programmers the fundamentals of Web application and Web Server site implementation by using Microsoft ASP.NET and Microsoft Visual Basic.NET or C#.NET. Focuses on using the Microsoft Visual Studio.NET environment and the Microsoft.NET platform to create an ASP.NET Web application and Web services that delivers dynamic content to Web applications and Web services.

PREREQUISITE(S): CSC 157 or 237 or experience programming in Microsoft's .NET framework

CSC 255 ADO.NET PROGRAMMING 4 CREDITS

This course provides a hands-on approach to learning ADO.NET, the data access model provided by the .NET Framework. The class features an in-depth coverage of ADO.NET but also takes an in-depth look at the ADO.NET architecture. It covers concepts of accessing, modifying, and manipulating data in both Connected and Disconnected database environments.

PREREQUISITE(S): CSC 157 or 236

CSC 257 BUILDING COM+ APPLICATIONS USING MICROSOFT.NET ENTERPRISE SERVICES 3 CREDITS

This course provides students with the knowledge and skills to effectively build scalable, distributed applications that use Microsoft .NET Enterprise Services and the Microsoft.NET Framework. It prepares the students to take the Microsoft exams #70-310 and #70-320.

PREREQUISITE(S): Experience in MS Visual Basic.NET or MS Visual C# and handling database transactions, or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CSC 258 ANALYZING REQUIREMENTS AND DEFINING MICROSOFT.NET SOLUTION ARCHITECTURE 3 CREDITS

This course provides students with the knowledge and skills needed to design Microsoft.NET-connected solutions to business problems. It provides training for Microsoft exam #70-300.

PREREQUISITE(S): General understanding of software development life cycle, working knowledge of .NET development technologies, familiarity with Microsoft Solutions Framework (MSF) Process Model, familiarity with object modeling and data modeling methodologies, and experience working with Microsoft Visio ® Professional 2000; or instructor's approval

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CSC 261 PROGRAMMING WITH C# FOR THE .NET PLATFORM 3 CREDITS

Provides students with the knowledge and skills they need to develop C# applications for the Microsoft.NET Platform. Focuses on C# program structure, language syntax, and implementation details.

PREREQUISIT(S): CSC 153 or instructor's permission

CSC 262 MS C#.NET APPLICATION DEVELOPMENT 3 CREDITS

Provides C# programmers with the skills required to create Windows Forms applications by using the .NET Framework. Covers the major topics for Windows client application programming on the .NET Framework. Includes Windows Forms, GDI+, simple data access, interoperating with unmanaged code, threading and asynchronous programming issues, simple remoting, Web access, Web Services consumption, debugging, security, and deployment issues for desktop applications.

PREREQUISITE(S): CSC 261

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CSC 263 MS ASP.NET XML WEB SERVICES DEVELOPMENT
3 CREDITS

Provides students with the knowledge and skills that are required to develop XML Web services-based solutions to solve common problems in the distributed application domain. Focuses on using Microsoft Visual Studio .NET, Microsoft ASP.NET, and Universal Description, Discovery, and Integration (UDDI) to enable students to build, deploy, locate, and consume Extensible Markup Language (XML) Web services.

PREREQUISITE(S): CSC 262

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CSC 269 PROGRAMMING IN PERL
2 CREDITS

This course introduces the knowledge and skills necessary to be able to write programs in the perl programming language. will offer a brief introduction of writing CGI programs using Perl.

PREREQUISITE(S): previous programming experience

COMPUTER WEB BASED

CWB 106 MASTERING THE WEB
3 CREDITS

Focuses on creating and managing web sites, the tasks and tools involved in building and maintaining a web site, and the web administrator's responsibilities and challenges.

PREREQUISITE(S): XML I

CWB 110 COMPLETE WEB AUTHORING
3 CREDITS

Explores the complete set of Web authoring skills using HTML and/or other scripting languages. Includes links, backgrounds, controlling text and graphic placement, tables, image maps, frames and forms.

CWB 164 INTRODUCTION TO XML
3 CREDITS

Provides students with an introduction to the XML language's structure and syntax. Examines supporting tools such as XSL and CSS. This course is not designed to focus on a particular implementation of XML, but examine the possibilities of using XML with popular technologies such as Java SAX, SOAP, RDF, and the DOM.

PREREQUISITE(S): CWB 110 or instructor's permission

CWB 166 ADVANCED XML
3 CREDITS

This course teaches students the advanced features of XML. Students will learn XML standards and applications, advanced XML schemas, XLink, XPointer, XPath Syntax, Parsing XML with DOM and Basic SOAP.

PREREQUISITE(S): CWB 164

This course is designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

CWB 205 COMPLETE WEB SCRIPTING
3 CREDITS

Explores the complete set of web scripting skills needed to develop Web Applications. Includes variables, data types, arithmetic operations, logical operations, looping, creating and reading cookies, creating an array, displaying data based on a cookie value, setting flags, working with frames, creating objects in a hidden frame, using the History Object, writing HTML to another window, determining browser and detecting keystrokes.

CWB 209 MASTERING WEB APPLICATION DEVELOPMENT USING MICROSOFT VISUAL INTERDEV 6
3 CREDITS

This course teaches site developers who perform architectural planning, technology selection, or web site programming tasks how to create enterprise-level web sites that use Component Object Model (COM) components on both the client and the server. Prepares student to take the Microsoft Certified Professional Exam 70-152.

PREREQUISITE(S): Students should be familiar with the internet, HTML and web authoring tools, database development tools, ActiveX controls and Java applets, client/server architecture models, email with mail client, or instructor's permission

CONVERGENT TECHNOLOGIES

CTC 107 INSTALLER
3 CREDITS

Teaches the proper procedures for performing aerial, underground and interior CA TV drop installations.

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 108 BROADBAND CABLE OVERVIEW
1 CREDITS

This course provides technical, sales/marketing, customer service, dispatch and management personnel with general understanding of CATV System equipment operation and terminology.

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 109 INSTALLER TECHNICIAN
4 CREDITS

This course teaches an experienced installer the CATV signal level fundamentals, test equipment, signal leakage detection procedures, and servicing single and multiple dwelling unit drops.

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 111 SERVICE TECHNICIAN
4 CREDITS

This course teaches a trained NCTI Installer Technician the basic characteristics and functions of the feeder line system active and passive devices, the fundamentals of cable powering, basic test equipment operation, signal leakage basics, coaxial cable and connectorization, and an overview of fiber optics. The study of AC electronic theory provides the foundation for understanding the lessons on coaxial cable, passive devices, amplifiers and cable powering.

PREREQUISITE(S): CTC 109

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 113 SYSTEM TECHNICIAN
4 CREDITS

This course teaches a trained NCTI Service Technician how to activate, test and troubleshoot the RF trunk system. It covers RF trunk and distribution amplifier theory of operation. It includes testing and measurement standards, and procedures.

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 116 FIBER OPTICS TECHNICIAN
3 CREDITS

Provides information on fiber optic system overview, applications, rackmount optical transmitters and receivers, forward and return optical node operations and activation, fiber optic design topologies, fiber design cost studies, fiber optic system design, fiber construction, fiber tests and documentation, and optical test equipment.

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 117 COMPUTERS AND BROADBAND MODEMS
3 CREDITS

Introduces Personal Computer hardware and software to use as an interface device. Focuses on the fundamentals of Personal Computers and requires no prior technical background or experience. Explains the operation of cable modems and how they work in a broadband cable network. Covers the client-server functions of CMTS and cable modems. Provides course material that is appropriate as a reference tool to understand more about Personal Computer concepts and terminology. Enables individuals to gain a comprehensive understanding of Personal Computer technology and how the PC works with broadband modems.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 118 BROADBAND DIGITAL INSTALLER
3 CREDITS

Introduces the basics of digital video and high-speed Internet access services by presenting the typical features and functions of digital set-top terminals and cable modems. Covers computer hardware and operating system setup basics. Enables students to learn how to certify the reliability of the drop prior to performing the extensive step-by-step installation procedures. Teaches how to effectively educate customers to use these new digital services reducing unnecessary repeat service calls and improving customer satisfaction. Covers installation procedures for twisted-pair inside wiring and constant bit rate telephony equipment. Incorporates information on communication service competitors to answer customer questions regarding competitive technologies offering similar digital services.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 119 DSL INSTALLATION
3 CREDITS

Introduces the basic operations of the telephone network, DSL technology, today's computer system hardware and software, and the Internet. Describes the procedures of installing twisted-pair inside wiring and connecting the premises to the phone network. Examines techniques on the proper use and maintenance of the tools necessary for installation and examines the step-by-step process of installing internal and external DSL modems. Provides practical techniques for applying customer service skills and instructing new customers how to get the most from their DSL service and the Internet.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 120 UNDERSTANDING VOICE AND DATA NETWORKS
3 CREDITS

Introduces telecommunications technology and terminology and develops a broad knowledge base for a career in the telecom industry. Requires no prior technical background or experience in the field. Enables a student to gain a comprehensive understanding of telecommunications technologies and their applications and implications for business. Combines computer, electrical engineering and business aspects of telecommunications, providing a thorough, up-to-date presentation of the latest technologies as well as practical industry applications.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 121 UNDERSTANDING BROADBAND TECHNOLOGY
3 CREDITS

Provides a thorough grounding in the fundamental concepts of broadband technology. Includes an overview of the underlying technologies of the entire broadband network from signal source to the customer premises. Focuses on a review of digital video, telephony, and high-speed data services. Addresses safety and regulatory issues.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 123 BASIC BROADBAND TROUBLESHOOTING
3 CREDITS

Teaches students to diagnose and resolve technical problems for customers over the phone. Provides a thorough understanding of the drop system, interconnection between devices, and other problems faced by broadband customers. Trains customer service representatives to distinguish problems that can be solved over the phone and not require a technician to be dispatched.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 124 TROUBLESHOOTING ADVANCED SERVICES
3 CREDITS

This course helps make the transition from analog to digital services troubleshooting. This course teaches how digital signals are transported, explains the use of test equipment used to test digital signals in the cable plant and teaches specific techniques for troubleshooting digital video, telephony and cable modem services.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 125 HIGH SPEED DATA CUSTOMER SERVICE
2 CREDITS

Focuses on high-speed data services, equipment, operations and troubleshooting. Covers cable modems, and personal computer hardware and software used in high-speed data services. Provides an understanding of data networking, the Internet and how cable modems interface with it, TCP/IP and the open system interconnection model, cable modem termination systems, and the return paths effect on high speed data service.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 126 ADVANCED HIGH SPEED DATA CUSTOMER SERVICE
3 CREDITS

Covers cable modems, computer systems, and troubleshooting of personal computers. Emphasizes the boot process, software, the system board, memory management, floppy and hard drives, input/output devices, return path fundamentals, and data communications. Explores and compares the technology related to wide area networks and broadband access including packet switching, frame relay, SMDS, ISDN, SONET and ATM.

PREREQUISITE(S): CTC 125 High Speed Data Customer Service

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 127 FIBER INSTALLATION AND ACTIVATION
2 CREDITS

Fiber Installation and Activation provides the student with current information on the development of fiber in optical broadband networks. The student will learn the basics of light transmission through optical fibers, how fibers are combined into optical cables and how fiber networks are designed and constructed. Network architecture, topology, and design will be covered. Training will also prepare the student to splice fibers using mechanical and fusion methods. The course teaches the topics required to provide the student with the ability to install and activate fiber optic networks. It assumes previous knowledge and experience in RF Broadband Technology.

COREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 128 TESTING AND MAINTENANCE FOR FIBER TECHNICIANS
2 CREDITS

Testing and Maintenance for Fiber Technicians provides the student with an understanding of the application of fiber optic theory on the job. The course concentrates on the test equipment and procedures necessary to perform test and turn-up for new Fiber Optic links, troubleshoot service outages, and restoring fiber optic links to their original standards. The course also describes the process of Fiber Optic restoration planning and implementing preventive maintenance regimens in an HFC network.

COREQUISITE(S): Employment in the Broadband industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 150 DATA COMMUNICATIONS
3 CREDITS

This course will provide the student with an overview of network systems. The architecture of each network, transmission modes, functions, uses, protocols and advantages of each will be discussed in detail. Synchronous as well as Asynchronous data systems will also be addressed.

CTC 160 CABLE COMMUNICATIONS
3 CREDITS

This course will provide the student with an overview of cable communication systems and their attributes. Areas of discussion will include: architecture, satellite applications, coaxial cable attributes, typical systems from tap to TV, and common construction practices. Applicable math skills will also be included.

PREREQUISITE(S): ELT 106, ELT 110 or instructor's permission

CTC 161 VOICE COMMUNICATIONS
3 CREDITS

Provides students with an overview of telephone communication systems. Address the components and processes used in a public switched network, residence, business and special telephone service, class 5 switching centers, outside telephone plants, video delivery and video conferencing. Covers operation and application of pagers will also be covered.

PREREQUISITE(S): ELT 106, ELT 110 or instructor's permission

CTC 162 TELECOMMUNICATION CONSTRUCTION & OSHA SAFETY
3 CREDITS

Emphasizes the constant awareness of safety issues. Enables the student to understand safety issues for situations in buildings, in the field, and vehicles.

PREREQUISITE(S): ELT 106, ELT 110 or instructor's permission

CTC 163 VIDEO TECHNOLOGY
3 CREDITS

This course will provide the students with an overview of video technology including the principles, colored as well as black and white signal construction, fundamentals of color and color mixing and color signal construction. Wave form analysis will be discussed as well as both interlaced and non-interlaced scanning schemes. Distortion, signal processing, measurements and video data compression will also be covered.

PREREQUISITE(S): ELT 106, ELT 110 or instructor's permission

CTC 165 ADVANCED TECHNICIAN
3 CREDITS

This course teaches a trained NCTI System Technician how to set up, operate, and maintain the headend. The study of communication electronics theory provides a foundation for understanding broadcast TV, microwave, satellite, and data communication systems. Essentials for headend equipment setup and maintenance, video baseband and RF FCC proof-of-performance tests, and NCTA Recommended Practices provide the necessary technical knowledge to operate and maintain sophisticated broadband cable system headends. The assumed cable system knowledge/skills for enrolling in the advanced Technician course are those in the NCTI system Technician course.

PREREQUISITE(S): Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between NCTI and ACC. Additional charges may apply to these courses. For additional information please contact Sarah Clark at NCTI at 303-209-1363, or at sarah@NCTI.com. You may also contact Gary Troutman (at ACC) at 303-797-5833 or gary.troutman@arapahoe.edu.

CTC 166 EMERGING TECHNOLOGIES
2 CREDITS

This course will provide the student with an opportunity to study concepts and applications of related technologies that are being reviewed and experimented with today. The course will be supplemented with presentations by industry experts. Student presentations or research on projects will address areas of interest in developing technologies. Applications and implications of new discoveries will be discussed.

CTC 215 OPTICAL NETWORKS
3 CREDITS

This course is an introduction to optical networks, which is the next great bandwidth provider. It addresses optical networking from a practical point-of-view, making it clear that although optical networks offer enormous bandwidth solutions, they are not the only answers to evolving transport challenges. This course describes and compares alternatives such as ISDN, xDSL, cable modems, and wireless local loop offerings such as LMDS, MMDS, and satellite and copper-based transport schemes, such as T1, T3 SONET and SDH. PREREQUISITE(S): CTC 161

CTC 220 REGULATIONS AND STANDARDS
3 CREDITS

This course will provide the students with an overview of the regulations and standards that pertain to technicians in the communication industries. Regulated as well as unregulated business operations will be discussed. The function and control of local regulatory agencies will be addressed. PREREQUISITE(S): CTC 150, 161 215

CTC 240 TELECOMMUNICATIONS ENGINEERING OUTSIDE PLANT
3 CREDITS

This course covers the components of engineering the telephone outside plant. It covers the fundamentals of transmission, resistance design, and distribution cable design in serving a customer area. PREREQUISITE(S): CAD 101, CTC 161, CTC 215

CTC 255 FIELD STUDIES: ENGINEERING PLANNING
3 CREDITS

The student will have the basic knowledge to articulate the tactical planning functions performed within capacity provisioning. The student will be able to access and apply the various tactical planning tools and data elements to supporting documentation. PREREQUISITE(S): CTC 240

CTC 267 TELECOMMUNICATIONS INSTALLATIONS, SPLICING & REPAIR
3 CREDITS

This course provides students with an understanding in the basic phone installation from pedestal to customer premise equipment (CPE). Troubleshooting and testing skills to maintain the integrity of the phone service are included. Students will also receive instruction in print reading, safety, cable locating, fault location and splicing. PREREQUISITE(S): CTC 161, 215

CTC 275 SPECIAL TOPICS 3 CREDITS
Provides students with opportunities to study topics of special interest that are not addressed in the standard CTC program. Contact the CTC department chair for additional details.

CTC 280 COOP EDUCATION CAREER TRAINING
3 CREDITS

This course is designed to provide students an opportunity to explore a career. The purpose of the course is to acquaint students with the tasks and working environment of specific occupations. The instructor's will work with the student to select an appropriate work site, establish learning objectives, and to coordinate learning activities with the employer or work site supervisor. Attendance at seminars and/or interaction with the instructor is required.

CRIMINAL JUSTICE

CRJ 101 BASIC POLICE ACADEMY I
8 CREDITS

The curriculum is designed to conform to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

PREREQUISITE(S): Permission of Academy Director

CRJ 102 BASIC LAW ENFORCEMENT ACADEMY II
6 CREDITS

The curriculum is designed to conform to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

PREREQUISITE(S): permission of Academy Director

CRJ 103 BASIC LAW ENFORCEMENT ACADEMY III
2 CREDITS

The curriculum is designed to enhance the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

PREREQUISITE(S): permission of Academy Director

CRJ 104 BASIC LAW ENFORCEMENT ACADEMY IV
1 CREDITS

The curriculum is designed to enhance the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

PREREQUISITE(S): permission of Academy Director

CRJ 105 BASIC LAW 6 CREDITS

The curriculum is designed to conform to P.O.S.T. standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Children's code, Victim's rights, Liquor code and controlled substances.

PREREQUISITE(S): permission of Academy Director

CRJ 107 LAW ENFORCEMENT DRIVING 3 CREDITS

Provides the skills, knowledge and abilities required for operation of a law enforcement vehicle. Defensive driving will be stressed. Students will demonstrate skills by driving a law enforcement vehicle under simulated law enforcement conditions while attending the Law Enforcement Training Academy or the P.O.S.T. required Mini Skills Academy.

CRJ 108 FIREARMS 3 CREDITS

The skills, knowledge and abilities necessary to safely use police firearms will be discussed. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role in the continuum of force.

CRJ 110 INTRODUCTION TO CRIMINAL JUSTICE

3 CREDITS

A study of the agencies and processes involved in the criminal justice system, legislature, the police, the prosecutor, the public defender, the courts, and corrections. An analysis of the roles and problems of the criminal justice system in a democratic society, with an emphasis upon inter-component relations and checks and balances.

CRJ 111 SUBSTANTIVE CRIMINAL LAW 3 CREDITS

Legal definition of crime and defenses; purposes and functions of the substantive criminal law; historical foundations; the limits of the criminal law.

CRJ 112 PROCEDURAL CRIMINAL LAW 3 CREDITS

This course covers constitutional and procedural considerations affecting arrest, search and seizure, and includes analysis of criminal cases from arrest through final appeal.

CRJ 125 LAW ENFORCEMENT OPERATIONS 3 CREDITS

An in-depth examination of the complexity and multidimensional aspects of the police role and career; police discretion; police values and culture in modern America. The role and functions of the police occupational, social, political and organizational context.

CRJ 135 JUDICIAL FUNCTION 3 CREDITS

Examines the criminal court system and criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, defense attorneys, judges, and the discretionary aspects of adjudication.

CRJ 145 CORRECTIONAL PROCESS 3 CREDITS

Post-conviction correction process; the development of a correctional philosophy, theory, and practice; a description of institutional operation, programming, and management; community-based corrections, probation and parole.

CRJ 150 BASIC DEPUTY SHERIFF'S ACADEMY 9 CREDITS

Curriculum is designed to conform to P.O.S.T. standards and State certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Deputy Sheriff. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning. 200 clock hours.

PREREQUISITE(S): CRJ 100 and/or permission of Academy Director

CRJ 210 CONSTITUTIONAL LAW
3 CREDITS

A study of the powers of government as they are allocated and defined by the United States Constitution; intensive analysis of United States Supreme Court Decisions.

**CRJ 220 HUMAN RELATIONS/
SOCIAL CONFLICTS**
3 CREDITS

Highlights the environmental, organizational and sociopsychological dimensions of social control. Includes the study of individual attitudes, beliefs and behavior involved in role conflicts, community relations and conflict management in a social structure.

CRJ 230 CRIMINOLOGY 3 CREDITS

Examination of the question of crime causation from legal, social, political, psychological, and theoretical perspectives; history and development of criminology.

CRJ 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

CRJ 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

DRAFTING

DRT 101 TECHNICAL DRAFTING I
3 CREDITS

Introduces the student to basic engineering graphics technology principles through development of basic entry-level drafting skills. Enables the student to develop skills in sketching, reading drafting scales, interpreting line types, lettering techniques, geometric construction, orthographic projection, and drawing reproduction.

DRT 102 TECHNICAL DRAFTING II
3 CREDITS

Introduces students to auxiliary views, pictorials, sections, threads, and fasteners, springs, and intersections and developments.

PREREQUISITE(S): DRT 101, CAD 102, or permission of instructor

DRT 105 BLUEPRINT READING
3 CREDITS

Focuses on interpretation of shop and working drawings. Examines drawing formats, view selection, hardware, dimensioning and tolerancing systems using the ANSI standards and symbols. Addresses interpretation, calculation and placement of tolerances.

DRT 109 DESCRIPTIVE GEOMETRY
3 CREDITS

Enables the student to develop the ability to visualize points, lines, and surfaces in space, to relate them to each other, and to apply these relationships in the solution of drafting assignments.

PREREQUISITE(S): DRT 102 or Instructor's Permission

EARLY CHILDHOOD EDUCATION

Arapahoe Community College does have articulation agreements dealing with early childhood and elementary education teacher preparation. Contact Sandy Panetta at 303-797-5784 for information.

**ECE 101 INTRO TO EARLY
CHILDHOOD EDUCATION**
3 CREDITS

This course provides an introduction to Early Childhood Education. Topics include the eight key areas of professional knowledge: Child Growth & Development; Health, Nutrition & Safety; Developmentally Appropriate Practices; Guidance; Family & Community Relationships; Diversity; Professionalism; Administration & Supervision. Ages addressed: birth through age 8.

ECE 101 is a pre or corequisite for ECE 102

**ECE 102 INTRODUCTION TO EARLY
CHILDHOOD LAB
TECHNIQUES** 3 CREDITS

This course includes a classroom seminar and a placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Ages addressed: birth through age 8. Background checks required by the Colorado Department of Human Services may be needed.

PREREQUISITE(S): ECE 101 or

COREQUISITE(S) ECE 101

**ECE 103 GUIDANCE STRATEGIES
FOR CHILDREN** 3 CREDITS

Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues, and prosocial skills. Addresses ages birth through age 8.

**ECE 111 INFANT AND TODDLER
THEORY AND PRACTICE**
3 CREDITS

This course presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. State requirements for licensing, health, safety and nutrition issues are included. Ages addressed: prenatal through age 2.

**ECE 112 INTRODUCTION TO
INFANT/TODDLER LAB
TECHNIQUES** 3 CREDITS

This course includes a classroom seminar and a placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions, and to develop effective guidance and nurturing techniques with infants and/or toddlers. Ages addressed: prenatal through age 2.

PREREQUISITE(S): ECE 111, Health screening, including TB and Hib tests

**ECE 125 SCIENCE/MATH AND THE
YOUNG CHILD** 3 CREDITS

Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts, and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

**ECE 126 ART AND THE YOUNG
CHILD** 2 CREDITS

This course prepares students to plan and implement a comprehensive and developmentally appropriate art program for young children. Students will also investigate the development of self-taught art techniques in young children.

**ECE 127 MUSIC/MOVEMENT FOR
THE YOUNG CHILD**
1 CREDITS

Focuses on the purposes of incorporating music and movement into the early childhood curriculum. Through active participation with hands-on experiences, students work with the concepts of age and developmental appropriateness when designing fun activities with both subjects.

ECE 175 SPECIAL TOPICS**1-6 CREDITS**

Explores current topics, issues and activities related to one or more aspects of the early childhood profession.

ECE 178 WORKSHOP**1-6 CREDITS**

Provides students with an experiential learning opportunity.

COREQUISITE(S): Seminar ECE 179

ECE 179 SEMINAR**1-6 CREDITS**

Provides students with an opportunity to examine aspects of early childhood education in detail.

COREQUISITE(S): Workshop ECE 178

ECE 185 INDEPENDENT STUDY**1-3 CREDITS**

Focuses on structured, guided, and individualized research that is organized and tailored around the interests and needs of the individual student.

PREREQUISITE(S): When appropriate

COREQUISITE(S) When appropriate

ECE 187 COOP EDUCATION**1-12 CREDITS**

A college -to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

ECE 205 NUTRITION HEALTH AND SAFETY**3 CREDITS**

This course focuses on nutrition health and safety as a key factor for optimal growth and development of young children. Content includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Ages addressed: prenatal through age 8.

ECE 220 CURRICULUM DEVELOPMENT: METHODS AND TECHNIQUES**3 CREDITS**

This course provides an overview of early childhood curriculum development. The content includes processes for planning and implementing developmentally appropriate environments, materials and experiences, and quality in early childhood programs. Ages addressed: birth through age 8.

ECE 225 LANGUAGE AND COGNITION FOR THE YOUNG CHILD**3 CREDITS**

This course examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. The content includes observing, planning, facilitating creative representation and evaluating strategies within the context of play. Content areas are language, science and math, problem solving and logical thinking. Ages addressed: birth through age 8.

ECE 226 CREATIVITY AND THE YOUNG CHILD**3 CREDITS**

This course provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. The content explores creative learning theories and research. It focuses on developmentally appropriate curriculum strategies in all developmental domains. Ages addressed: birth through age 8.

ECE 228 LANGUAGE AND LITERACY**3 CREDITS**

Presents strategies for optimum language development. Supports children's language and literacy (including English language learners) in home, classroom, and community settings. Provides appropriate teacher/child(ren) verbal interactions, classroom environments, and activities. Addresses ages birth through age 8.

ECE 240 ADMINISTRATION OF EARLY CHILDHOOD CARE AND EDUCATION PROGRAMS**3 CREDITS**

This course examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Course content focuses on new directors' administrative skills and role as a community advocate for young children.

ECE 241 ADMINISTRATION: HUMAN RELATIONS FOR THE EARLY CHILDHOOD PROFESSIONS**3 CREDITS**

This course focuses on the human relations component of an early childhood professional's responsibilities. Course content includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships and community interaction.

ECE 260 EXCEPTIONAL CHILD**3 CREDITS**

This class presents an overview of typical and atypical developmental progression. The content includes planning techniques, learning strategies, legal requirements and accommodations and adaptations that are necessary in order to create an integrated classroom environment for a child with a wide range of exceptionalities. Ages birth through age 8.

PREREQUISITE(S): ECE 226 or PSY 238

ECE 275 SPECIAL TOPICS I**1-6 VARIABLE CREDIT**

Seminars on special topics that relate to the area of early childhood education. Topics may be general to be of interest to educators or specific to parents, family child care providers, infant-toddler caregivers, preschool/child care educators, kindergarten and/or primary level educators.

ECE 278 WORKSHOP**1-6 VARIABLE CREDIT**

Provides students with an experiential learning opportunity.

COREQUISITE(S) Seminar ECE 279 when appropriate

ECE 279 SEMINAR**1-6 VARIABLE CREDIT**

Provides students with an opportunity to examine aspects of early childhood education in detail.

COREQUISITE(S): When appropriate

ECE 285 INDEPENDENT STUDY**1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ECE 287 COOP EDUCATION**1-12 CREDITS**

A college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

ECONOMICS**ECO 105 INTRO TO ECONOMICS****3 CREDITS**

This course is a survey of economics. It is designed as a beginning economics class. The course covers how modern economics evolved, supply and demand, national income accounting, money and banking, market structures and contemporary economic issues.

ECO 201 PRINCIPLES OF MACROECONOMICS**3 CREDITS**

Studies the American economy, stressing the interrelationships among the household, business, and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 202 PRINCIPLES OF MICROECONOMICS**3 CREDITS**

Studies the firm in-depth, the nature of cost, and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly, and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ECO 205 CONTEMPORARY ECONOMIC ISSUES**3 CREDITS**

A one-term course in economics that looks at the major national economics issues of the day. These issues and problems are examined within the context of basic economic analysis. Some current issues to be explored are in employment and inflation, income policy, health care, crime, energy, etc.

PREREQUISITE(S): an economics course or BUS 115 or MAR 216

ECO 275 SPECIAL TOPICS**1-6 VARIABLE CREDIT**

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

ECO 285 INDEPENDENT STUDY**1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

EDUCATION

Arapahoe Community College has articulation agreements dealing with early childhood and elementary education teacher preparation. Contact Sandy Panetta at 303-797-5784 for information.

EDU 175 SPECIAL TOPICS 1-6 CREDITS

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PREREQUISITE(S): Permission of instructor

EDU 185 INDEPENDENT STUDY 1-6 CREDITS

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Permission of instructor

EDU 187 COOPERATIVE EDUCATION 1-2 CREDITS

A college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student careerobjectives.

EDU 188 PRACTICUM I 1-6 CREDITS

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the education facility and with the direct guidance of the instructor.

EDU 221 INTRO TO EDUCATION 3 CREDITS

Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado

PREREQUISITE(S): College level reading and writing as demonstrated on college level placement scores

COREQUISITE(S) Field-Experience component, if not embedded in the class

EDU 233 ENGLISH LANGUAGE LEARNING (K-6) 3 CREDITS

Prepares teachers who work with limited English proficient students to learn strategies to develop English language learners' (ELLs) social and academic English and supports their transition to US culture and schools. This course is appropriate in a variety of program models: mainstream classrooms, self-contained ESL classrooms, and bilingual programs and may be adapted for use with preservice teachers.

PREREQUISITE(S): A Child Development Course or permission of the instructor

EDU 234 MULTICULTURAL EDUCATION 3 CREDITS

Focuses on the need to recognize and understand the similarities and differences among people and develop a respect for all individuals and groups. Assists teachers to recognize the special learning needs of children from different racial, ethnic, cultural and socioeconomic groups and to encourage teachers to integrate multicultural/diversity teaching into the school curriculum.

EDU 242 EXPRESSIVE ARTS IN THE ELEMENTARY CLASSROOM 3 CREDITS

Explores the integration of visual arts, music, and physical education/movement into the self-contained elementary classroom curriculum based upon the theory of multiple intelligences. Familiarizes the student with the Colorado Model Content Standards for each area, basic curriculum development, and the opportunities to practice their skills with students through field experiences.

EDU 260 ADULT LEARNING AND TEACHING 3 CREDITS

Introduces the basic instructional theory focusing on the adult learner. Includes developing a syllabus, learning goals and outcomes, and lesson plans. Emphasizes teaching to a diverse participant body, classroom management, learning theory, learning styles, teaching styles, and using technology in the classroom.

EDU 261 TEACHING, LEARNING AND TECHNOLOGY 3 CREDITS

Prepares students to integrate technology into their teaching curriculum. Enables the student to design educational and training materials incorporating instructional technology. Explores a variety of technologies, including the computer, Internet, multimedia, graphics, audio, and text with an emphasis on increasing learning through their use. Examines combining technology with a variety of instructional methodologies.

PREREQUISITE(S): EDU 221 or EDU 260

EDU 262 ASSESSMENT OF STUDENT ACADEMIC ACHIEVEMENT 3 CREDIT

Focuses on assessment as fundamental to the improvement of student academic achievement in the 21st century learning college. Analyzes methods for assessing academic achievement in the classroom, course, program, and institutional level. Defines measurable outcomes, evaluates student academic achievement, and uses the results to improve teaching methods, curriculum design, and outcomes.

PREREQUISITE(S): EDU 221 or EDU 260

EDU 263 TEACHING AND LEARNING ONLINE 3 CREDITS

This online course will provide faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities will be included.

PREREQUISITE(S): EDU 221 or EDU 260 or permission of instructor

EDU 264 FACULTY MENTORING 3 CREDITS

This course will provide the student with an understanding of and skills in mentoring new teachers/faculty in an academic institution. Students will explore the six dimensions of effective mentoring, mentoring phases, how to establish and build the mentor/mentee relationship, and constructive feedback techniques. Student must designate a potential mentee for practical experience throughout this course.

PREREQUISITE(S): EDU 221 or EDU 260 or Instructor's permission

EDU 265 INSTRUCTIONAL DESIGN 3 CREDITS

This course introduces the student to a systematic approach to Instructional Design and to designing instruction with multimedia. Students will incorporate learning and instructional theory into course/training design to ensure the quality of instruction. A process of goal analysis and learning needs coupled with the development of a delivery system to meet those needs will be determined. This course includes the development of instructional materials and activities as well as the evaluation of all instruction and learner activities.

PREREQUISITE(S): EDU 221 or EDU 260 or Instructor's permission

EDU 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EDU 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

EDU 287 COOPERATIVE EDUCATION 1-12 VARIABLE CREDIT

A college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student careerobjectives

PREREQUISITE(S): Instructor's permission

EDU 288 PRACTICUM II 1-6 VARIABLE CREDIT

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the education facility and with the direct guidance of the instructor.

PREREQUISITE(S): Instructor's permission

ELECTRONICS ENGINEERING TECHNOLOGY

ELT 101 SURVEY OF ELECTRONICS 3 CREDITS

An introduction to Electronics for consumers, individuals working in related fields, and those exploring Electronics Engineering Technology as a career option. The course covers fundamental concepts, circuit diagrams, construction of circuits, test instruments, basic troubleshooting, and the operation of common electronic systems and circuits. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): high school algebra

ELT 106 FUNDAMENTALS OF DC/AC 3 CREDITS

An introductory course that provides the basic skills needed for many careers in electronics and related fields. Covered are the operations and applications of basic DC and AC circuits, consisting of resistors, capacitors and inductors. The use of common test instruments in troubleshooting is emphasized. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): Minimum CPT algebra score of 45

COREQUISITE(S) MAT 116

ELT 109 QUALITY BUSINESS PRACTICES 1 CREDIT

This course covers current business practices designed to improve productivity and quality in the workplace. It addresses practices affecting materials and process control as well as personnel-related issues of performance and work teams. 15 hours lecture.

ELT 112 ADVANCED DC /AC 3 CREDITS

Continues to build on ELT 106 and covers advanced concepts of DC-AC circuits, including DC network theorems and analysis of AC series-parallel circuits. Includes an expanded treatment of power supplies, dual-supply rectifier circuits, and Zener diode voltage regulators. Emphasizes troubleshooting. 23 hours lecture, 46 hours lab

PREREQUISIT(S): ELG 106

ELT 113 ADVANCED CIRCUIT ANALYSIS 4 CREDITS

Serves as an advanced course in the analysis of passive AC circuits. Emphasizes the use of complex algebra and network analyses. 30 hours lecture, 60 hours lab

PREREQUISITE(S): ELT 112, MAT 117

ELT 136 INTRODUCTION TO TRANSISTORS 2 CREDITS

An introduction to the operation and applications of bipolar transistors, JFETs and MOSFETs. Included are switching circuits, single-stage small-signal amplifiers and troubleshooting. 15 hours lecture, 30 hours lab.

PREREQUISITE(S): ELT 106

ELT 137 ADVANCED TRANSISTORS 3 CREDITS

A continuation of ELT 136 with specifications and additional applications of bipolar transistors, JFETs and MOSFETs. Covered are voltage regulation, common-collector and power amplifiers. Also included are analysis of single and cascaded amplifier stages. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): ELT 136

ELT 138 POWER CONTROL DEVICES 2 CREDITS

Covers the specifications and operation of SCRs, triacs, diacs, unijunction transistors, PUTs and solid-state relays. Enables the student to construct and test circuits with power control devices. Troubleshooting is emphasized. 15 hours lecture, 30 hours lab

PREREQUISITE(S): ELT 136

ELT 139 OPTOELECTRONIC DEVICES 2 CREDITS

Focuses on a study of the specifications and operation of the LED, IRED, photoconductive cell, photodiode, phototransistor, optocoupler and vacuum-fluorescent display. Addresses fiber optics and lasers. Enables students to construct and test circuits with optoelectronic devices. Troubleshooting is emphasized. 15 hours lecture, 30 hours lab

PREREQUISITE(S): ELT 136

ELT 147 DIGITAL DEVICES I 3 CREDITS

This course introduces the operation and application of gates, flip-flops, counters, shift registers, encoders-decoders and LED displays. Also covered are binary numbers, Boolean algebra and troubleshooting. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): ELT 112

ELT 148 DIGITAL DEVICES II 3 CREDITS

A continuation of ELT 147. Covered are the operation and application of programmable logic devices, synchronous counters, multiplexers, liquid crystal displays, ROM and RAM. Included are also specifications of ICs, display multiplexing and design and minimization of circuits. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): ELT 147

ELT 149 DIGITAL DEVICES: TROUBLESHOOTING 2 CREDITS

After detailed circuit analysis of a digital system that is not microprocessor based, the course focuses on troubleshooting to the component level.

PREREQUISITE(S): ELT 148

ELT 161 ELECTROMECHANICAL TROUBLESHOOTING 1 CREDITS

An introduction to troubleshooting electromechanical systems consisting of switches, relays and motors. Teamwork is emphasized. 8 hours lecture, 16 hours lab.

PREREQUISITE(S): ELT 101 or 106

ELT 163 SOLDERING 1 CREDIT

This course covers the theory and practice of high-reliability hand-soldering in the electronics field. Soldering practice includes wire and terminal soldering as well as PCB soldering of through-hole and surface-mount devices. 8 hours lecture, 16 hours lab.

ELT 215 OPERATIONAL AMPLIFIERS 3 CREDITS

A study of integrated operational amplifiers and their applications. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): ELT 136

ELT 216 ANALOG INTEGRATED CIRCUITS 2 CREDITS

Introduces the operation and applications of integrated voltage regulators, timers, phase-locked loops, analog-to-digital and digital-to-analog converters. Emphasizes troubleshooting. 15 hours lecture, 30 hours lab

PREREQUISITE(S): ELT 147, 215

ELT 225 COMMUNICATION ELECTRONICS I 3 CREDITS

Focuses on a basic analog communication course emphasizing the elements of a communication system, radio frequency analysis and characteristics, radio frequency circuits, AM and FM modulation techniques, and AM and FM transmitters and receivers. 23 hours lecture, 46 hours lab

PREREQUISITE(S): ELT 137

ELT 227 FCC LICENSE PREPARATION 1 CREDIT

A review of electronics, to enable students to pass the General Radiotelephone Operator examination for the FCC Commercial Radiotelephone license. Emphasis will be on questions from Elements 1 and 3 provided by the FCC. A General Radiotelephone Operator license is required to adjust, maintain, or internally repair FCC licensed radiotelephone transmitters in the aviation, maritime and international fixed public radio services. 15 hours lecture.

PREREQUISITE(S): ELT 225

ELT 261 MICROPROCESSORS 3 CREDITS

Basic operation and applications of microprocessors. The student will be able to write machine and assembly language programs, interface microprocessors to various devices and troubleshoot microprocessor-based systems. 23 hours lecture, 46 hours lab.

PREREQUISITE(S): ELT 148

ELT 265 MICROCONTROLLERS 2 CREDITS

This course will provide the necessary software and hardware knowledge and skills for the development of microcontroller system. The student will use programming tools and a development software. 15 hours lecture, 30 hours lab.

PREREQUISITE(S): ELT 261

ELT 267 INTRODUCTION TO ROBOTICS 1 CREDITS

Introduces basic robotics. Enables the student to program a robot in a higher-level language to perform various tasks. Covers building and interfacing of sensor circuits. 8 hours lecture, 16 hours lab

PREREQUISITE(S): ELT 101 or ELT 106

ELT 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

These courses provide students with opportunities to study topics of special interest that may lie outside the standard ELT program. A syllabus will specify the content of each course at the time it is offered.

ELT 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

ELT 290-293 COOP EDUCATION
CAREER TRAINING
3 CREDITS

ELT 294-295 COOP EDUCATION
CAREER TRAINING
6 CREDITS

ELT 296 COOP EDUCATION
CAREER TRAINING
9 CREDITS

ELT 297 COOP EDUCATION
CAREER TRAINING
12 CREDITS

See Cooperative Education section for detailed description.

PREREQUISITE(S): Instructor's permission

EMERGENCY MEDICAL SCIENCES

CCN 230 BASIC ECG
INTERPRETATION
2 CREDIT

Develops the ability of the healthcare provider to read and interpret the electrocardiogram. Requires critical thinking and analytic skills.

EMS 120 EMERGENCY RESPONDER
2 CREDITS

This course will enable the First Responder to take appropriate action and provide care for injuries or sudden illnesses until more advanced medical personnel arrive. First Responder skills include, assessing patients and intervening in cardiorespiratory emergencies, trauma and other illnesses.

EMS 125 EMT BASIC **9 CREDITS**

Enables the student after successful completion of this course to take the EMT Certification Examination subject to the requirements of the Colorado Department of Health and Environment. Includes written and practical examinations. Student must be at least 18 years of age. By completion of 50% of the class.

COREQUISITE(S): EMS 170

EMS 126 EMT BASIC REFRESHER
3 CREDITS

Provides required didactic and skills review for renewing EMT students. Accommodates the needs of the re-entry EMT student.

PREREQUISITE(S): Current CPR card, Current or less than 36 months expired EMT Basic certification.

EMS 130 IV FOR THE EMT
2 CREDITS

This course provides basic understanding of intravenous therapy principles and administration. Topics include the roles and responsibilities of the EMT, legal issues, shock principles of fluid and blood replacement, 50% Dextrose, IV equipment, IV administration and venipuncture techniques.

PREREQUISITE(S): Current State EMT B Certification

EMS 134 ADVANCED EKG
2 CREDITS

This class will build upon basic EKG interpretation. 12 lead EKG interpretation including the diagnosis of myocardial infarction will be studied.

PREREQUISITE(S): EMS 132 or equivalent

EMS 136 EMT/PARAMEDIC SAFETY
ISSUES IN THE FIELD
1 CREDIT

This class will provide the EMT and Paramedic with the skills needed to quickly assess the scene for potential hazards to themselves. Introduced topics on scene safety, evaluation of potential problem patients, verbal communication control techniques, physical control techniques for the problem patient, and specific techniques for scene control.

PREREQUISITE(S): State EMT B Certification or instructor's permission

EMS 150 PEDIATRIC EDUCATION
FOR PREHOSPITAL
PROFESSIONALS **1 CREDIT**

Provides the student with core knowledge and skills necessary to provide emergency care to the pediatric patient.

PREREQUISITE(S): EMT-Basic or approval from Program Coordinator

EMS 170 EMT BASIC CLINICAL
1 CREDIT

Provides the EMT student with the clinical experience required of initial and some renewal students.

COREQUISITE(S): EMS 125 or EMS 126, depending on student status

EMS 203 EMT INTERMEDIATE I
6 CREDITS

Course provides preparatory information and is the first part of the EMT Intermediate program.

PREREQUISITE(S): Valid EMT-Basic, HEP B vac, Current CPR cards, high school grad or GED, CPT 80, Math

EMS 205 EMT INTERMEDIATE II
6 CREDITS

Serves as the second course for EMT Intermediate certification.

COREQUISITE(S): EMT Intermediate I or EMS 203

EMS 213 PREHOSPITAL TRAUMA
LIFE SUPPORT **1 CREDITS**

Provides basic and/or advanced trauma life support information and skill practice.

PREREQUISITE(S): EMT Basic or higher

EMS 214 BASIC TRAUMA LIFE
SUPPORT **1 CREDIT**

Provides students with information and skill practice to treat trauma patients in the prehospital environment.

PREREQUISITE(S): EMT Basic or higher

EMS 225 FUNDAMENTALS OF
PARAMEDIC PRACTICE
3 CREDITS

Serves as the first course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment.

PREREQUISITE(S): EMT Basic or EMT Intermediate-other requirements vary with site

EMS 226 FUNDAMENTALS OF
PARAMEDIC PRACTICE –LAB
2 CREDITS

Serves as the lab experience to coincide with EMS 225 topics.

PREREQUISITE(S): Acceptance in paramedic program site specific

COREQUISITE(S) EMS 225

EMS 227 PARAMEDIC SPECIAL
CONSIDERATIONS
3 CREDITS

Focuses on a comprehensive study of Advanced Life Support Practice.

PREREQUISITE(S): Acceptance into paramedic program-site specific

EMS 228 PARAMEDIC SPECIAL
CONSIDERATIONS LAB
2 CREDITS

Serves as the lab experience for those students enrolled in EMS 227.

PREREQUISITE(S): Acceptance to paramedic program site specific

COREQUISITE(S) EMS 227

EMS 229 PARAMEDIC
PHARMACOLOGY **3 CREDITS**

Focuses on a comprehensive study of emergency pharmacology.

PREREQUISITE(S): Acceptance in paramedic program-site specific

EMS 230 PARAMEDIC
PHARMACOLOGY LAB
2 CREDITS

Serves as the required lab course in the paramedic education program.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 231 PARAMEDIC CARDIOLOGY
5 CREDITS

Addresses cardiology topics as presented in the National Standard Curriculum for paramedics.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 232 PARAMEDIC CARDIOLOGY
LAB **1 CREDIT**

Incorporates a hands-on application of principles of cardiac care in the hospital environment.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 233 PARAMEDIC MEDICAL
EMERGENCIES **4 CREDITS**

Focuses on a comprehensive study of adult medical emergencies.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 234 PARAMEDIC MEDICAL
EMERGENCIES LAB
1 CREDIT

Focuses on a clinical study of adult and pediatric medical emergencies.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 235 PARAMEDIC TRAUMA EMERGENCIES 4 CREDITS

Focuses on a comprehensive study of adult and pediatric trauma emergencies.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 236 PARAMEDIC TRAUMA EMERGENCIES LAB 1 CREDIT

Serves as a lab presenting various acute trauma scenarios.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 237 PARAMEDIC INTERNSHIP PREPARATORY 2 CREDITS

Reviews concepts and techniques used in the prehospital setting.

PREREQUISITE(S): Acceptance to paramedic program-site specific

EMS 270 CLINICAL: EMS INTERMEDIATE 3 CREDITS

Provides the EMT-I student with the required field experiences as required by the Colorado Department of Health.

PREREQUISITE(S): EMS 203–205

COREQUISITE(S) EMS 205 as needed.

EMS 275 SPECIAL TOPICS 0.5–10 CREDITS

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EMS 280 PARAMEDIC INTERNSHIP I 6 CREDITS

Serves as the preceptor/internship program for paramedic students.

PREREQUISITE(S): Acceptance to paramedic program site specific

EMS 281 PARAMEDIC INTERNSHIP II 6 CREDITS

Serves as the continuation of EMS 240, preceptor program for paramedic students.

PREREQUISITE(S): Acceptance to paramedic program site specific

EMS 285 INDEPENDENT STUDY 1–6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

EMPLOYMENT STRATEGIES

COM 101 EMPLOYMENT STRATEGIES 1 CREDIT

This course is designed to assist students with the development of skills that are needed to search for and acquire a job. topics include surveying job markets, building resumes, applying for jobs and interviewing for positions.

ENGINEERING

EGG 100 INTRODUCTION TO ENGINEERING 1 CREDIT

This course is for students interested in a career in engineering. The course will introduce the math and science required in a variety of engineering disciplines. The particular engineering disciplines examined are: Civil Engineering, Mechanical Engineering, Electrical Engineering, Industrial Engineering, and Computer Science. For each discipline the course will examine certification requirements, program of study, types of work and tasks in each discipline and compensation ranges. Tours and speakers will be arranged.

PREREQUISITE(S): two years high school algebra

EGG 101 ENGINEERING GRAPHICS I 3 CREDITS

This course is an application of engineering graphics as a communication form and a tool to solve three-dimensional design problems. Topics include: Orthographic, axonometric, and isometric projections, sections and auxiliary views, the geometry of lines, planes and curved surfaces. This course is an introduction to PC-based, menu driven, 3D Computer Aided Design Systems, Spreadsheets, and Freehand Drawing.

PREREQUISITE(S): MAT 121, 122 or equivalent

EGG 105 LOGIC DESIGN 4 CREDITS

The design of combinatorial and sequential switching circuits. Topics include Boolean Algebra, Boolean Function Minimization Techniques, Combinatorial Circuit Analysis and Synthesis, Synchronous Sequential Circuit Analysis and Synthesis, Algorithmic State Machine Design, Asynchronous Sequential Circuit Analysis and Synthesis. Use of computer aided design tools facilitating design, simulation and implementation of digital system using field programmable logic devices is an integral part of the entire course. Laboratory experiments included.

PREREQUISITE(S): MAT 121, 122 or equivalent

EGG 211 ENGINEERING MECHANICS I (STATICS) 3 CREDITS

This course is a vector and calculus treatment of forces and force systems. Concurrent and non-concurrent force systems will be covered. Also included are calculating moments, friction, trusses, centroids and moments of inertia.

PREREQUISITE(S): MAT 201, PHY 211.

COREQUISITE(S) MAT 202

EGG 212 ENGINEERING MECHANICS II (DYNAMICS) 3 CREDITS

This course is a vector and calculus treatment of the dynamics of particles and rigid bodies using Newton's Laws. Topics include work-energy, impulse-momentum, free and forced oscillations.

PREREQUISITE(S): EGG 211, MAT 202, PHY 211

EGG 221 CIRCUIT ANALYSIS I 4 CREDITS

The basic theorems of circuit analysis. Transient solution of circuits by classical techniques. Steady-state sinusoidal solutions by means of phasors will be introduced. Basic electrical circuit measurements and experimentation using oscilloscopes, various meters and function generators will be performed in the lab.

PREREQUISITE(S): MAT 202, PHY 212

EGG 222 CIRCUIT ANALYSIS II 4 CREDITS

This course is designed to familiarize students with advanced methods of circuit analysis including computer simulations. Laplace transforms, frequency domain analysis, steady state solutions, two part network, Fourier series, pulses, impulses, and computer-aided analysis will be applied to circuits. Data acquisition, digital-to-analog and analog-to-digital converters will be covered. Laboratory experiments are included.

PREREQUISITE(S): EGG 221

EGG 275 SPECIAL TOPICS 1–6 VARIABLE CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EGG 285 INDEPENDENT STUDY 1–6 VARIABLE CREDIT

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

ENGLISH

All of the degree programs at ACC require students to successfully complete English composition courses; different programs require different courses. Before students enroll in composition courses, the students must demonstrate their writing competencies by means of a placement test. The test will be validated by an impromptu writing sample during the first week of class. Test results normally dictate where students will start in their writing programs. The faculty believe that students succeed more consistently in all their courses when they develop college-level competencies in reading and writing.

English 121-122 is the traditional college-level freshman composition program. The courses are sequential and acceptable for college transfer. All AA and AS students must complete this sequence; however, those students who demonstrate deficiencies in their writing competencies will be required to begin their writing programs in the Developmental Studies sequence: ENG 060 and/or ENG 090.

English 131 and 132 are college-level courses designed especially for students interested in occupational or technical fields. Many occupational programs require English 131; however, some students may need English 090 before enrolling in English 131. English 132, a college-transfer course, was designed for students who need an advanced technical writing class.

LITERATURE courses (listed separately) provide continued opportunities for refinement of reading, writing, and critical-thinking skills. See also JOURNALISM, MASS COMMUNICATIONS, FILM AND VIDEO.

ENG 001 LANGUAGE TUTORIAL 1 CREDIT

The content of the course will be determined for each individual student following diagnostic testing. The student and the instructor will agree to a learning contract which will specify content, activities, systems of evaluation and credit hours assigned for the work to be completed. Students may be referred by instructor's in all divisions of the College for specific remedial work in any of the language skill areas, i.e., reading, basic English, speech, listening or writing skills.

**ENG 060 LANGUAGE
FUNDAMENTALS 3 CREDITS**

This course will focus on paragraph structure and development and will introduce the formal essay. Students will review and improve grammar, usage and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations.

PREREQUISITE(S): CPT sentence skills score 50–69.

COREQUISITE(S) concurrent enrollment in REA 060/090 strongly recommended

**ENG 090 BASIC COMPOSITION
3 CREDITS**

This course will emphasize critical thinking as students explore writing for specific purposes and audiences. Students will develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development.

PREREQUISITE(S): ENG 060 or CPT sentence skills score 70–94

COREQUISITE(S) concurrent enrollment in REA 090 strongly recommended

**ENG 121 ENGLISH COMPOSITION I
3 CREDITS**

Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. Includes a minimum of five compositions that stress analytical, evaluative, and persuasive/ argumentative writing.

PREREQUISITE(S): ENG 090 with a grade of C or better or CPT sentence skills score of 95+ and reading score of 80+

**ENG 122 ENGLISH COMPOSITION II
3 CREDITS**

Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research.

PREREQUISITE(S): ENG 121 with a grade of C or better

**ENG 131 TECHNICAL WRITING I
3 CREDITS**

This course develops skills one can apply to a variety of technical documents. Students learn principles for organizing, writing and revising clear, readable documents for industry, business and government. Introduces research strategies.

PREREQUISITE(S): ENG 090 with a grade of C or better or CPT sentence skills score of 95+ and reading score of 80+

**ENG 132 TECHNICAL WRITING II
3 CREDITS**

This course expands and refines the objectives of ENG 131, emphasizing formal presentations, both written and oral.

PREREQUISITE(S): ENG 131 or instructor's permission or AP score of 3 or higher on the AP Language and Composition exam

**ENG 221 CREATIVE WRITING I
3 CREDITS**

This course teaches techniques for creative writing. Students explore imaginative uses of language through writing short stories, drama, poetry, and/or literary nonfiction.

PREREQUISITE(S): ENG 121 or instructor's permission

**ENG 222 CREATIVE WRITING II
3 CREDITS**

This course continues development of written expression in such forms as poetry, fiction, and/or nonfiction writing.

PREREQUISITE(S): ENG 221 or instructor's permission

**ENG 226 FICTION WRITING
3 CREDITS**

This course teaches techniques for creating fiction, including study and appreciation of the language and forms of the short story.

PREREQUISITE(S): ENG 221 or permission of instructor.

**ENG 230 CREATIVE NONFICTION
3 CREDITS**

Teaches students to incorporate literary techniques into factual writing. Enables the student to survey a wide range of readings and analyze form and content. Includes critical review, biographical profiles, travel writing, and memoirs. Provides the opportunity for students to write and review their own nonfiction in a supportive, constructive setting.

**ENG 235 RHETORIC AND
PROPAGANDA 3 CREDITS**

This course examines in some depth classical and modern theories of rhetoric, understood as effective, ethical means of persuasion, then seeks to examine the ways in which propaganda departs from these means. Students will apply theories of rhetoric and propaganda to examples of presidential rhetoric, Nazi and Soviet propaganda, and other examples of persuasive writing. The course will include the study of visual rhetoric; students will construct criteria for identifying visual propaganda, and will study the complex relationship, historically and in the present, between propaganda democracy, advertising and mass media.

**ENG 275 SPECIAL TOPICS: RHETORIC
1–6 VARIABLE CREDIT**

Explores special topics in rhetoric, such as applied rhetoric, styles, ethics, advanced composition, advanced argument, and expository techniques.

**ENG 285 INDEPENDENT STUDY
1–6 VARIABLE CREDIT**

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

ENGLISH AS A SECOND LANGUAGE

**ESL 022 INTERMEDIATE GRAMMAR
3 CREDITS**

This course will review beginning grammar structures and introduce intermediate structures. It will provide practice of structures through a variety of oral and written exercises.

**ESL 043 ADVANCED READING
3 CREDITS**

This course is for the international student who is enrolled in full-time academic study or the immigrant who wishes to pursue a college degree. It emphasizes reading and note taking skills to prepare students for academic reading assignments. Oral, listening, writing and study skills are also practiced.

PREREQUISITE(S): Michigan placement test score of 74 or below

**ESL 053 ADVANCED COMPOSITION
3–4 CREDITS**

Reviews paragraph organization and develops the skill of writing essays using selected rhetorical modes. Emphasizes accurate use of advanced grammatical structures. Includes summarizing, paraphrasing, and research writing.

PREREQUISITE(S): ESL 043 or appropriate placement score.

**ESL 275 SPECIAL TOPICS
1–6 VARIABLE CREDIT**

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

**ESL 285 INDEPENDENT STUDY
1–6 VARIABLE CREDIT**

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

FILM AND VIDEO TECHNOLOGY

**FVT 250 SCRIPTWRITING FOR FILM
AND VIDEO 3 CREDITS**

Develops screen writing skills, focusing on the basic format of the craft, scene construction, genre conventions, three act structure, characterization and idea generation. Students complete a 30-minute script suitable for shooting.

FINANCE

FIN 101 INTRO TO FINANCE

3 CREDITS

This course provides an in-depth study of the monetary system of the United States, the role of banks as financial intermediaries, and the types of financing available in our monetary system. Other topics include: international financial markets and international financial instruments used in exporting and importing, analysis of stock and bond values, the role and process of the stock and bond market and the derivative marketplace. The student also learns how to produce a cash budget, analyze financial statements including all financial ratios used in credit analysis and how to determine capital requirements and financing arrangements.

FIN 105 PRINCIPLES OF BANKING

2-3 VARIABLE CREDIT

As a solid foundation for any career in the financial services industry, Principles of Banking explores nearly every aspect of banking. Just as the industry is constantly changing, this course is continually being revised to provide specific up-to-date information. This course may be taught as a 2 Credit Accelerated Course.

FIN 110 INTRO TO CREDIT UNIONS

2 CREDITS

This course is an introduction to the credit union movement. It includes an explanation of the nature of credit unions, their history and a review of affiliated organizations. The legal basis for the operation of a credit union as well as the powers and characteristics of credit unions will be discussed. Roles and functions of credit union management and volunteers will be examined. Bonding, insurance, and the developing credit union financial system will be discussed.

FIN 113 CREDIT UNION ACCOUNTING PROBLEMS

2 CREDITS

Explains terms and procedures basic to accounting and unique to credit unions. Topics covered in this course include concepts of credit union accounting, general records and the general ledger, reserves and undivided earnings, the statement of financial condition, the balancing of other subsidiaries, closing the books, various accounting situations, and the credit union cycle.

FIN 116 TELLER TRAINING

1 CREDIT

This course is designed to prepare students to be a teller at any financial institution. The student will learn: how to deposit accounting works, the handling of cash, balancing a cash drawer, recording debits and credits, handling of commercial accounts, reviewing bank policy on large deposits, and placing holds on large deposits. The student will also learn customer service, how to handle problem customers, developing relationships with customers, and cross-selling other bank services.

FIN 117 RESIDENTIAL MORTGAGE LENDING

2 CREDITS

Lending institution employees working in all areas of residential lending business should have a thorough knowledge of all aspects of making a residential mortgage loan. The text covers the adjustable rate mortgage, alternative mortgage instruments and government related loan programs. In addition, a brief overview of appraising and the secondary mortgage market are covered as well.

FIN 119 DEPOSIT ACCOUNTS AND SERVICES

2 CREDITS

Deposit Accounts and Services provides an in-depth study of the nature, ownership and classification of deposit accounts. You will learn the types of accounts that institutions are currently authorized to offer, the different methods of classifying these accounts and the terms and conditions for payment of interest. By emphasizing the procedural aspects of deposit accounts, Deposit Accounts and Services will provide you with a better understanding of your own institution's procedures and a better perspective of the competitive environment in which savings institutions exist today.

FIN 132 RESIDENTIAL MORTGAGE LOAN ORIGATION

1 CREDIT

Introduces the basic procedures of Residential Mortgage Loan Origination for Conventional, Conforming/ Non-Conforming government loans. Enables the student to determine the acceptability of a loan for underwriting and evaluate the market conditions that effect the loan process.

FIN 133 RESIDENTIAL MORTGAGE PROCESSING

1 CREDIT

Introduces the basic guidelines and functions of Residential Mortgage Processing. Incorporates analysis of documentation required to assess and process Conventional and Government loans to be sold in the secondary market or held by a public or private financial institution in its own portfolio.

FIN 137 FHA FOR LAON OFFICERS

1 CREDIT

Presents the proper use of FHA loans, discusses FHA terminology and the descriptions of the Act that apply. The student learns how to calculate maximum loan limits and MIP funds, allowable closing costs, what type of loan is best for a buyer, Energy Efficient Mortgage program guidelines and acceptable credit sources. All forms of refinancing are discussed, plus all supporting documentation.

FIN 138 FHA FOR LOAN PROCESSORS

1 CREDIT

Presents the student with the proper use of FHA loans for loan officers and FHA terminology. Students learn qualifying guidelines, the credit alert system, acceptable credit documentation and alternative documentation sources. Student will be able to complete the Mortgage Credit Analysis Worksheet, calculate loan limits and MIP refunds and be able to work with FHA Connection online.

FIN 206 COMMERCIAL LENDING

3 CREDITS

This basic course in commercial loan origination is designed to enable students to acquire the skills needed to evaluate business loan applications and to correctly document loans when they have been approved. The course focuses on both the financial and human relations skills essential to commercial lending

FIN 201 INTERNATIONAL FINANCE AND ECONOMICS

3 CREDITS

International Finance and Economics will examine the basics of the foreign exchange market and exchange rate determination. Topics covered include the balance of payments, past and present international monetary arrangements, the role of the International Monetary Fund and the World Bank, import and export financing, financial management of the multinational firm, the international money market and Macroeconomic policy in an Open Economy.

FIN 205 CONSUMER LENDING

2 CREDITS

Consumer Lending provides an introduction to the important field of consumer credit and consumer lending activities performed by savings association personnel. The course is specifically developed for students with little or no background in consumer credit.

FIN 212 CREDIT AND COLLECTIONS

2 CREDITS

This course covers the fundamentals of credit operations and the role of the Credit Unions in granting and collecting loans. Topics include types of available credit, laws and regulations, business and personal credit and the function of credit in foreign trade. Evaluation techniques for and regulations concerning collections are studied from the perspective of credit management. PREREQUISITE(S): FIN 110 or instructor's permission

FIN 217 PERSONNEL ADMINISTRATION (CREDIT UNIONS)

3 CREDITS

This course covers the fundamentals of modern personnel administration including the role of personnel, developing viable job descriptions, supervision of office personnel, interviewing and hiring techniques, performance appraisals, compensation management, employee relations and employee training programs. This course is designed for Credit Union personnel operations.

PREREQUISITE(S): FIN 110

FIN 226 MONEY AND BANKING

3 CREDITS

Money and Banking presents a fundamental treatment of how money functions in the United States and world economies. Topics include the concept of money supply, the Federal Reserve System, the role banks play as money creator and participant in the nation's payment mechanism. This course also explains how the various types of financial institutions operate; the workings of monetary and fiscal policies, the role of Central Banks and International Banking.

FIN 235 ANALYZING FINANCIAL STATEMENTS

2-3 VARIABLE CREDIT

This course provides you with a practical understanding of financial statement analysis of a business borrower, in order to assess repayment capacity. This course may be taught as a 2 Credit Accelerated Course.

PREREQUISITE(S): ACC 121, 122

FIN 240 LAW AND BANKING PRINCIPLES

2 CREDITS

This course is a banker's guide to law and legal issues with special emphasis on the Uniform Commercial Code.

FIN 245 LAW AND BANKING APPLICATIONS

3 CREDITS

This course is an introduction to laws pertaining to secured transactions, letters of credit and the bank collection process. The student will learn to explain the concept of negotiability, analyze the concept of holder-in-due course status, define and explain the nature of the letter of credit, describe the nature of primary and secondary contractual liability on an instrument, identify the issues related to secured transactions and discuss the legal issues related to bank collections and check losses.

**FIN 250 FINANCIAL MARKETING
FOR BANKERS 3 CREDITS**

This course looks at what motivates customers to purchase financial services and teaches bankers how to develop a successful marketing plan. The student will learn to recognize consumer motivation and buying behavior. Also, he/she will learn to integrate public relations, advertising, sales promotion, selling and service distribution functions in the bank's overall marketing plan. The course conducts situational analysis and formulates a master marketing strategy. Also, the student develops ways to monitor and evaluate marketing performance and objectives.

**FIN 255 UNDERSTANDING AND
SELLING BANK PRODUCTS
3 CREDITS**

From the customer's perspective, this course shows you how to pinpoint and practice six human relations skills that encourage smooth, clear and personal communication between the two of you. The student will learn the basic steps of selling, proceed to information about bank products, go on to the product benefits (rather than the features) that appeal to a customer and finally delve into how to spot clues that can tell you what a customer needs. The student will also learn the importance of cross-selling to recognize the typical prospects for various categories of bank products, how to suggest products and overcome their resistance so as to conclude the sale.

**FIN 260 RETIREMENT/PENSION
PLANNING AND
INVESTMENT 3 CREDITS**

This course discusses all types of Defined Contribution and Defined Benefit Pension Accounts, Individual Retirement Accounts including Keoghs and SEPPS. The course will cover the difference between qualified and non-qualified pension accounts and deferred benefit accounts. The student will understand the regulations involving retirement account participation and withdrawal. The course will also cover the types of investments that can be made through the different retirement vehicles. Also, the tax ramifications of the different types of accounts will be studied.

**FIN 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT**

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

**FIN 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

**FIN 290-293 COOP EDUCATION
CAREER TRAINING
3 CREDITS**

For declared Financial Services Majors only. See Cooperative Education section for a detailed description. PREREQUISITE(S): Instructor's permission and completion of half of program coursework

FRENCH

Independent Studies are also available.

**FRE 101 CONVERSATIONAL
FRENCH I 3 CREDITS**

This is the first course in a sequence for beginning students who wish to understand and speak French. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

**FRE 102 CONVERSATIONAL
FRENCH II 3 CREDITS**

This is the second course in a sequence for beginning students who wish to understand and speak French. The material will continue to cover basic conversational patterns, expressions, and grammar.

PREREQUISITE(S): FRE 101 or instructor's permission.

FRE 111 FRENCH I 5 CREDITS

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. Note: The order of the topics and the methodology will vary according to the individual texts and instructor's.

FRE 112 FRENCH II 5 CREDITS

Continues French I in the development of functional proficiency in listening, speaking, reading and writing the language. Note: The order of the topics and the methodology will vary according to the individual texts and instructor's.

PREREQUISITE(S): FRE 111 or instructor's permission

**FRE 201 CONVERSATIONAL
FRENCH III 3 CREDITS**

This is the third course in a sequence for students who wish to continue their study of understanding and speaking French. The material will cover intermediate level vocabulary, grammar, and expressions.

PREREQUISITE(S): FRE 102 or instructor's permission

FRE 202 CONVERSATIONAL

FRENCH IV 3 CREDITS

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking French. The material will continue to cover intermediate level vocabulary, grammar, and expressions.

PREREQUISITE(S): FRE 201 or instructor's permission

FRE 211 FRENCH III 3 CREDITS

Continues French I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the language. Note: The order of the topics and the methodology will vary according to individual texts and instructor's.

PREREQUISITE(S): FRE 112 or instructor's permission

FRE 212 FRENCH IV 3 CREDITS

Continues French I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the language and introduction to literature. Note: The order of the topics and the methodology will vary according to individual texts and instructor's.

PREREQUISITE(S): FRE 211 or instructor's permission

**FRE 275 SPECIAL TOPICS:
1-6 VARIABLE CREDIT**

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

**FRE 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

GEOGRAPHIC INFORMATION SYSTEMS

**GIS 101 INTRODUCTION TO
GEOGRAPHIC
INFORMATION SYSTEMS
3 CREDITS**

Surveys the development and operation of automated geographic information systems. Focuses on the fundamentals of using computers to draw maps. Incorporates study of cartographic fundamentals such as map projections, map scales, selective display of data on maps, and various computer software applications in GIS.

GEOGRAPHY

**GEO 106 HUMAN GEOGRAPHY
3 CREDITS**

An introduction to geographic perspectives and methods with applications to the study of human activities. Special emphasis is placed on the distribution of humans, adjustments to the natural environment, and land use practices.

**GEO 107 PHYSICAL GEOGRAPHY
3 CREDITS**

Physical Geography is the study of the spatial relationship between humans and the natural environment. The course is divided into five main themes: the atmosphere (weather and climate); the hydrosphere (water bodies and rivers); the lithosphere (Earth's crust and landforms); the biosphere (soil, plant and animal relationships); and the impact of the human population on these environmental factors. This course is recommended for students interested in environmental studies, earth science, and geography.

GEO 165 HUMAN ECOLOGY
3 CREDITS
(Formerly GEO 101 Intro to Environmental Science)

Provides a current outlook for the global environment, describing the threats imposed on different natural ecological systems. Enables the student to develop a set of intellectual tools and ways of thinking about the environment to evaluate for themselves how serious a given environmental problem will be.

GEO 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

GEO 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT
Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

GEOLOGY

GEY 111 PHYSICAL GEOLOGY
4 CREDITS
Studies the materials of the earth, its structure, surface features and the geologic processes involved in its development. This course includes laboratory experience.

GEY 121 HISTORICAL GEOLOGY
4 CREDITS
Studies the physical and biological development of the earth through the vast span of geologic time. Emphasizes the investigation and interpretation of sedimentary rocks, the record of ancient environments, fossil life forms, and physical events, all within the framework of shifting crustal plates. Course includes laboratory experience.

PREREQUISITE(S): GEY 111 or instructor's permission

GEY 135 ENVIRONMENTAL GEOLOGY
3 CREDITS
This course introduces the relationship of applied geology to the human environment. An overview of geologic concepts and terminology precedes a study of natural geologic hazards such as floods, landslides, avalanches, earthquakes, and volcanoes. Surface and groundwater hydrology emphasizes human responsibility to protect these resources from contamination. The geologic aspects of environmental health, land use practices, and resource exploitation are reviewed and related to legislation regarding environmental law.

GEY 205 GEOLOGY OF COLORADO
3 CREDITS
Covers the geologic history of Colorado, with emphasis on formation of mountain ranges, igneous, sedimentary and metamorphic rock types, ore deposits and landforms. Incorporates field experience and/or class room lectures.

PREREQUISITE(S): Instructor's permission

GEY 208 GEOLOGY FIELD TRIP
1-3 CREDITS
This course involves in-depth field studies into the geology specific regions both within and outside Colorado. Trips lasting from one to several days length to study the area will constitute the major activity of the course. The specific area of investigation will be indicated in the schedule of classes each time the course is offered.

PREREQUISITE(S): Instructor's permission

GEY 275 SPECIAL TOPICS
0.25-3 CREDITS
Presents an overview of the special topic including one aspect of the earth and its history as recorded in rocks and rock formations. May also include current changes and impact of historical events and exploration of current topics, issues and activities related to one or more aspects of the named discipline.

GEY 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

GRAPHIC DESIGN & ILLUSTRATION

SEE MULTIMEDIA/GRAPHIC DESIGN
For Graphic Design courses taken the summer semester, 2004, under the GDI prefix, please refer to the 2003-2004 course catalog.

HEALTH PROFESSIONS

HPR 106 LAW & ETHICS FOR HEALTH PROFESSIONS
2 CREDITS
Advances student knowledge in the study and application of medico-legal concepts in medical careers, establishes a foundation for ethical behavior and decision making.

PREREQUISITE(S): Determined by individual program guides.

COREQUISITE(S): Determined by individual program guides.

HPR 112 PHLEBOTOMY
8 CREDITS
Teaches the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. Students will have experience with quality control, infection control and safety procedures as well as laboratory computer systems. Students successfully completing this course may apply for a National Phlebotomy Registry Examination.

PREREQUISITE(S): None

COREQUISITE(S): None

HPR 178 MEDICAL TERMINOLOGY
3 CREDITS
This course introduces the student to the structure of medical terms with emphasis on combining and using the most common prefixes, roots and suffixes. Includes terms related to clinical laboratory, diagnostic imaging, nuclear medicine and oncology as well as major body systems. Classroom structure provides accepted pronunciation of terms and relative use in the healthcare setting.

HPR 205 MICROBIOLOGY OF INFECTIOUS DISEASES
3 CREDIT

Acquaint the student with microbes and their roles in infectious disease. It includes descriptions of bacteria, viruses, fungi, and protozoa; as well as techniques for growing, controlling and treating diseases caused by these organisms. Within the scope of this course are units which discuss how the diseases are diagnosed, and finally, epidemiology and communicability of individual diseases grouped by portals of entry. Prevention and infection control issues as well as current issues surrounding infectious disease may also be discussed.

PREREQUISITE(S): Bio 201 or BIO 105 (not concurrent) or instructor permission

HPR 206 MICROBIOLOGY OF INFECTIONS DISEASES LAB
1 CREDIT

Provides a laboratory experience to acquaint the prenursing students with culture technique, staining methods, identification systems and methods on control of infectious disease microorganisms. It will include specimen, use of the light microscope, the technique of isolation streaking, antimicrobial sensitivity testing. This lab should be taken concurrently with HPR 205 lecture but HPR 205 lecture may be taken without this lab.

PREREQUISITE(S): HPR 205

COREQUISITE(S) HPR 205

HPR 216 PATHOPHYSIOLOGY
4 CREDITS

Focuses on the functions of the human body systems with emphasis on their interrelationships and adaptation to stress and disease.

PREREQUISITE(S): BIO 201, 202 or instructor's permission

HWE 237 EXERCISE, NUTRITION & BODY COMPOSITION
3 CREDITS

Discusses the concepts of improved performance in all fitness areas. Emphasis is placed upon updated information associated with nutrition and human performance. Measurement of body composition is used as it correlates to training and diet/exercise programs.

HPR 240 ROLE OF DEATH & BEREAVEMENT IN SOCIETY
3 CREDIT

Examines death from the perspectives of the dying individual, the bereaved and the caregivers. The course will focus on sociological, cultural, spiritual, development and psychological aspects of dying and bereavement. It will also include study of various groups and their relationships to death and disposition, funerals and other rites.

PREREQUISITE(S): PSY 101

HPR 275 SPECIAL TOPICS**1-6 CREDITS**

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

HPR 285 INDEPENDENT STUDY**1-6 CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

HWE 100 HUMAN NUTRITION**3 CREDITS**

Introduces basic principles of nutrition with emphasis on personal nutrition. Satisfies nutrition requirement of students entering health care professions

PREREQUISITE(S): None

COREQUISITE(S): None

HWE 103 COMMUNITY FIRST AID AND CPR**1 CREDIT**

Uses demonstration videos, instructor led practice and workbook/textbook study to prepare for certification in Adult/Child/Infant CPR and Community First Aid.

HWE 124 FITNESS AND WELLNESS**2 CREDIT**

Provides information on fitness and wellness and to serve as a guide to design, implement, and evaluate a complete personal fitness and wellness program. The course integrates the basic components of fitness and wellness in understanding human health in order to achieve well-being. This course offers current information in the health field and provides self-assessments for health risk and wellness behaviors. This includes lifestyle modification, nutrition, weight management, stress management, cardiovascular and cancer risk reduction, exercise and aging, exercise related injury, exercise and the environment, prevention of sexually transmitted diseases, substance abuse (including tobacco, alcohol and other psychoactive drugs), and analysis and interpretation of research publications and web sites in health and wellness.

HEALTH INFORMATION TECHNOLOGY (MEDICAL RECORDS)

HIT 101 HEALTH INFORMATION MANAGEMENT SCIENCE**6 CREDITS**

An introduction to the health care field in general and the Health Information Management field in particular. This course addresses organizational structures, regulatory agencies, and health care reform. The health record is analyzed for content as it relates to quality, health care personnel responsibility, and documentation requirements. Retrieval systems are studied as well as retention regulations.

PREREQUISITE(S): acceptance into HIT Program

HIT 105 PHYSICIAN PRACTICE: CODING AND REIMBURSEMENT**5 CREDITS**

This entry level course is designed to provide the student with opportunities to apply basic ICD-9-CM, CPT, and HCPCS principles and guidelines to code outpatient visits. Topics will include physician documentation requirements and guidelines for different payer classes, and fraud and abuse issues.

PREREQUISITE(S): HPR 178

HIT 111 HEALTH DATA MANAGEMENT**3 CREDITS**

A study of the computation of statistical data compiled by health care facilities. Special attention is paid to recognized terminology, accurate computation of formula, and computerized statistical methods and accompanying reports.

PREREQUISITE(S): CIS 118, HIT 101

HIT 112 LEGAL ASPECTS**2 CREDITS**

The student is introduced to the legal system, identifies the roles of participants in that system, and learns appropriate courtroom behavior. The course considers the medical record as a legal document; it deals with privileged information, confidential information and communication, release of information, and consent and authorization. Specific federal/state laws as they relate to release of information will be explored. Special attention is paid to court decisions which affect health care facilities, their employees, and the medical staff.

PREREQUISITE(S): HIT 101

HIT 188 HEALTH INFORMATION PRACTICUM I**2 CREDITS**

Provides a directed clinical experience in a health information department in a health care facility. This experience focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

PREREQUISITE(S): Completion of all first year HIT courses

HIT 221 CLINICAL CLASSIFICATION SYSTEMS I**5 CREDITS**

A study of nomenclatures and classification systems with emphasis on the most recent revisions of ICD-9-CM. Students will study the ICD-9-CM coding conventions and principles. These skills are then applied to the coding of medical records. Further experience will include sequencing of diagnoses, DRG assignment and abstracting.

PREREQUISITE(S): completion of all first year HIT courses, HPR 178, MOT 125, 133

HIT 222 QUALITY MANAGEMENT**3 CREDITS**

This course is designed to introduce the student to the concepts of quality assessment/quality improvement, utilization review, and risk management. JCAHO, state and federal regulations for quality management will be studied.

PREREQUISITE(S): completion of all first year HIT courses

HIT 225 HEALTH INFORMATION MANAGEMENT**3 CREDITS**

A comprehensive course designed to give the student a background in the principles of management as they relate to organization and administration of a health information management department.

PREREQUISITE(S): completion of all first year HIT courses

HIT 231 CLINICAL CLASSIFICATIONS SYSTEMS II**5 CREDITS**

An intermediate study of ICD-9-CM coding conventions and principles. Reimbursement issues also studied.

PREREQUISITE(S): completion of all first year HIT courses and HIT 221

HIT 241 CPT CODING BASIC PRINCIPLES**2 CREDITS**

This entry level course is designed to provide the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communication information and data about clinical services provided to patients by healthcare providers. Topics include understanding what the cpt nomenclature is, how and why it is used, and guidelines for each code category and how it is to be applied to represent services within each code category.

PREREQUISITE(S): HIT 221, HPR 178, MOT 125, 133 135 strongly recommended

HIT 275 SPECIAL TOPICS**1-6 VARIABLE CREDIT**

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

HIT 285 INDEPENDENT STUDY**1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

HIT 288 HEALTH INFORMATION PRACTICUM II 2 CREDITS

Focuses on the ability of the student to apply classroom knowledge in a clinical setting, practice professionalism, gain insight into the functions of the department and understand the relationship of health records to the facility as a whole. Emphasis is on the ability to act independently, complete assigned projects and demonstrate a good understanding of health information management concepts.

PREREQUISITE(S): Completion of all first and second year HIT courses

HISTORY

HIS 101 WESTERN CIVILIZATION I 3 CREDITS

Explores a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

HIS 102 WESTERN CIVILIZATION II 3 CREDITS

Explores a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

HIS 201 UNITED STATES (U.S.) HISTORY I 3 CREDITS

Explores events, trends, peoples, groups, cultures, ideas, and institutions in North America and United States history, including the multiple perspectives of gender, class, and ethnicity, between the period when Native American Indians were the sole inhabitants of North America, and the American Civil War. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

HIS 202 UNITED STATES (U.S.) HISTORY II 3 CREDITS

Explores events, trends, peoples, groups, cultures, ideas, and institutions in United States History, including the multiple perspectives of gender, class, and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

HIS 225 COLORADO HISTORY 3 CREDITS

Presents the story of the people, society, and cultures of Colorado from its earliest Native Americans, through the Spanish influx, the explorers, the fur traders and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists, and the modern state

HIS 247 CONTEMPORARY WORLD HISTORY 3 CREDITS

Investigates the major political, social, and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states.

HIS 275 SPECIAL TOPICS: 1-5 VARIABLE CREDIT

Focuses on the exploration of current topics, issues and activities related to one or more aspects of history.

HIS 285 INDEPENDENT STUDY 1-5 VARIABLE CREDIT

Incorporates structured and guided, individualized research that is organized and tailored around the interests and needs of the individual student.

PREREQUISITE(S): Instructor's permission

HONORS

HON 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

This course provides seminars on special topics. Topics may be of general interest, or may relate to the honors topic of Phi Theta Kappa. Each year the current honors topic will be offered. The 2004-2005 topic is "Popular Culture: Shaping and Reflecting Who We Are".

PREREQUISITE(S): Instructor's permission

HON 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

HUMANITIES

HUM 103 INTRODUCTION TO FILM ART 3 CREDITS

This course studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent key historical and aesthetic periods as well as a variety of genres and themes. The course incorporates the ocabulary stylistic systems (for instance, cinematography, editing and art direction) and narrative systems.

HUM 115 WORLD MYTHOLOGY 3 CREDITS

This course introduces students to the mythologies of various cultures with a special emphasis on Greek, Asian and North American examples. Common themes are illustrated and some artistic reactions are used as examples.

HUM 116 WORLD RELIGIONS 3 CREDITS

This course introduces the student to religion and to religious traditions. The influence of religion on the arts will be explored. Religions included will be African and Native American, Hinduism, Buddhism, Confucianism and Taoism, Middle Eastern and Persian, Greek and Roman, Judaism, Christianity and Islam.

HUM 118 RELIGION IN AMERICAN CULTURE 3 CREDITS

Investigates the various ways in which religion and American culture interact. It begins with the religion of Native Americans, which existed in a pre-modern society where religion went unchallenged as the preeminent organizing principle, to our post-modern era, where religion competes with a multiplicity of other belief systems in a complex societal matrix. This course pays close attention to the sundry ways in which religion and American culture interface.

HUM 121 SURVEY OF HUMANITIES I 3 CREDITS

Introduces students to the history of ideas in Western cultures through a study of the visual arts, literature, drama, music, and philosophy of early civilizations, Greek and Roman antiquity and Christian eras. Emphasizes connections among the arts, values, and diverse cultures.

HUM 122 SURVEY OF HUMANITIES II 3 CREDITS

Examines the Medieval, Renaissance, and Baroque periods through a study of the visual arts, literature, music, and philosophy. Compares and contrasts diverse cultural ideas and feminine and masculine viewpoints.

HUM 123 SURVEY OF HUMANITIES III 3 CREDITS

Examines the cultures of the 17th through the 20th centuries by focusing on the inter relatedness of the arts, ideas and history. Considers the influences of industrialism, scientific development and non-European peoples.

HUM 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

This course is designed to provided students with opportunity to pursue in depth special areas of interest in the Humanities. The content of the course will be determined by the instructor(s) who will provide a complete syllabus.

HUM 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

HEALTH AND WELLNESS EDUCATION

HUP 242 PRINCIPLES & TECHNIQUES FOR PHYSICAL FITNESS 2 CREDITS

Course Description: This course is designed to provide the student basic skills, practice, and theory in physical fitness. Major components of muscle strength, muscle endurance, cardiovascular endurance, flexibility and body composition are discussed in detail. Exercise prescription skills, assessment skills, administration skills, and leadership skills will also be addressed in this course.

HUP 245 PHYSIOLOGY OF EXERCISE 3 CREDITS

This course is designed to provide the student basic skills, practice, and theory in physical fitness. Major components of muscle strength, muscle endurance, cardiovascular endurance, flexibility and body composition are discussed in detail. Exercise prescription skills, assessment skills, administration skills, and leadership skills will also be addressed in this course.

OCCUPATIONAL LAB

This course introduces the student to the physiological responses and adaptations of individuals to exercise as well as the application to sports medicine, rehabilitation and general fitness. The laboratory provides experiences that demonstrate the underlying theoretical constructs that govern physiological responses and adaptations to exercise.

HUP 248 GUIDELINES FOR EXERCISE TESTING AND PRESCRIPTION 2 CREDITS

This course is designed to provide the student with the opportunity to conduct laboratory fitness assessments, evaluate test results and develop exercise prescriptions. In addition, the student will be expected to become knowledgeable about the promotion and marketing of fitness programs.

HWE 237 EXERCISE, NUTRITION AND BODY COMPOSITION 3 CREDITS

Discusses the concepts of improved performance in all fitness areas. Emphasis is placed upon updated information associated with nutrition and human performance. Measurement of body composition is used as it correlates to training and diet/exercise programs.

INTERIOR DESIGN

IND 100 INTERIOR DESIGN FUNDAMENTALS 4 CREDITS

Course currently under revision. Refer to the Interior Design Department for further information.

IND 107 HISTORY OF INTERIOR DESIGN 3 CREDITS

Offers a study of interior furnishings from the medieval period to the Revival styles of the mid-eighteenth century to the contemporary classics used in modern interiors today. The characteristics of historical interiors, ornamental design, use of color, and architecture will be the primary emphases.

PREREQUISITE(S): Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic; 8 credits of previous IND course work; all degree entrance requirements

IND 108 PROFESSION SURVEY 1 CREDIT

Guest speakers share experiences and insights concerning job types and opportunities; business practices; current work; professional organizations; tools, methods and educational requirements necessary for various positions; and prevailing professional attitudes.

IND 111 DRAFTING FOR INTERIORS 4 CREDITS

Introduction to basic drafting tools and techniques, graphic references and symbols, use of pencil and technical pen. Student learns to draft floor plans and interior elevations. Course also covers basic interior dimensioning and lettering as well as isometric drawing construction for interior components.

PREREQUISITE(S): Minimum CPT score of 61 for Arithmetic

IND 112 GRAPHIC COMMUNICATION 4 CREDITS

Students will learn methods of communicating interior design plans, elements and ideas in 3-D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills.

PREREQUISITE(S): Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

IND 114 SPACE PLANNING 3 CREDITS

Students will learn the principles and factors of space planning, and practice the space planning process through residential and light commercial applications. Students are introduced to interior architecture. Use of bubble diagrams and freehand ink presentation techniques are also included.

PREREQUISITE(S): IND 100, 111; Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

IND 117 INTERIOR TEXTILES 2 CREDITS

Emphasizes the study of fabrics, fibers, weaves, finishes, dyeing, and printing methods for residential and commercial fabrics and carpets. Resources are discussed and developed.

PREREQUISITE(S): Recommended basic skills standards (ENG 060, MAT 060, REA 090) or Faculty consent

PREREQUISITE(S): Minimum CPT scores: 83 for Reading Comprehension and 86 for Sentence Skills

IND 118 INTERIOR FINISHES 2 CREDITS

Examines finish materials for residential and commercial interior design; preparation and installation techniques; introduction to specifications and estimating.

PREREQUISITE(S): Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

IND 151 RESIDENTIAL DESIGN 4 CREDITS

Student learns and applies the preliminary project phases of the residential design process. Project documentation is introduced and practiced. At least one portfolio project is produced.

PREREQUISITE(S): IND 100, 110, 111, 112, 114, 117, 118 and 205 recommended; Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

COREQUISITE(S): IND 112, 114 or 118

IND 152 COMMERCIAL DESIGN I 2 CREDITS

Introduction to commercial design space planning and procedures. Students will study and apply space planning, code requirements and design documentation techniques for a variety of commercial project types through a series of short exercises. Emphasis will be placed on programming and schematic design. Hand drafting, sketching and various office computer software applications will be utilized.

PREREQUISITE(S): CIS 118, IND 112, 114, 117, 118, and IND 205 recommended; Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

COREQUISITE(S): IND 112, 117

IND 160 ACCESSORIZING 2 CREDITS

Student learns how to assist clients in selection of art, antiques and accessories to aid in defining the character of a space. Styles and the eclectic mix of styles are covered, as well as placement and effective use of themes.

IND 175 SPECIAL TOPICS 1-4 VARIABLE CREDIT

Explores current topics, issues and activities related to one or more aspects of the named discipline.

IND 178 SEMINAR 1-6 VARIABLE CREDIT

This course provides students with an experiential learning opportunity.

PREREQUISITE(S): Minimum CPT scores: 83 for Reading Comprehension; 86 for Sentence Skills and 61 for Arithmetic

IND 200 KITCHEN AND BATH DESIGN 4 CREDITS

The specialized design process and documentation requirements of kitchen and bath design are introduced and applied using NKBA guidelines. Student becomes familiar with trade resources supporting this design field. At least two portfolio projects are produced. Students will be encouraged to produce project documents using a variety of computer software applications.

PREREQUISITE(S): IND 151, 205, 211, 225

COREQUISITE(S): IND 211, 225

IND 201 COMMERCIAL DESIGN II 4 CREDITS

Emphasis is on commercial design. Student will study and apply ADA requirements, codes, building systems, office landscape systems and components; produce commercial project drawings and documentation; and prepare both graphic and oral presentations. Student is encouraged to use the Internet for research, and to produce project documents using a variety of computer software applications.

PREREQUISITE(S): IND 151, 152, 205, 225

COREQUISITE(S) IND 225

IND 205 PROFESSIONAL PRACTICE FOR INTERIOR DESIGNER 2 CREDITS

Introduces many of the business procedures encountered in the commercial and residential practice of interior design. The student will generate a business plan and a marketing plan and learn how to establish accounts within the industry.

PREREQUISITE(S): IND 114, 117, 118

IND 207 WINDOW TREATMENTS 2 CREDITS

Discusses and demonstrates the hard and soft window treatments used in today's market place. Measuring, installing, pricing, ordering, and resource development are investigated. Fabric weaves and weights, trims and linings are discussed, and creative treatments are designed and specified.

IND 211 INTERIOR CONSTRUCTION 4 CREDITS

This course introduces the student to interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects, and is encouraged to produce course projects using the computer and CAD software.

PREREQUISITE(S): IND 111; CAD 105; CIS 118

IND 225 LIGHTING DESIGN 2 CREDITS

Student studies and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources effect the perception of space, how to compute and control proper lighting levels, and how to communicate design information using a reflected ceiling plan and luminaire schedule. Students are encouraged to produce projects using a variety of computer software applications.

PREREQUISITE(S): IND 114; CIS 118

IND 278 WORKSHOP 1-6 VARIABLE CREDIT

Provides students with an experiential learning opportunity.

IND 280 INTERNSHIP 1-4 VARIABLE CREDIT

Provides work experience in a business or industry; 45 fieldwork hours per credit hour.

PREREQUISITE(S): ACC: 45 credits of IND coursework PPCC: IND 120, ARC 108

CORREQUISITE(S): PPCC: IND 120

IND 281 INTERNSHIP II 1-4 VARIABLE CREDIT

Provides work experience in a business or industry; 45 fieldwork hours per credit hour.

PREREQUISITE(S): IND 280

IND 289 CAPSTONE 1 CREDIT

Provides a demonstrated culmination of learning within a given program of study.

IND 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

These special-topics courses are separately designed for specific educational purposes: to offer more in-depth training/instruction in a particular subject; to cover material not found in other IND courses; or to study timely issues. They are offered as time, student demand, facilities, and faculty availability permit, often during summer semester.

PREREQUISITE(S): see advisor and/or semester course schedule

IND 278 WORKSHOP 1-6 CREDITS

Provides students with an experiential learning opportunity.

IND 280 INTERNSHIP 1-4 CREDITS

Provides work experience in a business or industry setting. 45 fieldwork hours per credit hour.

PREREQUISITE(S): 45 credit of IND coursework

IND 281 INTERNSHIP II 1-4 CREDITS

Provides work experience in a business or industry setting. 45 field work hourse per credit hour.

PREREQUISITE(S): 45 credit of IND coursework

IND 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

IND 289 CAPSTONE: ADVANCED DESIGN 1 CREDIT

Student completes an advanced design project that aligns with a chosen career path. Scope and content vary. Focus is on synthesizing and demonstrating skills and knowledge gained in prior course work. a final portfolio-quality project is produced and orally presented.

PREREQUISITE(S): IND 200, 201, 225, 278: DESIGN RESEARCH

IND 290-297 COOP EDUCATION CAREER TRAINING 3 CREDITS**IND 290-293 COOP EDUCATION CAREER TRAINING 3 CREDITS****IND 294-295 COOP EDUCATION CAREER TRAINING 6 CREDITS****IND 296 COOP EDUCATION CAREER TRAINING 9 CREDITS****IND 297 COOP EDUCATION CAREER TRAINING 12 CREDITS**

See cooperative Education section for detailed description.

PREREQUISITE(S): Instructor's permission

INSURANCE

INS 154 RISK MANagements 3 CREDITS

Examines the nature, purpose and steps in risk including identification of an analysis of the loss exposure of individuals and organization; the examination and application of alternative risk management techniques; and the development and justification of risk management decisions.

INS 200 PROPERTY AND LIABILITY INSURANCE PRINCIPLES 3 CREDITS

Presents a one-semester course designed for individuals wishing to obtain a general knowledge of property and liability insurance principles. The course is an overview of insurance fundamentals, insurance operations, and insurance contracts, loss exposures, and risk management.

INS 201 PERSONAL INSURANCE 3 CREDITS

Presents a one-semester course designed for individuals wishing to obtain a general knowledge of personal insurance. The course is an overview of the loss exposures faced by individuals and families and the type of insurance that is available to treat those loss exposures.

INS 202 COMMERCIAL INSURANCE 3 CREDITS

Presents a one-semester course designed for individuals wishing to obtain a general knowledge of commercial insurance. The course is an overview of the loss exposures faced by businesses and other organizations and the type of insurance that is available to remedy those loss exposures.

INS 204 DELIVERING INSURANCE SERVICES 3 CREDITS

Presents a one-semester course designed for individuals wishing to obtain a general knowledge of how insurance companies can deliver quality customer service. The course is an overview of insurance fundamentals and how an insurance customer service representative applied that knowledge to effectively serve his/her customer base.

INVESTMENTS

INV 115 INVESTMENTS/STOCKS & BONDS 3 CREDITS

This course is designed to make the student aware of a broad range of investment opportunities. The curriculum includes information about common stocks, corporate bonds, mutual funds, insurance, and real estate. The student will receive the basic general business concepts and information necessary to make a rational decision in the management of personal funds. Prepares for Series 6 Exam.

INV 215 ADVANCED INVESTMENTS 3 CREDITS

This class and the subjects covered are for students with a serious interest in investments. Subjects to be covered are: technical analysis, options, ratio analysis, leverages, etc. Prepares for Series 7 Exam.

PREREQUISITE(S): an accounting course or investment course; or instructor's permission

INV 269 PERSONAL FINANCIAL PLANNING 3 CREDITS

Students will obtain a general knowledge of personal financial planning. The course is designed to provide the students with a detailed analysis of personal financial planning, including areas of investment planning, income tax planning, planning for retirement, and estate planning.

INV 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

JAPANESE

JPN 111 JAPANESE I 5 CREDITS

Japanese I begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing Japanese.

JPN 112 JAPANESE II 5 CREDITS

Japanese II continues Japanese I in the development of functional proficiency in listening, speaking, reading and writing Japanese.

PREREQUISITE(S): JPN 111 or instructor's permission

JPN 211 JAPANESE III 3 CREDITS

Continues Japanese I and Japanese II in the development of increased functional proficiency in listening, speaking, reading and writing Japanese. Note: The order of the topics and the methodology will vary according to texts and instructors.

PREREQUISITE(S): JPN 112

JPN 212 JAPANESE IV 3 CREDITS

JPN 212 continues JPN 111, JPN 112 and JPN 211 in the development of increased proficiency in listening, speaking, reading & writing the language. This class includes an interdisciplinary overview of Japanese culture and society. Topics in literature, the arts, contemporary society, corporate culture are explored.

PREREQUISITE(S): JPN 211 or Instructor permission.

JPN 275 SPECIAL TOPICS

1-6 VARIABLE CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

JPN 285 INDEPENDENT STUDY

1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

JOURNALISM AND MASS COMMUNICATIONS

JOU 105 INTRO TO MASS MEDIA

3 CREDITS

This survey course places the mass media in a historical and cultural perspective to study the relationship between mass media and society. This course also introduces students to some of the ethical, legal and economic issues that affect the mass media and their consumers.

JOU 106 FUNDAMENTALS OF REPORTING

3 CREDITS

This is an introductory course in news writing, reporting and interviewing, with an emphasis on clarity, accuracy, timeliness and fairness.

PREREQUISITE(S): ENG 121

JOU 215 PUBLICATIONS PRODUCTION AND DESIGN

3 CREDITS

This intermediate course provides students with practical experience in the design, editing and layout of special non-newspaper publications. Students will work on the college literary magazine.

JOU 275 SPECIAL TOPICS

1-6 VARIABLE CREDITS

Courses offered under the Special Topics heading address special issues in reporting and editing.

JOU 285 INDEPENDENT STUDY

1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

JOU 190-192 COOP EDUCATION CAREER EXPLORATION 3 CREDITS

290-293 COOP EDUCATION CAREER TRAINING 3 CREDITS

294-295 COOP EDUCATION CAREER TRAINING 6 CREDITS

296 COOP EDUCATION CAREER TRAINING 9 CREDITS

297 COOP EDUCATION CAREER TRAINING 12 CREDITS

See Cooperative Education section for detail description.

MME 101 INTRO TO TELEVISION PRODUCTION 3 CREDITS

Introduces the use of television equipment. Emphasizes basic principles of professional production techniques, technology and terminology including special effects, editing, lighting, graphics, audio recording, storyboarding, and scripting. Students will learn how to do productions using both studio and field equipment to develop these skills. Textbook required.

MME 102 ADVANCED TELEVISION PRODUCTION 3 CREDITS

Students will produce their own projects as well as work on in-house projects for in-depth experience in all facets of a complex television production, e.g. directing, producing, writing. Also covered: methods and techniques for budgeting and planning, scheduling for production in terms of time, equipment and cost evaluation of finished programs, competing in the video market, and working with clients.

PREREQUISITE(S): MME 101, instructor's permission

MME 103 SCRIPTWRITING FOR FILM AND TELEVISION 3 CREDITS

Introduces the technical and creative aspects of writing a dramatic or commercial script for film or television. Covers proper script formatting, timing, developing a story and, for television, storyboarding.

MME 201 VIDEO PROJECT 3 CREDITS

Emphasizes application of all the skills gained in MME 101 and MME 102. Students will complete one or two video productions. If deemed of exceptional quality, the finished project(s) will be entered into a national student-video competition.

PREREQUISITE(S): MME 101, 102 or instructor's permission

MME 202 VIDEO COMMUNICATION MODES 3 CREDITS

Explores various modes of video communication. Covers Satellite, Microwave, Infrared, Wireless, Fiberoptic, and various video compression methods.

PREREQUISITE(S): MME 101 or instructor's permission

MME 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Explores particular areas of interest in Mass Communications.

PREREQUISITE(S): Instructor's permission

MME 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

**MME 190-192 COOP EDUCATION
CAREER EXPLORATION
3 CREDITS**

**MME 290-293 COOP EDUCATION
CAREER TRAINING
3 CREDITS**

**MME 294-295 COOP EDUCATION
CAREER TRAINING
6 CREDITS**

**MME 296 COOP EDUCATION
CAREER TRAINING
9 CREDITS**

**MME 297 COOP EDUCATION
CAREER TRAINING
12 CREDITS**

See Cooperative Education section for detailed description.

LATIN

**LAT 101 CONVERSATIONAL LATIN I
3 CREDITS**

This is the first course in a sequence for beginning students who wish to understand and communicate in Latin. The material will cover basic conversational patterns, expressions and grammar.

**LAT 102 CONVERSATIONAL LATIN II
3 CREDITS**

This is the second course in a sequence for beginning students who wish to understand and communicate in Latin. The material will continue to cover basic conversational patterns, expressions and grammar.

PREREQUISITE(S): LAT 101

**LAT 111 LATIN I
5 CREDITS**

This course begins a sequence in the development of functional proficiency in listening, speaking, reading, and writing the language.

**LAT 112 LATIN II
5 CREDITS**

This course continues a sequence in the development of functional proficiency in listening, speaking, reading, and writing the language.

PREREQUISITE: LAT III

**LAT 211 LATIN III
3 CREDITS**

Continues Latin I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

PREREQUISITE: LAT 112

LAW COURSES

SEE PARALEGAL

LITERATURE

Recommended: College-level reading ability

**LIT 115 INTRODUCTION TO
LITERATURE I 3 CREDITS**

Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading.

**LIT 201 MASTERPIECES OF
LITERATURE I 3 CREDITS**

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

**LIT 202 MASTERPIECES OF
LITERATURE II 3 CREDITS**

Examines significant writings in world literature from the Seventeenth Century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

**LIT 211 SURVEY OF AMERICAN LIT I
3 CREDITS**

This course is an overview of American literature from its beginnings through the Nineteenth Century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.

**LIT 212 SURVEY OF AMERICAN LIT II
3 CREDITS**

This course is an overview of American literature from the mid-Nineteenth Century to the present. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

**LIT 221 SURVEY OF BRITISH LIT I
3 CREDITS**

This course is an overview of British literature from the Anglo-Saxon period into the Eighteenth Century. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

**LIT 220 JEWISH-AMERICAN
LITERATURE 3 CREDITS**

Surveys some of the major achievements in literature and film by American Jews in late-nineteenth through the twentieth century. We will proceed chronologically, focusing on the fiction of the immigrant experience, on the politicized literature of the 1930s and the 1940s, on the literature of the post-WWII era and its struggle to fashion an adequate response to the Holocaust, and on questions surrounding assimilation, acculturation, and identity politics.

**LIT 222 SURVEY OF BRITISH LIT II
3 CREDITS**

This course is an overview of British literature from the Eighteenth Century to the present. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

**LIT 225 INTRO TO SHAKESPEARE
3 CREDITS**

This course explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works.

**LIT 240 POETS AND THEIR POEMS
3 CREDITS**

Teaches strategies for reading, interpreting, discussion, and evaluating a variety of poems with particular attention to a study of selected major poets in depth.

**LIT 245 LIT OF THE AMERICAN
WEST 3 CREDITS**

This course examines works in various genres by writers of the American West. It investigates the dominant themes and social and historical backgrounds.

**LIT 255 CHILDREN'S LITERATURE
3 CREDITS**

This course examines the criteria for selecting appropriate literature for children. Discussion topics explore age levels, values taught through literature, and literary and artistic qualities.

**LIT 257 LITERATURE AND FILM
3 CREDITS**

This course examines the relationship between literature and motion pictures, emphasizing film techniques and the interpretive function of filmmakers.

PREREQUISITE(S): LIT 115 or instructor's permission

**LIT 259 SURVEY OF AFRICAN
AMERICAN LITERATURE
3 CREDITS**

This course is an overview of African American Literature from 1750 to the present. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

**LIT 260-269 POPULAR LITERATURE
AND CULTURE: SPECIAL
TOPICS 3 CREDITS**

Explores special interests in literature, such as detective fiction and science fiction.

**LIT 266 INTRODUCTION TO
C.S. LEWIS 3 CREDITS**

An introduction to the essays, fiction, and literary criticism of C.S. Lewis. Emphasis is on the careful reading and understanding of the works, on class discussion, and on the writing of interpretive and critical essays.

**LIT 267 THE BIBLE AS LITERATURE
3 CREDITS**

An introduction to the Bible as the textual centerpiece of Western literature. Students will encounter the various literary genres represented in Biblical texts, the process of canonization, ways in which the Bible has been read by its various interpretive communities, and some impacts of the Bible in such areas as law, poetry, fiction, psychology, ethics, and theology.

LIT 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Explores particular authors, topics, themes in depth, such as Ibsen, Faulkner or Twain, great fiction of the Nineteenth Century, the Gothic Novel or Literature of the Holocaust.

LIT 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

MANAGEMENT

MAN 116 PRINCIPLES OF SUPERVISION 3 CREDITS

The course concentrates on the management skills needed by first line and new supervisors with practical applications taken from common supervisory situations. Emphasis placed on learning hiring, discipline, and conflict resolution concepts.

MAN 128 HUMAN RELATIONS 3 CREDITS

This course introduces the student to those aspects of interpersonal relations most directly linked to attainment of organizational and individual goals in the work place. Its focus is on identifying and analyzing those factors which help and hinder such relationships.

MAN 200 HUMAN RESOURCE MANAGEMENT 3 CREDITS

This course provides the student with a broad overview of the contemporary issues, theories and principles used to effectively manage human resources. Topics include hiring, compensation, development, employee relations and legal issues.

MAN 201 HUMAN RESOURCE MANAGEMENT II 3 CREDITS

This course offers further discussion of concepts of Human Resource Management. Topics covered include techniques and procedures in resources planning, appraising performance, selection and staffing, training and development, job enrichment, and wage and salary administration.

MAN 205 EVENT PLANNING 3 CREDITS

This course systematically presents the components of event planning: organization, personnel, finances, site selection, transportation, program design, promotion, arranging exhibits, and evaluation.

MAN 215 ORGANIZATIONAL BEHAVIOR 3 CREDITS

The course examines the behaviors of groups and individual members of organizations, and how that behavior can be influenced. Course emphasis is on the tools managers use to achieve organizational effectiveness, such as work style and corporate culture assessments.

MAN 216 SMALL BUSINESS MANAGEMENT 3 CREDITS

This course examines the elements necessary for the successful formulation of a new small business. Its is also designed to enhance the skills of those already involved in the operation of a small business. The course includes the development of a complete small business plan.

MAN 224 LEADERSHIP 3 CREDITS

Focuses on the leadership skills necessary to bring about change in an organization. Students learn to develop and communicate a shared vision, to empower employees, to manage conflict, to negotiate, and to develop organizations so that all are working toward common goals. Crosslisted with BUS 251.

MAN 226 PRINCIPLES OF MANAGEMENT 3 CREDITS

A survey of the principles of management. Emphasis will be on the primary functions of planning, organizing, staffing, directing, and controlling with a balance between the behavioral and operational approach. Emphasis placed on learning decision making and changing management concepts

MAN 230 CORPORATE RESPONSIBILITY 3 CREDITS

This course examines the concept of corporate responsibility and the extent to which an organization's resources should be used to identify and respond to social problems. Included in the course will be topics of corporate and social responsibility, and the concept of servant leadership.

MAN 240 STRATEGIC MANAGEMENT 3 CREDITS

Development of Business Policy and the integration of skills learned in prior business study, including strategy formulation, implementation and evaluation. Focus is on the coordination of marketing, production, finance, accounting and ethics and social responsibility to achieve competitive advantage.

MAN 241 PROJECT MANAGEMENT IN ORGANIZATIONS 3 CREDITS

This course is designed to introduce students to the planning, implementation, and control activities of Project Management, including project and performance evaluation, quality control and work flow analysis. Emphasis will be on the initiating, planning, executing, controlling and closing activities of Project Management.

MAN 243 PROJECT MANAGEMENT IN ACTION 3 CREDITS

This course is a workshop seminar designed to bring into focus the subject material covered in MAN 241 and CIS 202. Emphasis will be on extracting facts to form patterns, thereby enabling student to see the "big picture" of Project Management.

PREREQUISITE(S): MAN 241 and CIS 202, or instructor's permission

MAN 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

This course is designed to provide students with the opportunity to study topics in management in greater depth than provided by regular course offerings.

MANUFACTURING TECHNOLOGY

MTE 120 MANUFACTURING PROCESSES 3 CREDITS

Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products.

MTE 141 PRINTED CIRCUIT BOARD ECAD/CAM 3 CREDITS

Introduces the student to the basic computer concepts of creating a production file for the design and manufacture of a printed circuit board. Topics include the computer applications for design capture, PCB library management, databases, integration tools, packaging, design rules and production documents.

PREREQUISITE(S): Instructor's permission

MARKETING

MAR 111 PRINCIPLES OF SALES 3 CREDITS

This course enables the student to understand and develop ethical sales techniques and covers the role of selling in the marketing process. Areas of emphasis include behavioral considerations in the buying and selling process and sales techniques.

MAR 117 PRINCIPLES OF RETAILING 3 CREDITS

This course is a study of the basic principles and techniques of merchandising, operations, layout, store organization, site location, and customer service with an emphasis on retailing operations.

MAR 126 MERCHANDISING 3 CREDITS

This course emphasizes facility/store organization and merchandising techniques. The study of what makes a store appealing includes layout, product mix, and techniques of display.

MAR 160 CUSTOMER SERVICE 3 CREDITS

This course enables students to learn the relationship of self to customers, problem solve and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building customer rapport and creating positive outcomes. (This course was previously MAR 136).

MAR 216 PRINCIPLES OF MARKETING 3 CREDITS

The analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to business and the individual consumer.

MAR 217 E-COMMERCE MARKETING 3 CREDITS

Explores new marketing strategies that have emerged as areas of information technology and the Internet have evolved. This course examines traditional marketing concepts of buying behavior, promotion, production and others, then redefines them as they apply to marketing on the World Wide Web. Web fundamentals, e-marketing trends, strategies, models and research will be examined.

PREREQUISITE(S): MAR 216

MAR 235 CONSUMER BEHAVIOR
3 CREDITS

Enables the the student to understand the variables that affect consumer behavior in the marketplace and the implications of this knowledge for marketing decisions and strategies.

MAR 249 STRATEGIC MARKETING
3 CREDITS

Illustrates the connections between a market-driven strategy, customer satisfaction, and profitable growth. Students will examine how marketing strategies are developed and executed within both small and large organizations. The course will emphasize strategy development, implementation, and evaluation.

MAR 255 SPORTS INDUSTRY MARKETING
3 CREDITS

This course is designed for the professional who desires a career in the professional sport setting, commercial sports industry including sales, promotions, marketing, public relations and sport arena facility and event operations.

MAR 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Provides students with a vehicle to pursue special topics of interest in business. The content of this course is designed on an as needed basis to provide current, up-to-date information.

MASS MEDIA

See Journalism and Mass Communicatio

MATHEMATICS

MAT 030 FUNDAMENTALS OF MATHEMATICS
2 CREDITS

This course includes the vocabulary, basic operations and applications of whole numbers, decimals, and introduction to English and metric measurement, and an introduction to areas and perimeters.

PREREQUISITE(S): Math assessment, arithmetic score 24-56

MAT 060 PRE-ALGEBRA
3 CREDITS

This course includes the vocabulary, basic operations and applications of fractions, mixed numbers, ratio, proportions, percent, integers, algebraic expressions, and the solution of basic first-degree equations and inequalities. A very brief review of whole numbers and decimal operations and applications may be included.

PREREQUISITE(S): MAT 030 or Math Assessment, arithmetic score of 57-120; elementary algebra score of < 45

MAT 090 INTRODUCTORY ALGEBRA
4 CREDITS

This course includes solution of first-degree equations, inequalities, and formulas; polynomials; factoring polynomials and solving quadratic equations by factoring; algebraic fractions; coordinate geometry; systems of linear equations; graphing linear equations and inequalities; radical expressions; and applications.

PREREQUISITE(S): MAT 060 or Math Assessment, arithmetic score of 45-60

MAT 099 ENHANCED MATHEMATICS SUPPORT
1 CREDIT

Enhanced Mathematics Support, located in M3620/3610, is a student-centered learning environment that will complement mathematics classroom instruction. Students will be able to utilize the following resources: professional and peer tutoring, mathematics and tutorial software, online tutorial resources, video tapes, and training guides for these resources. Students will also be able to obtain help with calculators and mathematical software required in their mathematics courses. Graded on a Satisfactory/Unsatisfactory basis.

Some Financial Aid restrictions may apply.

COREQUISITE(S): Any other MAT course

MAT 106 SURVEY OF ALGEBRA
4 CREDITS

This course emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equation, rational exponents, radical expressions, graphing and applications.

PREREQUISITE(S): MAT 090 or Math Assessment score of 61-84

COREQUISITE(S): MAT 111 required

MAT 111 TECHNOLOGY LAB FOR ALGEBRA
1 CREDIT

Explores and applies algebraic topics in a laboratory course using graphing calculators.

PREREQUISITE(S): MAT 090 or Math Assessment score of 61-84

COREQUISITE(S): MAT 106 required

MAT 116 APPLIED MATH I, ALGEBRA
2 CREDITS

This course is designed to give basic algebra skills necessary for vocational courses in areas such as electronics, architecture, business, and interior design. It is intended for students who have limited background in Algebra, and who do not plan to take higher level algebra courses in the future. MAT 090 begins at the same level as this course. Students needing MAT 090 should normally begin there, not in MAT 116. Topics of this course include signed number review, order of operations, algebraic expressions, polynomial operations, exponents, linear equations, and formula manipulation. 30 hours lecture.

PREREQUISITE(S): MAT 060 or equivalent

MAT 117 APPLIED MATH II, GEOMETRY AND TRIGONOMETRY
2 CREDITS

This course is designed to give geometry and basic trigonometric skills necessary for vocational courses in areas such as electronics and architecture. Topics included in this course are lines, angles, geometric shapes, calculation of perimeter and area, trigonometric definitions, solution of triangles, and graphs of sine and cosine. 30 hours lecture.

PREREQUISITE(S): MAT 116 or equivalent

MAT 120 MATHEMATICS FOR LIBERAL ARTS
4 CREDITS

This course is designed to develop mathematical and problem-solving skills. Appropriate technological skills are included. Content is selected to highlight connections between mathematics and the society in which we live. Topics include set theory and logic, mathematical modeling including exponential and logarithmic functions, probability and statistical methods and consumer mathematics. Additional content will include one topic in geometry, numeration systems, decision theory, or management science.

PREREQUISITE(S): MAT 106 and 111 or Math Assessment score of 85-120

MAT 121 COLLEGE ALGEBRA
4 CREDITS

Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among: graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem and theory of equations.

PREREQUISITE(S): MAT 106 and 111 or Math Assessment score of 85-120

MAT 122 COLLEGE TRIGONOMETRY
3 CREDITS

This is a traditional prerequisite course to the calculus sequence. Topics include trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits.

PREREQUISITE/COREQUISITE: MAT 121 or instructor's permission

MAT 123 FINITE MATHEMATICS
4 CREDITS

This course is primarily intended for business, life science or social science majors. Topics include functions, matrix algebra, linear programming, and an introduction to probability and counting techniques. Emphasis is on applications. The course may include other topics such as statistics when time permits.

PREREQUISITES: MAT 106 or math assessment

MAT 125 SURVEY OF CALCULUS
4 CREDITS

For business, life science, and/or social science majors. Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential and logarithmic functions.

PREREQUISITE(S): MAT 121 or 123

MAT 135 INTRODUCTION TO STATISTICS
3 CREDITS

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference-estimation, hypothesis testing, comparison of populations, correlation and regression.

PREREQUISITE(S): MAT 106 or 136 or math assessment

COREQUISITE(S): MAT 179 required

MAT 136 TURBO ALGEBRA 3 CREDITS

A course designed to meet the needs of students not prepared for college level math, but with a background in algebra. An intensive review of algebra prerequisite to college level classes MAT 121, MAT 135. Topics covered include: Single variable equation solving, linear and non-linear equations in two variables and their graphs.

PREREQUISITE(S): mathematics course work beyond 1 year of high school algebra or beyond Introductory Algebra, MAT 090

MAT 155 MATHEMATICS FOR PRE-SECONDARY TEACHERS I 3 CREDITS

This course is designed to develop a sound background in the concepts underlying the pre-secondary school mathematics curriculum. Teachers making decisions in the diverse contexts of school mathematics classrooms must possess not only sound understanding of mathematical ideas but of the problem-solving processes by which this understanding develops and in which this understanding is applied.

These are the "Big Mathematical Ideas" of the course:

- 1) Mathematical problem-solving, reasoning and communication;
- 2) Patterns and their identification, representation, analysis, manipulation, and generalization;
- 3) Geometry and measurement concepts;
- 4) Counting principles, probability and statistics;
- 5) Number systems and computational algorithms.

PREREQUISITE(S): MAT 106

MAT 156 MATHEMATICS FOR PRE-SECONDARY TEACHERS II 3 CREDITS

This course, the second in a sequence of mathematics courses for prospective elementary teachers, is designed to deepen and extend students' understanding of the mathematical concepts underlying a pre-secondary mathematics curriculum aligned with the Colorado Model Content Standards for Mathematics.

These are the "big ideas" of this course [See Colorado Model Content Standards for Mathematics; NCATE Standard 1.5; CDE Standards 5.01, 8.01, 8.02, 8.20; CCHE Performance Standard2]:

- 1) Mathematical problem-solving, reasoning and communication;
- 2) Patterns and their identification, representation, analysis, manipulation, and generalization;
- 3) Geometry and measurement concepts;
- 4) Counting principles, probability and statistics;
- 5) Number systems and computational algorithms.

PREREQUISITE(S): MAT 155

MAT 179 COMPUTER APPLICATIONS FOR STATISTICAL PROCEDURES 1 CREDIT

Using statistical software and the world wide web, students will engage in an active, visual approach to the topics covered in MAT 135, Introductions to Statistics. Students will work with real world data on problems of a practical nature

PREREQUISITE(S): MAT 106 or 136 or equivalent
COREQUISITE(S): MAT 135 required

MAT 201 CALCULUS I 5 CREDITS

Introduces single variable calculus and analytic geometry. Includes limits, continuity, derivatives, and applications of derivatives, as well as indefinite and definite integrals and some applications.

PREREQUISITE(S): MAT 121 and 122 or equivalent

MAT 202 CALCULUS II 5 CREDITS

Continuation of single variable calculus and includes techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series.

PREREQUISITE(S): MAT 201, or instructor's permission

MAT 203 CALCULUS III 4 CREDITS

This course completes the traditional subject matter of The Calculus. Topics include vectors, vector-valued functions, and multi-variable calculus (including partial derivatives, multiple integrals, line integrals and applications).

PREREQUISITE(S): MAT 202

MAT 255 LINEAR ALGEBRA 3 CREDITS

This course includes an introduction to the theory of vector spaces, linear transformations, matrix representations, eigenvalues, and eigenvectors.

PREREQUISITE(S): MAT 202, or instructor's permission

MAT 265 DIFFERENTIAL EQUATIONS 3 CREDITS

The primary emphases in this course are on techniques of problem solving and applications. Topics include first, second and higher order differential equations, series methods, approximations, systems of differential equations, and Laplace transforms.

PREREQUISITE(S): MAT 203, or instructor's permission

MAT 280 DISCRETE MATHEMATICS 3 CREDITS

This course is designed to introduce some of the mathematical abstractions and formal structures used in computer science and more advanced mathematics courses. Topics include logic, mathematical induction, elementary set theory, relations and functions, combinatorics counting, and graph theory. Applications are drawn from computer science.

PREREQUISITES: MAT 201 or 125, and one course in a computer language

MAT 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

MAT 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

MEDICAL LABORATORY TECHNOLOGY

HPR 112 PHLEBOTOMY 8 CREDITS

Teaches the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. Students will have experience with quality control, infection control and safety procedures as well as laboratory computer systems. Students successfully completing this course may apply for a National Phlebotomy Registry Examination.

MLT 120 CLINICAL ASSISTANT CORE MODULE 2 CREDITS

MLT 120 is the Core Module for the Clinical Assistant Certificate. Topics covered include laboratory safety and regulations, quality control, basic specimen collection, reagent preparation and laboratory medical terminology.

This course is not eligible for financial aid.

MLT 131 INTRODUCTION TO HEMATOLOGY 2 CREDITS

MLT 131 is designed as an introduction course to hematology for MLT students and a complete Hematology module for the Clinical Assistant. Basic manual hematology test and basic instrumentation theory are covered. OSHA safety and an introduction to phlebotomy are also included.

COREQUISITE(S): BIO 201

MLT 132 HEMATOLOGY II 4 CREDITS

MLT 132 is the continued section of Hematology for the MLT students. Advanced Hematology theory and disease correlation are covered. OSHA safety, phlebotomy and instrumentation are continued, cell differentials, other manual Hematology testing and coagulation are also included.

PREREQUISITE(S): MLT 131 or instructor's permission

COREQUISITE(S): BIO 201

**MLT 141 IMMUNOLOGY/
IMMUNOHEMATOLOGY**
4 CREDITS

Basic principles of immunology are discussed with serological techniques practiced and observed in the clinical laboratory also covered. In addition basic theories of Immunohematology (Blood Banking) such as ABO and Rh typing are taught and experienced in the student laboratory.

PREREQUISITE(S): BIO 201, MLT 131, 132 or instructor's permission

COREQUISITE(S): BIO 202

MLT 142 URINALYSIS 2 CREDITS

MLT 142 is designed for both MLT and Clinical Assistant (CA) students. Introduction to kidney functions and basic principles of urinalysis with complete urinalysis procedures are discussed and performed. Basic description and recognition of Body Fluids is also included.

COREQUISITE(S): BIO 201 or 202

**MLT 180 INTERNSHIP/BLOOD
BANK I** 1 CREDIT

Presents the clinical internship rotation in one or two blood banking facilities or lab. Student attends for 40 hours per week. Additional practice of blood bank principles and procedures, experience with automated instrumentation and exposure to clinical environment provided.

PREREQUISITE(S): MLT 141

**MLT 182 INTERNSHIP II/
HEMATOLOGY,
COAGULATION &
URINALYSIS** 5 CREDITS

Presents the clinical internship rotation in a hematology laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of hematology principles and procedures, experience with automated instrumentation and exposure to clinical environment provided.

PREREQUISITE(S): MLT 131, 132, 142

MLT 231 CLINICAL MICROBIOLOGY
4 CREDITS

A brief introduction to the field of microbiology followed by the more technical aspects of clinical microbiology. Infectious diseases will also be discussed. Specimen types from different anatomical sites will be covered for the culture of bacteria in the clinical laboratory. Use of media for isolation and differential tests for identification of bacteria will be performed in the student laboratory.

PREREQUISITE(S): BIO 201, 202 or instructor's permission

**MLT 232 PARASITOLOGY/
MYCOLOGY** 2 CREDITS

An introduction to protozoa, Helminths and blood tissue parasites with special emphasis on microscopic morphology in the detection and correct identification of parasites. This combined course also includes an introduction to fungi with emphasis on microscopic and culture methods.

PREREQUISITE(S): BIO 201, or instructor's permission

**MLT 241 INTRODUCTION TO
CLINICAL CHEMISTRY**
2 CREDITS

MLT 241 is designed as an introduction course to clinical chemistry for MLT students and a complete chemistry module for Clinical Assistant students. Basic laboratory math, instrumentation, safety and quality control are discussed along with basic theory and result evaluation of electrolytes, kidney function and liver function test.

PREREQUISITE(S): CHE 101 or instructor's permission

MLT 242 CLINICAL CHEMISTRY II
4 CREDITS

MLT 242 is the continued section of clinical chemistry for the MLT student. Advanced clinical chemistry theory, organ functions and disease correlations are covered.

PREREQUISITE(S): CHE 101, MLT 241 or instructor's permission

MLT 243 CLINICAL PRACTICES
1 CREDIT

This course is designed for both MLT and CA students. Common Healthcare practices such as point of care testing, vital signs, capillary blood collection and specimen processing are covered. Additionally, information on Healthcare regulatory agencies, medical ethics and patient services are discussed.

MLT 253 MLT SEMINAR 1 CREDIT

Current laboratory technology topics and employability skills are presented in an online format. Grade determination also includes successful completion of three MLT program Comprehensive Exams and 15 hours of community service.

PREREQUISITE(S): ALL MLT courses

MLT 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

**MLT 280 INTERNSHIP III/CLINICAL
CHEMISTRY** 5 CREDITS

Provides a clinical internship rotation in a chemistry laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of clinical chemistry principles and procedures, experience with automated instrumentation and exposure to clinical environment provided.

PREREQUISITE(S): MLT 241, 242

**MLT 282 INTERNSHIP IV/
MICROBIOLOGY** 5 CREDITS

Provides a clinical internship rotation in a microbiology laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of clinical chemistry principles and procedures, experience with automated instrumentation and exposure to clinical environment provided.

PREREQUISITE(S): MLT 231, 232

MLT 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

MEDICAL OFFICE TECHNOLOGY

**MOT 110 MEDICAL OFFICE
ADMINISTRATION** 4 CREDIT

Introduces the administrative duties specifically used in medical offices.

MOT 125 BASIC MEDICAL SCIENCES I
3 CREDITS

This course introduces the allied health professional to basic anatomy and physiology and pathophysiology. Introductory concepts of chemistry and biology as it applies to healthcare will be discussed as well as an overview of disease and an introduction to pharmacology. The student will learn anatomy and physiology, pathophysiology, and related pharmacology of the immune, musculoskeletal, and digestive systems. Pediatric and geriatric considerations will be integrated throughout the course. This course is a prerequisite for MOT 133 and MOT 135.

PREREQUISITE(S): MOT 178 for HIT students and MOT 102 for MOT students

MOT 132 MEDICAL TRANSCRIPTION
4 CREDITS

Provides basic knowledge, understanding, and skills required to transcribe medical dictation with accuracy, clarity and timeliness, applying the principles of professional and ethical conduct.

MOT 133 BASIC MEDICAL SCIENCES II
3 CREDITS

Teaches the anatomy and physiology, pathophysiology and drug therapy of the cardiovascular, respiratory, and dermatology systems. This course is a follow-on course from MOT123. Students may take MOT125, MOT133, and MOT135 in any order after successfully completing MOT123.

PREREQUISITE(S): MOT 123

**MOT 135 BASIC MEDICAL
SCIENCES III** 3 CREDITS

Covers the anatomy and physiology, pathophysiology and drug therapy of the Renal, Reproductive, Neurological, and Endocrine systems. This course is a follow-on course from MOT123. Students may take MOT125, MOT133, and MOT135 in any order after successfully completing MOT123.

PREREQUISITE(S): MOT 123

**MOT 136 INTRODUCTION TO
CLINICAL SKILLS** 2 CREDITS

Provides hands-on experience with the basic clinical skills required for assisting with patient care. Delivers the theory behind each skill presented as well as proper technique for performing each skill. Includes knowledge and/or performance of blood-borne pathogens/OSHA regulations, medical asepsis, procedural gloving, patient gowning, positioning, and vital sign measurement.

MOT 138 LABORATORY SKILLS**4 CREDITS**

Introduces the student to basic routine laboratory skills and technique for collection, handling and examination of laboratory specimens often encountered in the ambulatory care setting. Emphasizes hands-on experience with lab procedures.

MOT 140 MEDICAL ASSISTING CLINICAL SKILLS**4 CREDITS**

Provides hands on experience with the clinical skills required for assisting with patient care. Delivers the theory behind each skill presented as well as proper technique for performing each skill.

PREREQUISITE(S): Determined by individual program guides.

COREQUISITE(S): Determined by individual program guides.

MOT 142 MEDICAL TRANSCRIPTION II**4 CREDITS**

Uses a simulation approach to build student vocabulary and speed, while providing actual medical transcription of a variety of health care and medical reports at a progressively increasing accuracy and productivity standards.

MOT 180 MEDICAL TRANSCRIPTION INTERNSHIP**3 CREDITS**

Provides supervised placement in a contracted facility for guided experience in the application of knowledge and skills acquired in the classroom.

MOT 181 ADMINISTRATIVE INTERNSHIP**2 CREDITS**

Provides supervised placement in a contracted facility for guided experience and application of knowledge and skill acquired in the classroom. The student assists with a variety of business and billing procedures. Positions are non-paid. Student must have permission by program coordinator to begin internship.

PREREQUISITE(S): Determined by individual program

COREQUISITE(S): Determined by individual program

MOT 182 CLINICAL INTERNSHIP**3 CREDITS**

Provides supervised placement in contracted facility for guided experience in applications of knowledge and skills acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

MOT 183 MEDICAL ASSISTANT INTERNSHIP**5 CREDITS**

Provides supervised placement in contracted facility for guided experience in applications of knowledge and skills acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

MOT 225 MEDICAL PRACTICE MANAGEMENT ISSUES**4 CREDITS**

This course will be a culmination of the knowledge the student has learned in the program. Students will focus their attention on bringing acquired knowledge to issues faced specifically by medical practice managers. Content will include management priorities, principles of practice management, financial, clinical, personal, and service, financial management control, information management systems, marketing, managed care contracting and negotiations, basic business policies of medical office compliance, coding and documentation.

PREREQUISITE(S): Students must have completed 45 of the 61 credits toward the Medical Practice Management degree option or Academic Coordinator permission

MOT 285 INDEPENDENT STUDY**1-6 VARIABLE CREDIT**

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

MORTUARY SCIENCE**MOR 100 INTRO TO FUNERAL SERVICE****3 CREDITS**

This course is designed to provide students with an overview of funeral customs and practices which have lead to our current industry. The course will begin by examining ancient practices of the Egyptians, and will conclude with the practices of post World War II. The course will concentrate on the American History of "undertaking". This course will help students to determine more clearly their level of interest in and aptitude toward this profession.

MOR 210 EMBALMING THEORY I AND LAB**4 CREDITS**

Embalming Theory I is an intensive study of the basic fundamentals of the embalming process including the purpose of embalming, history of embalming, modes of death, signs of death, tests for death, postmortem physical and chemical changes, ethics of embalming, and laws of decomposition. Included are the physical and chemical changes in the dying process and moral and ethical considerations in preparation of human remains. The academic lab portion of this course includes active participation by the student in 5 embalming.

PREREQUISITE(S): BIO 201, 202, MOR 224 and 243 for Track II students

COREQUISITE(S): MOR 224 for Track I students

MOR 215 FUNERAL SERVICE MERCHANDISING**3 CREDITS**

This course presents a study of marketing and merchandising techniques analogous to small business and the funeral profession in particular. The student will have the opportunity to study casket and burial vault construction, pricing methods, merchandising, and sales techniques. The counselor presents goods and services to client families. The course will utilize theory and role playing to convey knowledge and self-confidence. The course will include: basic terminology; financing and pricing; organization and management; personnel management; and specific theories inherent to the funeral service profession.

PREREQUISITE(S): Program admission or BUS-216

COREQUISITE(S): MOR 220

MOR 220 MORTUARY LAW AND COMPLIANCE**3 CREDITS**

This course is designed to provide students with an overview of laws, regulations and ethics in the profession. Major emphasis of this course will deal with government compliance issues such as OSHA, FTC, ADA, and EPA; the definition of legal next-of-kin, the dead human body as "quasi-property", obtaining legal authorizations, and confidentiality.

PREREQUISITE(S): Program admission and BUS 216

COREQUISITE(S): MOR 215

MOR 224 THANATO-MICROBIOLOGY/ PATHOLOGY**4 CREDITS**

Designed to present the basic principles of microbiology, nature and cause of disease, and the pathogenicity associated with specific diseases.

PREREQUISITE(S): Program admission and BIO 201

MOR 225 EMBALMING THEORY II AND LAB**4 CREDITS**

Embalming Theory II is an intensive study beyond the basic skills involved in the embalming process. Topics covered include case analysis, formulating chemical solutions, a complete analysis of the circulatory system, an explanation of the equipment used in the embalming process, and methods of injection and drainage. This course will introduce the student to theoretical practice in the art of embalming by means of case analysis. The academic lab portion of this course includes active participation by the student in 5 embalming.

PREREQUISITE(S): MOR 210

COREQUISITE(S): MOR 230

MOR 230 RESTORATIVE ART AND LAB**4 CREDITS**

Restorative art is defined as "the care of the deceased to recreate natural form and color". This course is an in-depth study of anatomical modeling, forming of expression, and familiarization with instruments, materials, and techniques of restoring human features. These principles and practices will be used in the every day embalming operations in our industry. 45 hours lecture, 30 hours lab.

COREQUISITE(S): MOR 225

**MOR 235 FUNERAL DIRECTING
AND COUNSELING**
3 CREDITS

The total funeral service education environment and counseling aspects will be examined. This will include duties, responsibilities, skills, and ethical obligations. There will be an introduction to various religious, fraternal, and military types of funeralization. An appreciation of care-giving roles in relation to grieving persons will be considered.

PREREQUISITE(S): program admission and PSY 101.

MOR 243 THANATOchemistry
3 CREDITS

To provide the student with the knowledge necessary to safely and effectively utilize potentially harmful chemicals necessary for the sanitation, disinfection, restoration and preservation of dead human remains currently in practice in the funeral service industry.

PREREQUISITE(S): Program admission

MOR 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

MOR 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

**MOR 290 FUNERAL SERVICE
INTERNSHIP** 4 CREDITS

Practical experience in an off-campus funeral service firm as assigned by the Mortuary Science Department. The student will take part in: removals, cosmetizing, restorative art, dressing-casketing, arrangements, visitations, funeral directing, internment procedures, merchandising, office procedures, and general funeral home management.

PREREQUISITE(S): Must have completed all MOR courses.

MULTIMEDIA/ GRAPHIC DESIGN

**MGD 101 INTRODUCTION TO
COMPUTER GRAPHICS**
(FORMERLY GDI 106)
3 CREDITS

Introduces the student to the computer system developed for graphics. The student will learn the hardware and software components for multimedia production. Each student will explore basic computer operations, ergonomics, file management, scanning techniques, archiving capabilities, and utilization of the multimedia department server and internet connection.

**MGD 102 INTRODUCTION TO
MULTIMEDIA**
(FORMERLY GDI 120)
3 CREDITS

Introduces the types of equipment and technical considerations used in multimedia productions and the multimedia professions. It focuses on current types of equipment such as scanners, printers, digital cameras and computers. Students gain hands-on experience in how the technology is utilized for input and output in production and design projects. Over view of software and basic design principles will be explored.

MGD 103 PRODUCTION DESIGN
(FORMERLY GDI 150)
3 CREDITS

Explores the use of tools, computer graphics techniques and design layout principles to produce professional graphic designs. Studies include printing basics, typography and digital color systems. Students use creative thinking to solve communication and design concepts for the output process.

PREREQUISITE(S): MGD 101, MGD 133 or ART 131

COREQUISITE(S): MGD 112, MGD 113

MGD 105 TYPOGRAPHY & LAYOUT
(FORMERLY GDI 105)
3 CREDITS

Covers the creation and production of graphic projects, emphasizing the layout creative design process, problem solving, and research. Provides experience producing thumbnails, roughs and digital layouts emphasizing refined creative typography.

COREQUISITE(S): MGD 101

MGD 111 ADOBE PHOTOSHOP I
(FORMERLY GDI 200)
3 CREDITS

Concentrates on the high-end capabilities of a raster photo-editing software as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 112 ADOBE ILLUSTRATOR I
(FORMERLY GDI 160)
3 CREDITS

Acquaints students with the processes of a vector drawing program on the computer. Students learn how to use the tools to create digital artwork that can be used in web design, print media and digital screen design.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 113 QUARKXPRESS
(FORMERLY GDI 155)
3 CREDITS

Introduces students to QuarkXPress, a digital page layout tool. Students learn how to assemble, organize, manipulate and manage text and graphics to produce a high quality publication. Class discussions and independent projects supplement hands-on classroom work.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 114 ADOBE INDESIGN
3 CREDITS

Introduces students to InDesign, a page layout program which integrates seamlessly with other Adobe design programs. InDesign delivers creative freedom and productivity to DTP. Class discussions and independent projects supplement hands-on classroom work.

PREREQUISITE(S): MGD 101 or instructor's permission

**MGD 117 INTRODUCTION TO VISUAL
COMMUNICATIONS**
(FORMERLY GDI 101)
3 CREDITS

Surveys visual communications, its history and impact on society. A foundation course for graphic design and illustration majors and a survey for non-majors who are interested in the field. Assignments require minimal artistic talent.

MGD 128 MULTIMEDIA HARDWARE
(FORMERLY GDI 240)
3 CREDITS

Teaches the principles and techniques of maintaining, upgrading, and customizing personal computer systems. Emphasis will also be placed on various emerging and established technologies related to graphic computing.

PREREQUISITE(S): MGD 102 or instructor's permission

MGD 133 GRAPHIC DESIGN I
(FORMERLY GDI 103)
3 CREDITS

Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos, and brochures.

MGD 141 WEB DESIGN I
(FORMERLY GDI 260)
3 CREDITS

Introduces the fundamentals of HTML syntax using a simple text editor to create a web page. Web-safe colors and the use of graphic editors will be explored. Students study web aesthetics and intuitive interface design. The course emphasizes file organization and layout including tables and frames.

PREREQUISITE(S): MGD 101 or instructor's permission

**MGD 143 WEB MOTION
GRAPHIC DESIGN I**
(FORMERLY GDI 273)
3 CREDITS

Stresses creation of animated GIF's and dynamic, interactive media for Web applications. Students will learn how to draw objects, create symbols, and assemble motion tweens.

PREREQUISITE(S): MGD 111, MGD 141

MGD 155 LIGHTWAVE I
(FORMERLY GDI 246)
3 CREDITS

Introduces students to LightWave's Modeler program with an emphasis on modeling techniques. It also touches on LightWave's Layout program for setting up scenes with texture maps and lighting. There will also be instruction on how to import models from other programs.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 161 DIRECTOR I
(FORMERLY GDI 270)
3 CREDITS

Examines Macromedia Director, the leading authoring tool for interactive multimedia from the art director's perspective. Students will learn the basics of 2D animation for both computer presentations and the web. Interface design and scene development is emphasized. Hands-on projects include lingo scripts, behaviors, adding sound and digital video to student's movies.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 164 DIGITAL VIDEO EDITING I
(FORMERLY GDI 241)
3 CREDITS

Introduces to digital non-linear video editing. Students will capture, compress, edit, and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles, and motion control; transitions and filters, and special effects are explored.

PREREQUISITE(S): MGD 102 or instructor's permission

MGD 207 ILLUSTRATION I
(FORMERLY GDI 170)
3 CREDITS

Addresses methods and techniques used in the profession of illustration for advertising, brochures, books and other forms of printed communications. Course concentrates on developing expertise in producing line and continuous-tone black-and-white art with emphasis on design and the creation of art for reproduction.

PREREQUISITE(S): ART 121

MGD 208 ILLUSTRATION II
(FORMERLY GDI 206)
3 CREDITS

Addresses methods and techniques used in the illustration profession beyond those covered in Illustration I. Course concentrates on developing expertise in producing color art for reproduction.

PREREQUISITE(S): MGD 207

MGD 209 ILLUSTRATION III
(FORMERLY GDI 207)
3 CREDITS

Continues Illustration II with added emphasis on conceptual development and proficiency in technique.

PREREQUISITE(S): MGD 208

MGD 210 ILLUSTRATION IV
(FORMERLY GDI 208)
3 CREDITS

Covers advanced illustration techniques including manual, computer, and mixed media techniques.

PREREQUISITE(S): MGD 209

MGD 211 ADOBE PHOTOSHOP II
(FORMERLY GDI 259)
3 CREDITS

Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 111. Fundamentals are continuously reinforced as new design techniques are introduced.

PREREQUISITE(S): MGD 111

MGD 212 ADOBE ILLUSTRATOR II
(FORMERLY GDI 251)
3 CREDITS

Enables the student to continue development of electronic drawing skills through practice and use of state of the art illustration software.

PREREQUISITE(S): MGD 112

MGD 213 ELECTRONIC PREPRESS
(FORMERLY GDI 252)
3 CREDITS

Explores in detail the electronic prepress process. Students examine steps for preparing a digital file for trapping, output considerations and proofing techniques. Creating effective electronic designs and efficient use of today's software programs are also covered.

PREREQUISITE(S): MGD 113

MGD 214 MACINTOSH TROUBLESHOOTING FOR DESIGNERS
(FORMERLY GDI 230)
3 CREDITS

Addresses terminology, hardware, graphics software applications, peripherals, and troubleshooting needs of designers who use the Macintosh computer as a production tool.

PREREQUISITE(S): MGD 101 or instructor's permission

MGD 250 EMERGING MULTIMEDIA TECHNOLOGIES
(FORMERLY GDI 271)
3 CREDITS

Provides a broad-based overview of current trends and issues in multimedia development and related industries. The class format will include lectures, readings, demos, discussion, research, projects, and a final student presentation. Course content changes each semester. May include topics such as voice/data/video integration, virtual environments, broadband, streaming media architectures, telco/CATV/satellite technologies, network-based applications, using technology for building community, wireless technology, current thinking in human factors and usability, XML and the semantic web, groupware and collaborative tools, pervasive computing, and others.

PREREQUISITE(S): MGD 128, MGD 161

MGD 256 GRAPHIC DESIGN PRODUCTION
(FORMERLY GDI 180)
3 CREDITS

Provides an opportunity to combine several draw and paint applications into one design and layout class. Students will explore advanced techniques in creating and designing computer art.

PREREQUISITE(S): MGD 101, MGD 105, MGD 133 or ART 131

COREQUISITE(S): MGD 103, MGD 112, MGD 113

MGD 260 GRAPHIC DESIGN PRODUCTION II
(FORMERLY GDI 220)
3 CREDITS

Continues design and production techniques with further instruction in computer file set-up and creation of camera-ready art. Use of black and white and spot color for a variety of design projects.

PREREQUISITE(S): MGD 256

COREQUISITE(S): MGD 111

MGD 262 GRAPHIC DESIGN PRODUCTION III
(FORMERLY GDI 225)
3 CREDITS

Covers advanced study in design and production techniques and processes, including use of full color for publication design and book formats, advertising campaigns, business reply mail, promotional items, and editorial design.

PREREQUISITE(S): MGD 260

MGD 264 DIGITAL VIDEO EDITING II
(FORMERLY GDI 243)
3 CREDITS

Looks at the more complex and advanced techniques of digital video editing. Areas of editing such as masking, filtering, blue/green screening, track mattes, and image mattes will be examined. Students will produce a movie project in this class and discuss practical ways to distribute to various audiences.

PREREQUISITE(S): MGD 111, MGD 164

MGD 268 COMMERCIAL ART BUSINESS
(FORMERLY GDI 256)
2 CREDITS

Presents a guide to freelance work and a study of business practices and procedures unique to commercial art including billing rates, client management, business forms, employee management, taxes, licenses, registration, bid processes and self-promotion. Course may include visits by professionals in the field and discussion of career opportunities and professional organizations.

PREREQUISITE(S): MGD 103, MGD 256

MGD 275 SPECIAL TOPICS
(FORMERLY GDI 275)
1-6 CREDITS

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PREREQUISITE(S): To be determined by the instructor

MGD 278 SEMINAR/WORKSHOP
(FORMERLY GDI 255)
2 CREDITS

Provides students with an experiential learning opportunity.

PREREQUISITE(S): To be determined by the instructor. Must be taken final semester before graduation.

MGD 280 INTERNSHIP **3 CREDITS**

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

PREREQUISITE(S): MGD 112, MGD 113, and MGD 256 with grades of B or better for each class.

**MGD 285 INDEPENDENT STUDY
(FORMERLY GDI 285)**

1-6 CREDITS

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): To be determined by the instructor

**MGD 287 COOPERATIVE EDUCATION
(FORMERLY GDI 290)**

3 CREDITS

Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor will work with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor.

PREREQUISITE(S): To be determined by the instructor. Student must also have a resume and a portfolio to present.

MUSIC

**MUS 100 FUNDAMENTALS OF
MUSIC THEORY 3 CREDITS**

This course is designed to help the beginning music student, or those students with a limited background in music theory. The course focuses upon the basic elements of music, including notation, rhythm, scales, key signatures, intervals, and chords.

MUS 120 MUSIC APPRECIATION

3 CREDITS

Course covers the basic materials of music, musical forms, media genres, and musical periods. Emphasizes the development of tools for intelligent listening and appreciation.

MUS 121 MUSIC HISTORY I

3 CREDITS

Studies the various periods of music history with regard to the composers, aesthetics, forms, and genres of each period. Considers music from the Middle Ages through the Classical period.

MUS 122 MUSIC HISTORY II

3 CREDITS

Continues Introduction to Music History I with a study of music from the early Romantic period to the present.

MUS 125 HISTORY OF JAZZ MUSIC

3 CREDITS

Provides an overview of the history of jazz in America, and to provide basic listening skills for the understanding and appreciation of jazz music.

MUS 131 MUSIC CLASS 2 CREDITS

Applies the fundamentals of music to the voice or specific musical instruments. This course also introduces basic techniques, repertoire, and sight-reading. First year, first term.

MUS 141 PRIVATE INSTRUCTION

1-2 CREDITS

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, first term

PREREQUISITE: Class instruction or permission of the instructor. An additional fee is required.

MUS 142 PRIVATE INSTRUCTION II

1-2 CREDITS

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, second term.

PREREQUISITE: Class instruction or permission of the instructor. An additional fee is required.

MUS 151 ENSEMBLE

1 CREDIT

First year, first term. Rehearses and performs various types of musical literature.

PREREQUISITE: Permission of the instructor.

COREQUISITE: None

MUS 152 ENSEMBLE II

1 CREDIT

Rehearses and performs various types of musical literature. First year, second term.

PREREQUISITE: Permission of the instructor

MUS 241 PRIVATE INSTRUCTION

1 CREDIT

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, first term.

PREREQUISITE: Class instruction or permission of the instructor. An additional fee is required.

MUS 242 PRIVATE INSTRUCTION

2 CREDITS

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, third term.

MUS 251 ENSEMBLE I

1 CREDIT

Description: Rehearses and performs various types of musical literature. Second year, second term.

PREREQUISITE: Permission of the instructor.

MUS 252 ENSEMBLE II

1 CREDIT

Description: Rehearses and performs various types of musical literature. Second year, second term.

PREREQUISITE: Permission of the instructor.

MUS 177 PRIVATE INSTRUCTION—

INSTRUMENTAL 2 CREDITS

Private instruction consists of one thirty-minute lesson per week. Participation in a student performance is required at least once each term.

PREREQUISITE(S): Class instruction or instructor's permission

MUS 275 SPECIAL TOPICS

1-6 VARIABLE CREDIT

Courses on special topics that relate to music. Topics may be of interest to the general population and/or of interest to special populations such as music majors, educators, etc.

MUS 285 INDEPENDENT STUDY

1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

NURSE AIDE

**NUA 101 CERTIFIED NURSE AIDE
HEALTH CARE SKILLS**

4 CREDITS

Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, restorative services, personal care skills, safety and emergency care issues are covered in theory and lab. The student will learn skills that address mental health needs as well as patient/resident/client rights.

This course is not eligible for financial aid

NUA 170 NURSE AIDE CLINICAL

1 CREDIT

Applies knowledge gained from NUA 101 in a clinical setting.

PREREQUISITE(S): Successful completion of NUA 101.

**NUA 171 ADVANCED NURSE AIDE
CLINICAL 1 CREDIT**

NUA 171 prepares the student to move toward more independent functioning in applying knowledge and skills gained in NUA 101 and NUA 170. The student will learn skills that address cultural competency care of the dying patient and organizational skills.

PREREQUISITE(S): Current CPR card. Negative TB test or chest X-ray and immunizations current.

COREQUISITE(S): NUA 101, 170

This course is not eligible for financial aid

NURSING

**NUR 101 PHARMACOLOGY
CALCULATIONS 1 CREDIT**

Introduces the nursing student to the concepts and techniques of dosage calculations and medication administration by a variety of routes. Learners will apply basic math concepts to complex conversion of dosages between and among various systems of weights and volumes. Learners will apply critical thinking skills to the calculation and administration of medications by oral and parenteral (including intravenous) routes of administration.

PREREQUISITE(S): Basic Skills Assessment, Admission to the program and BIO 201 or 202 with a grade of C or better (must be completed within 7 years of application and entry into NUR courses), or instructor's permission

**NUR 106 MEDICAL AND SURGICAL
NURSING CONCEPTS**

7 CREDITS

Introduces the student to the role of the nurse in assessing and meeting the medical and surgical nursing needs of adults across the life span in various health care settings. The student learns nursing concepts to assist the patient in achieving optimal functioning. Knowledge from foundational nursing, the sciences, pharmacology, and nutrition along with the continued integration of mental health and cultural concepts provides foundations for nursing care planning for medical and surgical clients.

PREREQUISITE(S): H120, 112, 170, BIO 201, 202, HWE 100, HPR 205, PSY 101, 235, ENG 121 or instructor's permission

NUR 107 NURSING CONCEPTS AND SKILLS I 4 CREDITS

Introduces the nursing student to applications of critical thinking and the nursing process to provide care to clients in a variety of community and acute care settings. Emphasis is on holistic health care across the health-illness continuum. Introduces learners to the clinical skills essential for the nursing role of care provider including safe and effective clinical environment, skill preparation, implementation and evaluation. Emphasizes use of caring, critical thinking, and communication while completing nursing skills.

PREREQUISITE(S): Basic Skills Assessment.

Admission to the program and BIO 201 or 202 with a grade of C or better (must be completed within 7 years of entry into NUR courses) or instructor's permission

NUR 108 NURSING CONCEPTS & SKILLS II 3 CREDITS

Introduces more complex concepts and behaviors of nursing roles within the context of the nursing process, holistic care and health care. Emphasizes the theoretical and practical aspects of more complex nursing skills required to meet the needs of clients in a variety of settings.

PREREQUISITE(S): NUR 101, 107 or instructor's permission

NUR 111 SOCIALIZATION INTO PRACTICAL NURSING 1 CREDIT

Introduces roles and responsibilities of the graduate Practical Nurse as defined by established standards, including the Colorado Nurse Practice Act. Emphasis is placed on accountability, delegation, and perspectives in health care. Career and job readiness skills are developed.

PREREQUISITE(S): BIO 201, 202, HPR 205, HWE 100, PSY 101, 235, ENG 121, NUR 101, 107, 108, 112, 170 or instructor's permission

NUR 112 BASIC CONCEPTS OF PHARMACOLOGY 2 CREDITS

Introduces the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classifications, and the basic pharmacology of commonly used medications. Emphasis is placed on nursing considerations and client education. Learners will apply knowledge gained in selected clinical settings in caring for clients across the lifespan.

PREREQUISITE(S): NUR 101, 107 or instructor's permission

NUR 117 NURSING CARE OF THE CHILDBEARING FAMILY 3 CREDITS

Provides a foundational course in the nursing care of the childbearing family. The focus is on normal pregnancy, physiologic and psychological changes experienced, and care of the normal newborn. The nursing process is used in identifying and meeting the needs of the childbearing family to facilitate optimal functioning. The impact of psychosocial and cultural values and practices of the childbearing family are explored. Legal and ethical issues are addressed.

PREREQUISITE(S): HWE 100, HPR 205, ENG 121, PSY 101, 235, BIO 201, 202, NUR 107, 108, 101, 112, 170 or instructor's permission

NUR 118 NURSING CARE OF CHILDREN 3 CREDITS

Introduces the role of the nurse in meeting the individual needs of the child from infancy through adolescence in health and illness. Beginning assessment and use of the nursing process, basic growth and development, pathophysiology, nutrition, and relevant emotional, cultural and family concepts are integrated throughout.

PREREQUISITE(S): BIO 201, 202, HPR 205, HWE 100, PSY 101, 235, ENG 121, NUR 101, 107, 108, 112, 170, or instructor's permission

NUR 170 CLINICAL 2 CREDITS

Offers the clinical practicum to apply the related nursing theory.

PREREQUISITE(S): NUR 101, 107 or instructor's permission

NUR 171 CLINICAL II 1 CREDIT

Offers the clinical practicum to apply the related nursing theory.

PREREQUISITE(S): NUR 101, 107, 108, 112, 170, BIO 201, 202, HWE 100, HPT 205, PSY 101, 235, ENG 121 or instructor's permission

NUR 175 SPECIAL TOPICS 1-6 CREDITS

This course provides students with a vehicle to pursue in depth exploration of special topics of interest.

NUR 178 SEMINAR: TRANSITION PN TO RN 1 CREDIT

Introduction to selected concepts related to the role of the AD nurse as a provider of care, teacher, manager, client advocate and member of the profession. Emphasis is placed on application of critical thinking in providing and managing comprehensive care in a variety of health care settings with clients across the lifespan. This course is designed to assist the Licensed Practical Nurse with the transition into the practice of professional nursing.

PREREQUISITE(S): Admissions to the PN-RN advanced placement option, PSY 101, 235, ENG 121, BIO 201, 202, HPR 205 or instructor's permission

NUR 185 INDEPENDENT STUDY 1-3 VARIABLE CREDIT

Structured and guided, individualized study that is organized and tailored around the interest and needs of the individual student.

PREREQUISITE(S): Instructor's permission

NUR 206 ADVANCED CONCEPTS OF MEDICAL-SURGICAL NURSING I 5 CREDITS

Focuses on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the nursing needs of adults across the life span. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various health care settings.

PREREQUISITE(S): NUR 106, 111, 117, 118, 171 or instructor's permission

NUR 210 NURSING CARE OF COMPLEX OBSTETRICAL AND PEDIATRIC CLIENTS 5 CREDITS

Prepares the professional nurse to comprehend and apply advanced concepts in care of the high-risk child bearing family and for children with complex health problems from birth through adolescence. Emphasizes special needs and complications during the perinatal experience and altered functioning, special needs, and disease processes manifested in children. The nursing process is used as a framework to attain optimal levels of maternal-newborn and pediatric health and wellness. Legal and ethical accountability are integrated throughout the course. Critical thinking skills are utilized throughout

PREREQUISITE(S): NUR 106, 111, 117, 118, 171 or instructor's permission

NUR 211 NURSING CARE OF PSYCHIATRIC CLIENTS 5 CREDITS

Develops concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. This course emphasizes communication and caring through the application of the therapeutic relationship and nursing process in the care and treatment of common clinical conditions/disorders.

PREREQUISITE(S): NUR 206,, 272, 288 or instructor's permission

NUR 216 ADVANCED CONCEPTS OF MEDICAL SURGICAL NURSING II 4 CREDITS

Continues to focus on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the complex medical and surgical health care needs of adult clients. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various complex health care situations and settings.

PREREQUISITE(S): NUR 206, 210, 272, 288 or instructor's permission

NUR 217 LEADERSHIP FOR PROFESSIONAL NURSING PRACTICE 2 CREDITS

Socializes the student into the graduate registered nurse role. The focus is on the exploration and analysis of contemporary nursing practice, current trends and issues impacting nursing care delivery. Advanced leadership and management concepts are discussed as part of the nursing role.

PREREQUISITE(S): NUR 206, 210, 272, 288 or instructor's permission

PREREQUISITE(S): NUR 203, PSY 101 or instructor's permission

**NUR 240 MEDICAL/SURGICAL/
PEDIATRIC NURSING II**

6 CREDITS

This course examines the utilization of the nursing process in providing care to adults & children. Content related to the following systems is included: cardiovascular, renal disease, special senses & central nervous system, spinal cord, & burns. The 7 roles of the nurse will be refined. This is a 5 week course which includes 30 hours of lecture & 90 hours caring for adults and/or children and also provides an opportunity to explore various practice settings. These settings may include but are not limited to community based clinics, offices, homes, schools, ambulatory care facilities, extended care facilities, and expanded in-patient sites such as Critical Care Units, Dialysis and GI labs. An opportunity to explore some expanded roles of the nurse will be provided. Note: Students who did not provide care for children in NUR 230 will do so in NUR 240. PREREQUISITE(S): NUR 230, 232 or instructor's permission

**NUR 243 CURRENT ISSUES IN
REGISTERED NURSING**

2 CREDITS

This course focuses on a variety of issues which involve decision making for the new graduate and the Registered Nurse. Content areas include employment skills and job opportunities, the process of delegation versus assignment making and group decision making, the Nurse Practice Act, licensure and role of the Board of Nursing, ethical choices, professional organizations, political processes, and current issues and controversies in Registered Nursing. The content and learning methods provide a theory capstone for the 7 roles of an ACC graduate. 30 lecture hours.

PREREQUISITE(S): NUR 240, or instructor's permission

**NUR 244 THE TRANSITION PROCESS:
FROM STUDENT TO
GRADUATE NURSE**

4 CREDITS

This is the last clinical course of the nursing program. It focuses on student nurse change and adaptation to graduate nurse roles and responsibilities. Student and faculty select clinical internship sites which correlate to individual learning needs and goals for future job placement. The students are mentored 1:1 by staff nurses with faculty supervision on an intermittent basis. The 7 roles of the ACC Nursing Program graduate will be practiced in the "real world" setting. This clinical internship is 180 hours. An additional 45 hours (1 credit) may be elected by the student.

PREREQUISITE(S): All previous courses required in nursing curriculum

**NUR 272 EXPANDED CLINICAL III
1-6 VARIABLE CREDIT**

Offers practical experience and continues to build upon the principles, that are expected to be understood by students in the nursing discipline.

PREREQUISITE(S): NUR 106, 111, 117, 118, 171 or instructor's permission

**NUR 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT**

Courses on Special Topics that relate to Nursing. Topics may be of interest to nursing students or graduates. Useful in meeting license renewal (LPN/RN) requirements. 22 lecture and 15 lab hours.

Prerequisite(S): NUR 205

**NUR 285 INDEPENDENT STUDY:
ADVANCED NURSING
CONCEPTS I**

1-3 VARIABLE CREDIT

Structured and guided, individualized study that is organized and tailored around the interest and needs of the individual student.

PREREQUISITE(S): Instructor's permission

**NUR 288 PRACTICUM: HEALTH
AND PHYSICAL ASSESSMENT
FOR NURSING PRACTICE**

1 CREDIT

Develops skills of nursing assessment across the life span using effective communication, interview techniques and beginning physical assessment. The course develops critical thinking skills in assessment, data analysis and derivation of actual/potential health needs.

PREREQUISITE(S): NUR 106, 111, 117, 188, 171 or instructor's permission

**NUR 289 CAPSTONE:
COMPREHENSIVE NURSING
INTERNSHIP**

2-3 VARIABLE CREDIT

Facilitates transition from student to graduate nurse through application of nursing principles and skills in an area of health care delivery. Critical thinking, life long learning, nursing process, caring, collaboration, and health teaching and promotion are emphasized.

PREREQUISITE(S): Successful completion of preceding nursing program course work or program director permission.

COREQUISITE(S): Successful completion of concurrent nursing program coursework or program director permission.

PARALEGAL

PAR 110 LEGAL ANALYSIS 3 CREDITS
A basic course in legal authority and analysis.

**PAR 115 INTRODUCTION TO LAW
3 CREDITS**

Provides an understanding of the role of paralegals, issues facing paralegals, the working of the legal system, and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

PAR 116 TORTS 3 CREDITS

A basic course in tort law, including negligence, intentional torts and strict liability with an emphasis on personal injury litigation.

PAR 117 FAMILY LAW 3 CREDITS

This course covers domestic law, common property, dissolutions, adoptions, legal separation, and other family law issues.

PAR 118 CONTRACTS 3 CREDITS

This course covers the basic principles of contract law.

PAR 125 PROPERTY LAW 3 CREDITS

This course covers real estate law, ownership, sale, leasing, financing and government regulation of land.

PAR 202 EVIDENCE 3 CREDITS

Course is designed to introduce students to State and Federal Rules of Evidence, and application to the trial process.

PREREQUISITE(S): PAR 115, or with permission of instructor

**PAR 203 CIVIL LITIGATION
3 CREDITS**

This course covers the beginning of the civil litigation process from the perspective of the paralegal, including jurisdiction, pleadings, interviewing, and investigation.

**PAR 204 CIVIL LITIGATION II
3 CREDITS**

This course covers the trial phase of the civil litigation process from the perspective of the paralegal, including discovery, trial management, jury instructions, exhibits, and post trial issues.

PREREQUISITE(S): PAR 203

PAR 205 CRIMINAL LAW 3 CREDITS

Introduces basic concepts of criminal law and criminal procedure, including Colorado statutes and Rules of Procedure.

PREREQUISITE(S): PAR 115, or instructor's permission

**PAR 206 BUSINESS ORGANIZATIONS
3 CREDITS**

Study of the major types of business organizations.

PREREQUISITE(S): PAR 115, or instructor's permission

PAR 208 PROBATE AND ESTATES
3 CREDITS

The course provides an understanding of the creation and administration of an estate, including wills and trusts, and the probate process.

PREREQUISITE(S): PAR 115, or instructor's permission

PAR 210 LEGAL RESEARCH AND WRITING
3 CREDITS

A course in topical legal research and writing.

PREREQUISITE(S): PAR 110, 115, ENG 121 or instructor's permission

PAR 215 ALTERNATIVE DISPUTE RESOLUTION
3 CREDITS

This course will introduce the students to Negotiation, Mediation, Arbitration and other forms of dispute resolution.

PREREQUISITE(S): PAR 115 or instructor's permission

PAR 216 EMPLOYMENT LAW
3 CREDITS

Provides an understanding of current legal issues in the area of employer/employee relationships.

PREREQUISITE(S): PAR 115, or instructor's permission

PAR 217 ENVIRONMENTAL LAW
3 CREDITS

This course covers state and federal laws concerning the environment, including chemical safety laws, workplace safety, and hazardous waste.

PAR 218 BANKRUPTCY LAW
3 CREDITS

This course covers the federal and state laws and procedures involving bankruptcy.

PREREQUISITE(S): PAR 115, or instructor's permission

PAR 226 SECURITIES LAW
3 CREDITS

This course covers federal and state laws governing regulation and registration of securities.

PREREQUISITE(S): PAR 115, PAR 206 or instructor's permission

PAR 228 INTELLECTUAL PROPERTY
3 CREDITS

This course covers the federal and state laws regarding intellectual property.

PAR 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

PAR 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

PAR 287 COOPERATIVE EDUCATION
1-6 VARIABLE CREDIT

Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor will work with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor.

PAR 289 PARALEGAL CAPSTONE
3 CREDITS

Emphasizes a synthesis of the information and skills that students learned throughout their paralegal studies.

PREREQUISITE(S): All required courses in certificate and AAS degree programs.

PHARMACY TECHNICIAN

PHT 102 PHARMACY CALCULATIONS AND TERMINOLOGY
1 CREDIT

This course will provide the student with a math prereview necessary for pharmaceutical calculations. This course will also expose the student to common pharmacy symbols and terminology, as well as, the metric system.

PHT 111 ORIENTATION TO PHARMACY
2 CREDITS

This module orients students to the work of pharmacy technicians and the context in which technician's work is performed. Students will learn the concept of pharmaceutical care and technician's general role in its delivery. The development of new drug products is discussed as well as a variety of issues that touch on attitudes, value and beliefs of success for pharmacy technicians. Students gain an appreciation for the value of obtaining technician certification, and the benefits of technicians active involvement in local, state, and national pharmacy organizations.

PHT 112 PHARMACY LAW
1.5 CREDITS

The students are introduced to the profound influence that drug laws, standards, and regulations have on practice. Students learn to abide by the laws, regulations and standards which govern the preparation and dispensing of drugs.

PHT 113 PHARMACY CALCULATIONS AND TERMINOLOGY
1.5 CREDITS

This course will provide the pharmacy technician student with a math preview necessary for pharmaceutical calculations and necessary pharmaceutical terminology.

PHT 115 PHARMACOLOGY OF THE GI, RENAL, REPRODUCTIVE, IMMUNE, DERMATOLOGIC AND HEMATOLOGIC SYSTEMS
3 CREDITS

This course will present the basic concepts of normal body function and the changes caused by disease. Focus will be on the gastrointestinal, pharmacology of the GI, renal, reproductive, immune, dermatologic and hematologic systems. The student will learn basic concepts of pharmacology, the diseases affecting the systems listed above, and the drugs used in treating diseases of these systems.

PHT 116 INSTITUTIONAL PHARMACY
3 CREDITS

This course will give pharmacy technician students exposure to the unique aspects of hospital/home care pharmacy practice. The student learns the proper method for receiving an order, screening it for completeness, and adding any missing information. Students learn current methods for distributing medications. Students learn to compound sterile products according to the appropriate techniques. Students learn techniques to compound cytotoxic and other hazardous drug products. Students will also learn procedures for maintaining pharmacy equipment such as the laminar air-flow cabinet. Students will learn methods of handling hazardous waste sharp, and infection control. This course will prepare the student for the hospital/clinical internship.

PREREQUISITE(S): PHT 111 and PHT 113

PHT 117 COMMUNICATION FOR PHARMACY TECHNICIANS
1 CREDIT

Students learn to communicate in a clear, logical manner at the appropriate level when performing the job responsibilities of a pharmacy technician. Communication skills in interviewing, preparing resumes and employer interviews, as related to pharmacy, will be covered.

PHT 118 PHARMACOLOGY OF THE NERVOUS, ENDOCRINE, MUSCULOSKELETAL
3 CREDITS

This course will present the basic concepts of normal body function and the changes caused by disease. Focus will be on the nervous, endocrine, musculoskeletal, cardiovascular and respiratory systems. The student will learn the basic concepts of pharmacology, the disease affecting the systems listed above, and the drugs used in treating diseases of these systems.

PHT 119 COMMUNITY PHARMACY
3 CREDITS

Students will experience hands on approach to learning the technical aspects of community pharmacy practice. This course teaches the students to receive and screen written medication prescriptions. The skill of drug preparation are taught. Students learn to compound nonsterile products using the correct compounding techniques. Students also learn various methods of inventory control of pharmaceuticals, devices, and supplies including handling their receipt, storage, removal and documenting of these activities. This course will prepare the student for a community clinical internship.

PREREQUISITE(S): PHT 111 and PHT 113

**PHT 170 PHARMACY PRACTICE II
(HOSPITAL CLINICAL)**

4 CREDITS

This course is designed to provide students with hands on experience in an inpatient hospital pharmacy setting within the State of Colorado. Students must complete all didactic course work prior to enrolling for this course. The course involves a minimum of 160 hours including 8 hours of seminar class time and 152 hours of on-the-job work experience. Each student is required to work under the supervision of a licensed pharmacist (i.e. preceptor) who may, in turn, delegate some supervisory and/or training responsibilities to another licensed pharmacist or certified pharmacy technician. During their work time at their hospital pharmacy site, students are expected to participate in the pharmacy practice activities delineated in the Clinical Site Manual provided each student and each preceptor. Such activities include, but are not limited to, dispensing, compounding, inventory handling and control, drug distribution, and the preparation of intravenous (IV) admixture products, chemotherapy products and total parenteral nutrition (TPN) products. Students are also expected to complete daily and weekly reports of their work activities and are required to evaluate both their work site and their preceptor at the conclusion of their clinical rotation. Similarly, each preceptor is asked to complete an evaluation of, and provide a grade for, each student at the completion of the student's rotation. The course instructor is also required to evaluate each student after completing a visit to the student's work site and discussing the student's performance with both the student and his/her preceptor.

PREREQUISITE(S): Permission of Academic Coordinator required to do internship

**PHT 171 PHARMACY PRACTICE III
(COMMUNITY CLINICAL)**

4 CREDITS

This course is designed to provide students with hands on experience in a community pharmacy setting within the State of Colorado. Students must complete all didactic course work prior to enrolling for this course. The course involves a minimum of 160 hours including 8 hours of seminar class time and 152 hours of on-the-job work experience. Each student is required to work under the supervision of a licensed pharmacist (i.e. preceptor) who may, in turn, delegate some supervisory and/or training responsibilities to another licensed pharmacist or certified pharmacy technician. During their work time at their community pharmacy site, students are expected to participate in the pharmacy practice activities delineated in the Clinical Site manual provided each student and each preceptor. Such activities include, but are not limited to, dispensing, compounding, inventory handling and control, drug distribution, processing of third party claims, maintenance of patient profiles and interaction and communication with patients. Students are also expected to complete daily and weekly reports of their work activities and are required to evaluate both their work site and their preceptor at the conclusion of their clinical rotation. Similarly, each preceptor is asked to complete an evaluation of, and provide a grade for, each student at the completion of the student's rotation. The course instructor is also required to evaluate each student after completing a visit to the student's work site and discussing the student's performance with both the student and his/her preceptor.

PREREQUISITE(S): Permission of Academic Coordinator required to do internship

PHT 275 SPECIAL TOPICS

VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

PHT 285 INDEPENDENT STUDY

VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

PHILOSOPHY

PHI 111 INTRO TO PHILOSOPHY

3 CREDITS

Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes the nature and theory of knowledge, freedom, ethics, the future, and religion.

PHI 112 ETHICS

3 CREDITS

Examines human life, experience, and thought in order to discover and develop the principles and values for pursuing a moral existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues.

PHI 113 LOGIC

3 CREDITS

Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem solving skills.

PHI 214 PHILOSOPHY OF RELIGION

3 CREDITS

Focuses on the critical examination of the fundamental concepts, ideas, and implications of religion. Specific topics will include: the nature of God, the varieties of religious experience, argument concerning God's existence, the Problem of Evil, faith and reason, religion and human destiny, and the connection between religion and ethics.

PHI 275 SPECIAL TOPICS

1-6 VARIABLE CREDIT

Students explore in depth significant philosophical topics, movements, or persons in the history of Western philosophy. This study might include, e.g., Plato, Greek philosophy, Hume, periods in the history of philosophy, philosophy and literature, medical ethics, the problem of evil, logical positivism, philosophy of mind, etc. Readings will be selected by the instructor's as appropriate to the topic. Course may be repeated for credit provided topics are not repeated.

PREREQUISITE(S): Prior philosophy class, sophomore standing, or instructor's permission

PHI 285 INDEPENDENT STUDY

1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

PHOTOGRAPHY

PHO 101 PHOTOGRAPHY I

3 CREDITS

This course is an introduction to black and white photography as a fine art medium, and develops skills necessary for basic camera and lab operations.

PHO 102 PHOTOGRAPHY II

3 CREDITS

This course is a further exploration in camera and lab operations with an emphasis on individual creativity. It includes the development of a comprehensive portfolio.

PHO 103 COLOR PHOTOGRAPHY I

3 CREDITS

This course covers fundamentals of color photography such as color theory and light, production, processing and printing of color negatives.

PREREQUISITE(S): PHO 101

PHO 202 PHOTOGRAPHY III

3 CREDITS

This course further explores photography technique with emphasis on history, theory, and assimilation of ideas into the student's creative work. Included is the development of a comprehensive portfolio.

PREREQUISITE(S): PHO 101 and PHO 102 or demonstrated competency

COREQUISITE(S): None

PHO 203 COLOR PHOTOGRAPHY II

3 CREDITS

Designed for students who are approaching a personal style and aesthetic in the medium of color photography. It is an extension of Color Photography I. Personal expression will be stressed through individual critiques.

PREREQUISITE(S): PHO 103

PHO 205 DIGITAL PHOTOGRAPHY I

3 CREDITS

This course provides each student with an introduction to the basic concepts of digital imaging as applied to Photography. With hands-on experience using applicable technology, modern developments will be presented which have led to the present applications of digital imaging which combine traditional photographic ideas with electronic media. The student will have the opportunity to learn how to operate image manipulation software using a variety of scanning equipment, software tools and output devices by executing new assignments and applying these technologies to their photographic process.

PREREQUISITE(S): PHO 101

PHO 206 DIGITAL PHOTOGRAPHY II

3 CREDITS

This course is a continuation of the beginning digital photography class. This class will look at digital photography in terms of design and communication factors including color, visual design, lighting, graphics, and aesthetics.

PREREQUISITE(S): PHO 205 Digital Photography I

PHO 209 LANDSCAPE PHOTOGRAPHY WORKSHOP 2 CREDITS

This class is designed to present participants with both traditional and contemporary approaches to landscape photography. Technical and aesthetic aspects of landscape photography will be discussed through group discussions, a field study, lectures, and print and slide critiques.

PREREQUISITE(S): PHO 101

PHO 211 STUDIO PHOTOGRAPHY 3 CREDITS

This course will explore the creative uses of studio lighting from the perspective of Fine Art Photography with an emphasis on portraiture, three dimensional object photography, and two dimensional collage photography.

PREREQUISITE(S): PHO 101

PHO 275 SPECIAL TOPICS: PHOTOGRAPHY 1-6 VARIABLE CREDIT

This course provides students with a vehicle to pursue in depth exploration of special topics of interest.

PHO 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE: Permission of the Instructor.

PHYSICAL EDUCATION—ACTIVITY CLASSES

PED 100 GOLF 1 CREDIT

A basic course in golf designed for those who have had little or no formal instruction or for those with some experience who are interested in improving some aspect of their game. Instruction will be by certified golf professionals. Driving range, putting green and on course play will be included.

PED 106 TENNIS 1 CREDIT

This course is designed to introduce and improve the skill level in tennis. The primary emphasis is teaching students the elements of tennis: rules of the game, groundstrokes, serving, the various shots, and singles and doubles play and strategies.

PED 108 BEGINNING SWIMMING 1 CREDIT

This course is designed to teach the fundamentals of swimming, including the front crawl, elementary backstroke, back crawl, and the fundamentals of treading water. Students may also be introduced to the breaststroke and sidestroke and the basics of turning at a wall. This course is for the non-swimmer or novice swimmer looking to improve aquatic skills.

PED 109 ADVANCED SWIMMING 1 CREDIT

This course is designed to coordinate and refine the major swimming strokes. Students are introduced to the butterfly stroke, open turns and surface dives. Students develop endurance swimming using the primary swimming strokes.

PREREQUISITE(S): PED 108 Beginning Swimming or equivalent.

PED 110 FITNESS CENTER ACTIVITY I 1 CREDIT

This course is designed for individuals interested in improving total fitness via an aerobic circuit training program. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including: flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. Weight machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

PED 111 FITNESS CENTER ACTIVITY II 1 CREDIT

This is an advanced course designed for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. Weight machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

PREREQUISITE(S): PED 110

PED 113 FITNESS CONCEPTS 1 CREDIT

This course is designed for individuals who are seeking information and guidelines for moving toward a more healthy lifestyle. The course will include classroom instruction, an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program utilizing the equipment and exercise options available in the Fitness Center.

PED 115 BODY SCULPTING AND TONING 1 CREDIT

This course is designed to introduce exercise techniques to improve overall physical fitness. The primary emphasis is the interaction between cardiovascular conditioning, muscular strength and endurance, flexibility and program design that are integrated into an aerobic format. Emphasis is placed upon blending together different combinations and sequences of exercises while conditioning the entire body. Students exercise using various types of resistance equipment.

PED 116 WEIGHT TRAINING 1 CREDIT

This course offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasis is placed upon weight training equipment orientation, correct lifting techniques, and basic program design for men and women.

PED 118 INDOOR STATIONARY GROUP CYCLING 1 CREDIT

An indoor stationary group cycling course designed to improve cardiovascular fitness, burn calories and enhance muscular endurance. Designe124d specifically to enhance aerobic work capacity and improve pedalling skills. Each exercise session is choreographed to music and includes a complete workout with a warm-up, endurance and cool-down component.

PED 126 WATER AEROBICS 1 CREDIT

This course offers water exercise to develop physical fitness. In addition, this course offers instruction in a variety of water exercises and vigorous activities to develop cardiovascular and muscular endurance, flexibility and the promotion of body composition management.

PED 129 SCUBA DIVING 1 CREDIT

This course provides basic instruction in scuba diving. This course provides the knowledge and skills related to swimming and snorkeling, diving equipment, communications, the environment, safety, dive tables, and other pertinent information a student needs for safe scuba diving. This course prepares the student for open-water (PADI) certification.

PREREQUISITE(S): Basic Swimming Skills

PED 131 NORDIC SKIING 1 CREDIT

This course is designed to provide students with the fundamental skills of nordic skiing. The emphasis is on skiing technique, conditioning, safety, and equipment. The course has classroom and activity sessions. Conditioning in the fitness center and trips to local ski areas are part of this course.

PED 133 BEGINNING SNOWBOARDING 1 CREDIT

A basic Snowboarding course designed for those who have had little or no prior snowboarding experience. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the college. For purposes of instruction, students will be assigned to small groups based on their present snowboarding ability. All on-snow instruction will be by certified ski instructors employed by the ski area.

PED 134 ADVANCED SNOWBOARDING 1 CREDIT

An advanced Snowboarding course designed for those who have had prior snowboarding experience and can link skidded turn with good speed and control on green and blue terrain. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the college. For purposes of instruction, students will be assigned to small groups based on their present snowboarding ability. All on-snow instruction will be by certified ski instructors employed by the ski area.

PREREQUISITE(S): PED 133

PED 135 INTERMEDIATE TENNIS 1 CREDIT

An advanced course in tennis for students who already have playing experience and skill in the basic strokes. Emphasis will be placed on learning the lob, smash, half-volley, serve variations and tennis strategy for singles and doubles.

PREREQUISITE(S): PED 106

PED 136 ADVANCED WEIGHT TRAINING 2 CREDITS

Offers guided instruction and independent practice in weight training for men and women. Students practice various weight training techniques in accordance with their abilities. Emphasizes physiological considerations, equipment orientation, correct lifting techniques, program design, and nutrition. Offers guided instruction and independent practice in weight training for men and women. Students practice various weight training techniques in accordance with their abilities. Emphasizes physiological considerations, equipment orientation, correct lifting techniques, program design, and nutrition.

PED 137 VARSITY SPORTS I, II, III, IV 1 CREDIT (EACH)

Allows the student-athletes an opportunity to participate in a competitive varsity sports program.

PED 141 BEGINNING ALPINE SKIING 1 CREDIT

Designed for students who have little or no prior experience in downhill skiing. The course will consist of a combination of on-the-snow classes at one of the mountain ski areas and classroom sessions at ACC. For purposes of instruction, students will be assigned to small groups based on their present skiing ability. Students must furnish or rent all skiing equipment.

PED 142 ADVANCED ALPINE SKIING 1 CREDIT

An advanced skiing course designed for students who are ready for advanced instruction in parallel skiing. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the College. Students will be divided into small groups and assigned to instructors based on the demonstrated skiing ability. All on-snow instruction will be by certified ski instructors employed by the ski area. Students must furnish or rent all skiing equipment. PREREQUISITE(S): Alpine skiing (PED 141) or intermediate skiing ability

PED 143 TAI CHI I 1 CREDIT

This course is designed to introduce Tai Chi as an expression of understanding of self-control, exercise and self-defense. The primary emphasis is to gain an understanding of the history (origins and changes) of Tai Chi, the movements and their names, application of movements and terminology.

PED 144 TAI CHI II 1 CREDIT

This course will emphasize the instruction of Tai-Chi from a practical and scientific approach with illustrations of applications for each of the movements in daily life. Cardiovascular training, strength and flexibility training, balance and coordination will be integral parts of the Tai-Chi training. In addition psychosocial skills such as meditation, relaxation and self-efficacy will be addressed.

PED 146 MARTIAL ARTS 1 CREDIT

This course is designed to introduce basic martial arts techniques and forms designed to improve the physical and mental capacity of an individual. The primary emphasis is to gain an understanding of the basic philosophies and concepts around the martial arts; the approach to ethics and provides a clear-cut guide for developing a powerful sense of character and will.

PED 147 YOGA 1 CREDIT

This course offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Emphasis is placed on enhancing general health and well-being through the performance of yoga strength, flexibility, balance, relaxation techniques and exercises.

PED 148 YOGA II 1 CREDIT

Concepts of basic yoga are carried into additional areas. Increases awareness of yoga as its physical and mental benefits.

PREREQUISITE(S): Yoga I or permission of instructor

PED 149 SELF DEFENSE-ADVANCED KARATE 1 CREDIT

Advanced Karate is an empty-hand form of self defense using all parts of the body in various blocking, kicking, punching and striking techniques against one or more assailants. The style of Karate taught will be Tae Kwon Do. Based on the results of an initial skills test, each student will be assigned two additional kicks, one additional jump kick, and one pattern. Intermediate sparring and self-defense techniques will be taught. Each student will be assigned a goal that they will strive to achieve by the end of the course.

PREREQUISITE(S): PED 146

PED 200 ADVANCED GOLF 1 CREDIT

Advanced golf is designed for individuals with an advanced level of golfing skills who are interested in improving their game. Driving range, putting green and on-course instruction and play will be included. Use of woods, irons, wedges and putting will be stressed.

PREREQUISITE(S): PED 100

PED 210 FITNESS CENTER ACTIVITY III 1 CREDIT

This is an advanced exercise course designed for individuals interested in attaining a high level of total fitness. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. The primary mode of training will be Aerobic Circuit Training. The circuit training will be supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track available in the Fitness Center.

PREREQUISITE(S): PED 110, 111

PED 211 FITNESS CENTER ACTIVITY IV 1 CREDIT

This is an advanced course designed for individuals interested in attaining a high level of total fitness. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. The primary mode of training will be Aerobic Circuit Training. The circuit training will be supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track available in the Fitness Center.

PREREQUISITE(S): PED 110, 111 and 210

PED 279 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

PED 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

PHYSICAL EDUCATION/OTHER CLASSES

Health, Physical Education and Recreation

PHR 120 ACEP COACHING CERTIFICATE 1 CREDIT

This course will satisfy the CHSAA (Colorado High School Activities Association) Coaching education requirement for those who coach at the high school level but are not certified teachers. The course will cover the following areas: 1) coaching philosophy 2) sport psychology 3) sport pedagogy 4) sport physiology and 5) sport management.

PER 151 LIFE GUARD TRAINING 2 CREDITS

This course is designed to provide the necessary minimum knowledge and skills training for a person to qualify as a non-surf lifeguard. The course content and activities prepare lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies and prevent drowning and other incidents. The course also teaches other skills in individual needs to be a professional lifeguard.

PREREQUISITE(S): Advanced Swimming or equivalent.

PER 232 CARE & PREVENTION OF ATHLETIC INJURIES 2 CREDITS

Focuses on techniques in prevention, care and basic rehabilitation of athletic injury.

PER 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PHYSICAL THERAPIST ASSISTANT

PTA 110 BASIC CARE IN PHYSICAL THERAPY (5 CREDITS)

This course examines the basic patient care skills for the healthcare practitioner. Students will gain an understanding and demonstrate these skills that include; positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, intermittent venous compression, medical terminology, activities of daily living, wheelchair management, architectural barriers, and gait training.

PREREQUISITES: Admission to PTA program or Instructor's Permission

PTA 115 PRINCIPLES AND PRACTICES IN PHYSICAL THERAPY (2 CREDITS)

This course explores the history of the profession of Physical Therapy including its definition, development and areas of practice. The role of the APTA, the physical therapist assistant and the relationship between the physical therapist, PTA and other health care professionals are investigated. Current issues and trends in Physical Therapy including professionalism, ethics, quality assurance, communications and reimbursement issues such as Medicare, Medicaid, Worker's Compensation and commercial insurance are discussed as they relate to the delivery of health care.

PREREQUISITES: None

PTA 120 MODALITIES IN PHYSICAL THERAPY (5 CREDITS)

The theory and principles of physical therapy modalities will be examined. Course includes therapeutic heat and cold, traction, massage and hydrotherapy.

PREREQUISITES: PTA 110

PTA 131 PROFESSIONAL COMMUNICATION I (1 CREDIT)

Introduces Physical Therapist Assistant (PTA) program students to professional communication in their field. The course develops skills in research, medical documentation, and oral presentation of information to others.

PREREQUISITES: None

PTA 135 PRINCIPLES OF ELECTRICAL STIMULATION (2 CREDITS)

This course will investigate the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. This course will help the student understand the electrochemical and physiological effects of electrical stimulation and identify the various forms and applications of ES.

PREREQUISITES: Admission to the PTA program.

PTA 140 CLINICAL KINESIOLOGY (5 CREDITS)

This course will focus upon the science of human motion, theories of biomechanics and muscle/ joint structure and function. Also emphasized are basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PREREQUISITES: PTA 130

PTA 141 PROFESSIONAL COMMUNICATION II (1 CREDIT)

To introduce Physical Therapist Assistant (PTA) program students to professional communication in their field. The course develops skills in conveying instructions to patients and/or subordinates, participating effectively in meetings, abstracts, and conducting self-critiques and peer reviews of on-the-job performance. In addition, the course continues to emphasize research and documentation skills begun in Professional Communication I.

PREREQUISITES: PTA 131

PTA 176 SPECIAL TOPICS: ANATOMICAL KINESIOLOGY (4 CREDITS)

This course focuses on an understanding of anatomical structures of the human body. Includes the composition and adaptability of tissues and the identification and function of the skeletal, muscular and nervous systems as they relate to physical therapy.

PREREQUISITES: Admission to the PTA program or Instructor's Permission

PTA 205 PSYCHOSOCIAL ISSUES IN HEALTH CARE (2 CREDITS)

This course explores the psychosocial aspects of the patient/client and health care practitioner. Recognition of and adjustment for psychological, sociological, educational, cultural, economic and political concerns on the delivery of health care services are investigated. Communication skills and social and advocacy responsibilities of the health care practitioner will be discussed in order to assist the development of a health care practitioner committed to meeting the expectations and needs of the members of society receiving health care services.

PREREQUISITES: None

PTA 230 ORTHOPEDIC ASSESSMENT AND MANAGEMENT (5 CREDITS)

The principles and practices of physical therapy will be examined and understood of the following procedures will be developed: Goniometry, therapeutic exercise, manual muscle testing, gait analysis, orthotics, and prosthetics.

PREREQUISITES: PTA 120

PTA 240 NEUROLOGICAL ASSESSMENT AND MANAGEMENT (5 CREDITS)

The theory and principals of physical therapy will be expanded with an introduction to assessment and management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac and pulmonary conditions.

PREREQUISITES: PTA 230

PTA 251 PROFESSIONAL COMMUNICATIONS III (1 CREDIT)

The course promotes the concepts from Professional Communications II and further develops written and oral communication skills in the professional arena through correct documentation of patient progress based on observations, dictating progress notes, development of resume, job interview skills, portfolios, and an awareness of the national PTA exam.

PREREQUISITES: PTA 141

PTA 275 SPECIAL TOPICS: CLINICAL PATHOPHYSIOLOGY I (2 CREDITS)

This course investigates the pathophysiological changes resulting from disease processes. Course includes the etiology of disease such as trauma, genetic, immunological, inflammatory and degenerative processes. Pathology and pharmacology of musculoskeletal and neurological system diagnoses as they relate to physical therapy is emphasized.

PREREQUISITES: None

PTA 275 SPECIAL TOPICS: CLINICAL PATHOPHYSIOLOGY II (2 CREDITS)

This course investigates the pathophysiological changes resulting from disease processes. Course includes the etiology of disease such as trauma, genetic, immunological, inflammatory and degenerative processes. Pathology and pharmacology of cardiovascular, respiratory, endocrine and chronic pain diagnoses as they relate to physical therapy is emphasized.

PREREQUISITES: None

PTA 278 PTA SEMINAR (2 CREDITS)

This course provides a summary of all coursework, internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PREREQUISITES: PTA 230, PTA 280

PTA 280 PTA INTERNSHIP I (4 CREDITS)

Initial clinical exposure providing hands on of various types of patient practicum skills and techniques. Includes application of basic patient care skills including transfers, range of motion, modalities, bandaging, aseptic techniques, and gait training. Students will demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, geriatric, or outpatient setting will provide supervision.

PREREQUISITES: PTA 120

PTA 281 PTA INTERNSHIP II (5 CREDITS)

The intermediate clinical experience providing hands on of various types of patient practicum skills and techniques learned. Includes continued application of physical therapy procedures of Internship I with the addition of therapeutic exercise, goniometry, manual muscle testing, and motor learning techniques. Students will demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, rehabilitation, outpatient, geriatric, or home health setting will provide supervision. During the internship, the student will present an inservice on a physical therapy related topic.

PREREQUISITES: Successful completion of all PTA curriculum or Instructor's Permission.

PTA 282 PTA INTERNSHIP III
5 CREDITS

Advanced clinical experience providing hands on of various types of patient practicum skills and techniques learned. Students will refine all physical therapy skills in preparation to enter the field as an entry-level physical therapist assistant. This final experience in any physical therapy setting will include independent practice with an assigned caseload under the on-site supervision of a clinical instructor. The student will research and present an in-depth physical therapy case study.

PREREQUISITES: Successful completion of all PTA curriculum or Instructor's Permission.

PTA 285 INDEPENDENT STUDY

This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PHYSICS

PHY 101 BASIC PHYSICS 4 CREDITS

This course teaches basic understanding of the laws of physics. Emphasis is on critical thinking skills which allow the student to apply the laws to a wide variety of fields. Applications are illustrated by demonstrations and simple hands-on exercises which involve careful observation, measurement, analysis, and interpretation of phenomena, allowing the student to draw conclusions based on the laws of physics. In addition, the student learns problem solving techniques in which the basic laws are applied in simple, logical or mathematical ways. A variety of media such as strobe photography, diagrams, graphs and films are used to reinforce understanding of the basic laws and their applications.

PREREQUISITE(S): Student should be familiar with the most basic algebra concepts-elementary algebra should suffice.

PHY 105 CONCEPTUAL PHYSICS
4 CREDITS

This courses provides a conceptual approach to the laws of physics. Topics include mechanics, heat, wave motion, electricity, magnetism, and optics. This course includes laboratory experience.

PHY 111 PHYSICS: ALGEBRA-BASED I
5 CREDITS

Studies include mechanics and heat. This course includes laboratory experience.

PREREQUISITE(S): MAT 160

PHY 112 PHYSICS: ALGEBRA-BASED II
5 CREDITS

Studies electricity and magnetism, light, and modern physics. This course includes laboratory experience.

PREREQUISITE(S): PHY 111

PHY 211 PHYSICS:
CALCULUS-BASED I
5 CREDITS

Studies include mechanics and heat. This course includes laboratory experience.

COREQUISITE(S): MAT 201

PHY 212 PHYSICS:
CALCULUS-BASED II
5 CREDITS

Studies include wave motion, electricity and magnetism, and light. This course includes laboratory experience.

PREREQUISITE(S): PHY 211

PHY 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

To be determined by individual instructor. A specific course description, list of competencies, and topical outline will be developed for each special topics course.

PHY 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE(S): Instructor's permission

POLITICAL SCIENCE

POS 105 INTRODUCTION TO
POLITICAL
SCIENCE 3 CREDITS

This course is a survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments and processes, and international relations.

POS 111 AMERICAN GOVERNMENT
3 CREDITS

Includes the background of the U. S. Constitution; the philosophy of American government; general principles of the Constitution; federalism; civil liberties; public opinion and citizen participation; political parties, interest groups, and the electoral process; and the structure and functions of the national government.

POS 125 AMERICAN STATE AND
LOCAL GOVERNMENT
3 CREDITS

This course is a study of the structure and function of state, county, and municipal governments including their relations with each other and with national government. Colorado government and politics are emphasized.

POS 205 INTERNATIONAL
RELATIONS 3 CREDITS

This course examines of the relationships among modern nation states. Topics include diplomacy, nationalism, ideologies, power and influence, conflict and cooperation, the role of non-state actors, the international economy and theoretical attempts to understand international behavior.

POS 215 CURRENT POLITICAL
ISSUES VARIABLE CREDIT

This course is an in-depth analysis of critical issues in political science. Topics will be determined each term.

POS 225 COMPARATIVE
GOVERNMENT 3 CREDITS

This course is a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups, and governmental institutions.

POS 275 SPECIAL TOPICS
1-6 VARIABLE CREDIT

This course provides students with a vehicle to pursue in depth exploration of special topics of interest.

POS 285 INDEPENDENT STUDY
1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

PSYCHOLOGY

PSY 101 GENERAL PSYCHOLOGY I 3 CREDITS

Scientific study of behavior including motivation, emotion, sexuality, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

PSY 102 GENERAL PSYCHOLOGY II 3 CREDITS

Scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development and social psychology.

PSY 110 CAREER DEVELOPMENT 3 CREDITS

This course assists students in recognizing their career potential, and provides tools for making realistic decisions concerning educational and occupational objectives. This course also helps students develop skills needed for job search, employer search and resume development.

PSY 116 STRESS MANAGEMENT 3 CREDITS

This course identifies the physiological, emotional and behavioral aspects of stress. Techniques of stress reduction and management are explored and applied.

PSY 200 RESEARCH METHODOLOGY 3 CREDITS

A survey of research methods and designs including correlational studies, experimental designs and quasi-experimental designs. Additional topics include evaluations of scientific research, data analysis, report writing, and research ethics.

PREREQUISITE(S): PSY 101 or 102

PSY 226 SOCIAL PSYCHOLOGY 3 CREDITS

This course covers behavior of humans in social settings including attitudes, aggression, conformity, cooperation and competition, prejudice, and interpersonal attraction.

PREREQUISITE(S): 3 hours of general PSY; 3 hours of introductory SOC, or instructor's permission

PSY 235 HUMAN GROWTH AND DEVELOPMENT 3 CREDITS

This course is a survey of human development from conception to death emphasizing physical, cognitive, emotional and psychosocial factors.

PREREQUISITE(S): 3 hours of general PSY or instructor's permission

PSY 238 CHILD DEVELOPMENT 3 CREDITS

This course covers growth and development of the child from conception through the elementary school years, emphasizing physical, cognitive, emotional and psychosocial factors.

PREREQUISITE(S): 3 hrs. general PSY or instructor's permission

PSY 247 CHILD ABUSE AND NEGLECT 3 CREDITS

This course examines the causes and effects of physical, sexual and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

PSY 190-192 COOP EDUCATION CAREER EXPLORATION 3 CREDITS

PSY 290-293 COOP EDUCATION CAREER TRAINING 3 CREDITS

PSY 294-295 COOP EDUCATION CAREER TRAINING 6 CREDITS

PSY 296 COOP EDUCATION CAREER TRAINING 9 CREDITS

PSY 297 COOP EDUCATION CAREER TRAINING 12 CREDITS

See Cooperative Education section for detailed description.

PSY 275 SPECIAL TOPICS: 1-6 VARIABLE CREDIT

This course enables students who have a strong interest in a special psychological topic to pursue the topic through research, field trips, classroom, or laboratory setting.

PSY 285 INDEPENDENT STUDY 1-6 VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

READING

All courses at ACC require students to read materials at college level. The CPT placement test, given when a student enrolls, helps to determine the level at which the student is currently reading. The test results identify the reading class appropriate to the student's present reading level. (The CPT test may be reinforced by a specialized reading test given in the reading class). Students succeed more consistently in all their courses when they develop college level reading skills. Therefore, following the advice of the CPT recommendation is strongly suggested.

REA 060 FOUNDATIONS OF READING 3 CREDITS

The student will learn strategies for vocabulary development, improved reading comprehension and enrichment.

PREREQUISITE(S): CPT reading score 40-61

COREQUISITE(S): ENG 060/090 is recommended

REA 080-089 SPECIAL TOPICS: DEVELOPMENTAL READING VARIABLE CREDIT

Courses offered under this prefix and title would be designed to introduce students to a specialized area of reading skills.

REA 090 COLLEGE PREPARATORY READING 3 CREDITS

The student will apply strategies for improving comprehension, developing vocabulary and increasing rate for reading college textbooks.

PREREQUISITE(S): CPT reading score 62-79

COREQUISITE(S): ENG 060/090 is recommended

REA 112 SPEED READING 2 CREDITS

Designed for the those whose reading test score is 80 or above and who are interested in increasing reading rate of comprehension through computer pacing, reading flexibility, skimming and scanning techniques and general reading theory. Concurrent enrollment in REA 090 or REA 060 is not recommended.

PREREQUISITE(S): CPT reading score 80-120

REAL ESTATE

REE 103 REAL ESTATE PRACTICE AND LAW, PRACTICAL APPLICATIONS, AND CURRENT LEGAL ISSUES 6 CREDITS

This course, in conjunction with REE 104, is designed to meet the educational requirements of the Colorado Real Estate Commission for Associate and Independent Broker licensing. The course introduces the student to the practice of real estate through the study of a common body of knowledge including key terms and concepts in real estate as well as the related federal laws practiced in the majority of states on a national level. The study of the application of laws, rules and standard practices. To develop or enhance students knowledge and awareness of current real estate and real estate related statutes, regulations, important legal issues, developments, and practices.

REE 104 REAL ESTATE CONTRACTS, REGULATIONS, CLOSINGS, RECORDKEEPING 5 CREDITS

This course, in conjunction with REE 103, is designed to meet the educational requirements of the Colorado Real Estate Commission for Associate and Independent Broker. The course is designed to have students prepare and understand Colorado Real Estate Commission approved contracts and understand Colorado real estate regulations. Basic skills necessary to properly close a real estate transaction, including responsibilities from the contract through and after the closing, plus accounting for all funds received and disbursed as well as a comprehensive review of the legal documents prepared by the broker. Proper recordkeeping procedures required by the Real Estate Commission to maintain and account for funds belonging to others. A certificate of completion is issued to students who successfully complete REE 103 and 104.

PREREQUISITE(S): REE 103 or equivalent experience

COREQUISITE(S): REE 103

REE 115 INTRO TO REAL ESTATE 3 CREDITS

The function of the real estate broker; sales techniques, real estate ethics. Course is for those who intend to enter the profession, for salespeople who need a review, and for those desiring a basic knowledge of the real estate business.

REE 118 REAL ESTATE APPRAISAL 4 CREDITS

This course confines its scope to the technique and theory of appraisal as it relates to single family residences with emphasis on market data correlation. REE 118 and REE 119 satisfy the 75 hour educational requirement of the Colorado Real Estate Commission for a State Registered License.

REE 119 UNIFORM STANDARDS/ APPRAISAL (USPAP) 1 CREDIT

The National uniform Standards of Professional Appraisal Practice (USPAP) course is designed to aid appraisers in all areas of appraisal practice seeking competency in ethics and standards. This course is intended to fulfill the 15 hour requirement as established by the Appraisal Qualifications Board (AQB) of the Appraisal Foundation. Students are awarded a Satisfactory/Unsatisfactory for this course. REE 118 and REE 119 satisfy the 75-hour educational requirement of the Colorado Real Estate Commission for a State Registered License.

SOCIOLOGY

SOC 101 INTRO TO SOCIOLOGY I 3 CREDITS

Examines the basic concepts, theories, and principles of sociology, as well as human cultures, social groups, and the social issues of age, gender, class and race.

SOC 102 INTRO TO SOCIOLOGY II 3 CREDITS

Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political, and economic structures.

SOC 205 SOCIOLOGY AND FAMILY DYNAMICS 3 CREDITS

This course will help develop an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural, and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative life styles.

SOC 215 CONTEMPORARY SOCIAL PROBLEMS 3 CREDITS

This course explores current social issues that result in societal problems. It focuses on such issues as: civil liberties, gender discrimination, substance abuse, crime, poverty, and social change.

SOC 218 SOCIOLOGY OF DIVERSITY 3 CREDITS

This course explores the variety of inter group relations; race, nationality, ethnicity, income and other minority classifications. Patterns of prejudice, discrimination, and possible solutions to these issues will be examined.

SOC 275 SPECIAL TOPICS 1-3 CREDITS

This course enables students who have a strong interest in a specific sociological topic i.e, Suicide Prevention, sociology of Nursing, Death & Dying, Gerontology, Juvenile Delinquency, Sociology of Music, etc., to pursue the topic through research, field trips, classroom or laboratory setting.

SOC 190-192 COOP EDUCATION CAREER EXPLORATION 3 CREDITS

SOC 290-293 COOP EDUCATION CAREER TRAINING 3 CREDITS

SOC 294-295 COOP EDUCATION CAREER TRAINING 6 CREDITS

SOC 296 COOP EDUCATION CAREER TRAINING 9 CREDITS

SOC 297 COOP EDUCATION CAREER TRAINING 12 CREDITS

See Cooperative Education section for detailed description.

SOC 299 INDEPENDENT STUDY VARIABLE CREDIT

Course designed to meet the individual needs of students.

PREREQUISITE(S): Instructor's permission

SPANISH

Independent Studies are also available.

SPA 101 CONVERSATIONAL SPANISH I 3 CREDITS

This is the first course in a sequence for beginning students who wish to understand and speak Spanish. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

SPA 102 CONVERSATIONAL SPANISH II 3 CREDITS

This is the second course in a sequence for beginning students who wish to understand and speak Spanish. The material will continue to cover basic conversational patterns, expressions, and grammar.

PREREQUISITE(S): SPA 101 or instructor's permission

SPA 111 SPANISH I 5 CREDITS

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. Note: The order of the topics and the methodology will vary according to the individual texts and instructor's.

SPA 112 SPANISH II 5 CREDITS

Continues Spanish I in the development of functional proficiency in listening, speaking, reading and writing the language. Note: The order of the topics and the methodology will vary according to the individual texts and instructor's.

PREREQUISITE(S): SPA 111 or instructor's permission

SPA 114 FAST-TRACK SPANISH I & II 5 CREDITS

This is an intensive high-beginner course designed to bridge beginning Spanish courses with an intermediate Spanish course. It is designed for students who have studied two years of Spanish in high-school and possess linguistic and cultural knowledge that true beginners do not, but are not ready yet to move to the intermediate level because they need an in-depth review of essential structures.

PREREQUISITE(S): Two years of Spanish in high-school or placement test

SPA 115 SPANISH FOR THE PROFESSIONAL I 3 CREDITS

Designed as an introduction to a working knowledge of the target language, cultural behaviors and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others

PREREQUISITE: College Level Reading

SPA 201 CONVERSATIONAL SPANISH III 3 CREDITS

This is the third course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will cover intermediate level vocabulary, grammar, and expressions.

PREREQUISITE(S): SPA 102 or instructor's permission

SPA 202 CONVERSATIONAL SPANISH IV 3 CREDITS

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level vocabulary, grammar, and expressions.

PREREQUISITE(S): SPA 201 or instructor's permission

SPA 211 SPANISH III 3 CREDITS

Continues Spanish I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the language. Note: The order of the topics and the methodology will vary according to individual texts and instructor's.

PREREQUISITE(S): SPA 112 or instructor's permission

SPA 212 SPANISH IV 3 CREDITS

Continues Spanish I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the language and an introduction to literature. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

PREREQUISITE(S): SPA 211 or instructor's permission

SPA 215 SPANISH FOR THE PROFESSIONAL II 3 CREDITS

Continues SPA 115 in the development of a working knowledge of the target language, cultural behaviors and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others.

SPA 275 SPECIAL TOPICS 1-6 CREDITS

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SPA 285 INDEPENDENT STUDY 1-6 CREDITS

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

PREREQUISITE: Permission of the Instructor

SPEECH

SPE 107 DYNAMICS OF LEADERSHIP 3 CREDITS

This course provides classroom training, discussions, and challenging exercises to develop leadership communication skills. Communication theory and research will be explored through discussions, practical application and experiential learning. This course will provide knowledge and communication tools for people who intend to directly apply their leadership skills and improve their leadership effectiveness in the work place, classroom, and community.

SPE 115 PUBLIC SPEAKING 3 CREDITS

This course combines basic theories of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support, and audience analysis.

SPE 125 INTERPERSONAL COMMUNICATION 3 CREDITS

This course is an examination of communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict negotiation.

SPE 216 ADVANCED PUBLIC SPEAKING 3 CREDITS

This course is a continuation of SPE 115 with special emphasis on informative and persuasive public speaking skills and techniques using longer, in-depth speeches. Work in other speech formats may include extemporaneous, impromptu, manuscript, special occasion speeches, and group decision making.

PREREQUISITE(S): SPE 115

SPE 225 ORGANIZATIONAL COMMUNICATION 3 CREDITS

This course is a study of human communication systems and patterns in business and organizational settings. Topics include exploration of leadership strategies, effective managerial communication skills with peers, superiors, and subordinates, and organizational communication environments, networks and goals.

PREREQUISITE(S): SPE 115

SPE 226 ORAL INTERPRETATION 3 CREDIT

This course excites and exposes the student to the potential offered in the reading and performing of great literature such as is found in prose, poetry, and drama.

SPE 275 SPECIAL TOPICS 1-6 CREDITS

This course provides students with a vehicle to pursue in depth exploration of special topics of interest.

SPE 285 INDEPENDENT STUDY 1-6 CREDITS

This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

Prerequisite: Permission of the Instructor

STUDY SKILLS

SEE ACADEMIC ACHIEVEMENT.

STS has been changed to AAA, Academic Achievement

TECHNICAL ENGINEERING

TEC 201 ENGINEERING MATERIALS 3 CREDITS

Investigates the types, properties and behavior of state-of-the-art and advanced materials. Lectures include an introduction to the classifications, properties and behavior of ferrous and nonferrous metals, polymers (plastics), woods, ceramics, and advanced materials.

TEC 205 GEOMETRIC DIMENSIONING AND TOLERANCING 3 CREDITS

This course enables students to interpret and apply geometric dimensioning and tolerancing (GD&T) in machining or drafting. The course covers math formulas, tolerancing systems, modifiers, symbols, datums, and tolerances of form, profile, orientation, runout and location. Students learn the generation of a working drawing is a team effort between design, drafting, manufacturing and quality control.

THEATRE

THE 105 INTRO TO THEATRE ARTS 3 CREDITS

This course includes discussions, workshops, and lectures designed to discover, analyze, and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, criticism, and theory.

THE 110 THEATRE IN DENVER 3 CREDITS

The purpose of this course is to acquaint students with the range of theatre companies and productions in the Denver area. The itinerary is designed to provide the greatest variety of theatrical experiences within the logistical circumstances of a given semester's offerings. Accordingly, students will confront a broad spectrum of dramatic literature performed by various companies in distinct milieus.

THE 111 ACTING I 3 CREDITS

This course covers basic acting techniques and approaches including scene study, improvisation and script analysis. It includes practical application through classroom performance.

THE 112 ACTING II 3 CREDITS

This course continues to explore basic acting techniques and approaches, including scene study, improvisation, and script analysis. It includes practical application through classroom performance.

PREREQUISITE(S): THE 111

THE 116 TECHNICAL THEATRE 3 CREDITS

Description: Introduces hands-on methods of constructing and painting scenery and properties and operating stage lighting. Students also learn the proper procedures of using shop equipment and serving on stage crews.

THE 143 BASIC ACTING TECHNIQUE (STANISLAVSKY SYSTEM). 3 CREDITS

This course offers scene work and acting exercises for people with little or no training or experience in the theatre. The Stanislavsky System of character analysis and development is stressed.

THE 181: AUDITION TECHNIQUES. 1 CREDIT

This course focuses on the selection and preparation of audition materials, including prepared monologues, cold reading and improvisation techniques. Basics of resume preparation are also discussed.

THE 182 PRACTICUM: THEATRE PRODUCTION I VARIABLE 1-3 CREDITS

This course allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage-managing, and administration is available.

THE 183 PRACTICUM: THEATRE PRODUCTION II VARIABLE 1-3 CREDITS

This course allows students to continue to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 211 DEVELOPMENT OF THEATRE I 3 CREDITS

This course surveys the history and evolution of drama from Ancient Greece to the renaissance, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance.

THE 212 DEVELOPMENT OF THEATRE II 3 CREDITS

This course surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance.

THE 275 SPECIAL TOPICS 2 CREDITS

Description: Explores current topics, issues and activities related to one or more aspects of the named discipline.

THE 285 INDEPENDENT STUDY 1-3 CREDITS

Emphasizes structured and guided, individualized study that is organized and tailored around the interests and needs of the individual student.

TRAVEL AND TOURISM

TRA 120 TRAVEL RESERVATIONS 3 CREDITS

Prepares the travel and tourism student to research and plan itineraries. By providing complete product information, codes, printed resources and sample CRS displays, reservation procedures and sales and service techniques, the student will have the necessary information to book air travel, car rentals, hotel accommodations, rail travel and cruises.

TRA 125 AIRLINE RESERVATIONS 2 CREDITS

Prepares the travel and tourism student to research and plan itineraries. By providing complete product information, codes, printed resources and sample CRS displays, reservation procedures and sales and service techniques, the student will have the necessary information to book air travel, car rentals, hotel accommodations, rail travel and cruises.

TRA 128 TRAVEL DESTINATIONS- DOMESTIC 3 CREDITS

Acquaints student with domestic travel destinations. Requires student to plan a travel itinerary to a domestic destination.

TRA 141 LEISURE TRAVEL 3 CREDITS

Presents a comprehensive look at the introduction to tourism. Tours, modes of travel, tourism planning, and tourism development are some of the subjects covered. Also covered are economic and political impacts of tourism along with the environment and social/cultural impacts.

TRA 230 HOME-BASED TRAVEL AGENT 3 CREDITS

Description: Provides a complete overview for becoming a home-based travel agent, the opportunities that exist to get involved in organizing and selling travel on a part-time or full-time basis, and the resources you need for professional organizations, magazines, books and other resources.

TRA 275 SPECIAL TOPICS 1-6 CREDITS

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

WORKFORCE DEVELOPMENT

WFD courses are designed for those students taking classes through ACC's Colorado Center for Professional Development and additional charges may apply. For more information, please contact CCPD at 303-734-3701 or ccpd@arapahoe.edu.

WFD 140 A+ CORE HARDWARE 4 CREDITS

This course teaches students the basic skills to be a computer service technician. Students will learn basic system components, bus architectures, peripheral devices and expansion boards.

PREREQUISITES: None

WFD 141 A+ OPERATING SYSTEMS 4 CREDITS

This course teaches students the basic skills necessary to set up and support the operating systems that run on PCs. Students will learn the Windows architecture, TCP/IP, system administration basics, network printing, and troubleshooting Windows.

PREREQUISITES: None

WFD 150 INTRODUCTION TO CISCO NETWORKING TECHNOLOGIES 3 CREDITS

This course presents important networking fundamentals using the Open Systems Interconnect (OSI) seven layer model concepts; terminology and technologies are explained and illustrated using text and graphics animation.

PREREQUISITES: None

WFD 156 CISCO CVOICE 4 CREDITS

This course is designed to give the student a strong orientation toward Cisco's voice products and the basics of telephony. It covers VoIP, VoFr, and VpATM, and installation and configuration of hardware voice cards in Cisco routers

PREREQUISITES: CNG 259, CNG 265, or instructor's approval

WFD 158 CERTIFIED INFORMATION SYSTEMS SECURITY PROFESSIONAL 4 CREDITS

The Certified Information Systems Security Professional course is designed to train students in the fundamentals of information security. This includes network and physical security and covers security design, implementation, and process review. Students will learn to create an information security plan, implement it, and monitor employees and outside entities for physical and technological attacks.

PREREQUISITES: Cisco CCNA, CCNP, INFOSEC certifications, bachelor's degree, and field experience, or instructor's approval

WFD 160 IMPLEMENTING WINDOWS 2000 PROFESSIONAL AND SERVER 4 CREDITS

This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows 2000 Professional on stand-alone and client computers that are part of a workgroup or domain. In addition, this course provides the skills and knowledge necessary to install and configure Windows 2000 Server to create file, print, Web, and Terminal servers.

PREREQUISITES: CNG 210, CNG 125, or instructor's approval

WFD 161 IMPLEMENTING A WINDOWS NETWORK INFRASTRUCTURE 4 CREDITS

This course is for support professionals who are new to Microsoft Windows® 2000 and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows 2000 Server products

PREREQUISITES: WFD 160, or instructor's approval

WFD 162 IMPLEMENTING AND ADMINISTERING WINDOWS DIRECTORY SERVICES 4 CREDITS

This course is designed to provide students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows® 2000 Active Directory™ directory services. The course also focuses on implementing Group Policy and performing the Group Policy-related tasks that are required to centrally manage users and computers

PREREQUISITES: WFD 161, or instructor's approval

WFD 163 DESIGNING A WINDOWS DIRECTORY SERVICES INFRASTRUCTURE 3 CREDITS

Provides students with the knowledge and skills necessary to design a Windows directory services infrastructure in an enterprise network. Presents strategies to assist the student in identifying the information technology needs of an organization and to design a Windows Active Directory™ structure that meets those needs. Prepares student to take the Microsoft Certified Systems Engineer Exam 70-219

PREREQUISITES: WFD 162, or instructor's approval

WFD 164 DESIGNING A MS WINDOWS 2000 MIGRATION STRATEGY 3 CREDITS

Designing a Microsoft Windows 2000 Migration Strategy provides students with the knowledge and skills necessary to select and design a strategy to migrate from a Microsoft® Windows® NT Server 4.0 directory services infrastructure to a Microsoft Windows 2000 Active Directory™ directory service infrastructure by describing the planning processes and implications involved. Prepares the student to take the Microsoft® Certified Systems Engineer Exam 70-222.

PREREQUISITES: WFD 162 or WFD 163, or instructor's approval

WFD 165 UPDATING SYSTEMS ADMINISTRATOR SKILLS FROM MICROSOFT WINDOWS 2000 TO WINDOWS SERVER 2003 2 CREDITS

This course gives students the knowledge and skills to manage and maintain a Microsoft Windows Server™ 2003 networked environment. It prepares the student to take the Microsoft exam #70-292.

PREREQUISITE: MCSE or MCSA 2000 Certification or instructor's approval

WFD 166 UPDATING SYSTEMS ENGINEER SKILLS FROM MICROSOFT WINDOWS 2000 TO WINDOWS SERVER 2003 3 CREDITS

This course teaches students the knowledge and skills needed to plan and maintain a Microsoft Windows Server™ 2003 networked environment. It prepares students to take the Microsoft exam #70-296.

PREREQUISITE: MCSE Certification or instructor's approval

WFD 167 DESIGNING MICROSOFT EXCHANGE 2000 FOR THE ENTERPRISE 3 CREDITS

This course provides students with the knowledge and skills necessary to design a Microsoft® Exchange 2000 organization for an enterprise environment. It prepares students to take the Microsoft exam #70-225.

PREREQUISITES: CNG 226, or instructor's approval

WFD 169 MASTERING WEB APPLICATION DEVELOPMENT USING MS VISUAL INTERDEV 6 3 CREDITS

This course teaches site developers who perform architectural planning, technology selection, or web site programming tasks how to create enterprise-level web sites that use Component Object Model (COM) components on both the client and the server. Prepares student to take the Microsoft Certified Professional Exam 70-152.

PREREQUISITES: Students should be familiar with the Internet, HTML and web authoring tools, database development tools, ActiveX controls and Java applets, client/server architecture models, email with mail client, or instructor's approval

WFD 170 MANAGING A MICROSOFT WINDOWS SERVER 2003 ENVIRONMENT 4 CREDITS

This course provides students with the knowledge and skills to manage accounts and resources in a Microsoft Windows® Server 2003 environment. It prepares students to take the Microsoft Exam #70-290.

PREREQUISITES: WFD 140, WFD 141, CNG 125, or instructor's approval

WFD 171 MAINTAINING A MICROSOFT WINDOWS SERVER 2003 ENVIRONMENT 3 CREDITS

This course provides students with the knowledge and skills that are needed to effectively maintain server resources, monitor server performance, and safeguard data on a computer running one of the operating systems in the Microsoft Windows® Server 2003 family. It prepares students to take the Microsoft Exam #70-290.

PREREQUISITES: WFD 170, or instructor's approval

WFD 172 IMPLEMENTING A MICROSOFT WINDOWS SERVER 2003 NETWORK INFRASTRUCTURE: NETWORK HOSTS 2 CREDITS

This course provides students with the skills and knowledge necessary to configure Windows-based computer to operate in a Microsoft Windows® Server 2003 networking infrastructure. It prepares students to take the Microsoft Exam #70-291.

PREREQUISITE: CNG 255, CNG 125, WFD 170, or instructor's approval

WFD 173 IMPLEMENTING, MANAGING AND MAINTAINING A MICROSOFT WINDOWS SERVER 2003 NETWORK INFRASTRUCTURE: NETWORK SERVICES 4 CREDITS

This course provides students with the knowledge and skills to implement and manage a Microsoft Windows® Server 2003 network infrastructure. It prepares students to take the Microsoft Exam #70-291.

PREREQUISITES: WFD 172, or instructor's approval

WFD 174 PLANNING AND MAINTAINING A MICROSOFT WINDOWS SERVER 2003 NETWORK INFRASTRUCTURE 4 CREDITS

This course provides students with the knowledge and skills necessary to plan and maintain a Windows Server 2003 network infrastructure. It prepares students to take the Microsoft Exam # 70-293.

PREREQUISITES: WFD 173, or instructor's approval

WFD 175 PLANNING, IMPLEMENTING, AND MAINTAINING A MICROSOFT WINDOWS SERVER 2003 ACTIVE DIRECTORY INFRASTRUCTURE 4 CREDITS

This course provides students with the knowledge and skills to successfully plan, implement and troubleshoot a Microsoft Windows® Server 2003 Active Directory® directory service infrastructure. It focuses on a Windows Server 2003 directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user group, and computer account strategies. Prepares students to take the Microsoft Exam #70-294.

PREREQUISITES: WFD 174, or instructor's approval

WFD 176 DESIGNING A MICROSOFT WINDOWS SERVER 2003 ACTIVE DIRECTORY AND NETWORK INFRASTRUCTURE 4 CREDITS

This course provides students with the knowledge and skills to design a Microsoft Active Directory® directory service and network infrastructure for a Microsoft Windows Server™ 2003 environment. It prepares students to take the Microsoft Exam #70-297.

PREREQUISITES: WFD 174, WFD 175, or instructor's approval

WFD 179 IMPLEMENTING AND MANAGING A MICROSOFT EXCHANGE SERVER 2003 4 CREDITS

This course provides students with the knowledge and skills that are needed to update and support a reliable, secure messaging infrastructure. This infrastructure is used for creating, storing, and sharing information by using Microsoft Exchange Server 2003 in a medium-sized to large-sized (250 to 5,000 seats) messaging environment. This course offers a significant amount of hands-on practices, discussions, and assessments that assist students in becoming proficient in the skills that are needed to update and support Exchange Server 2003.

PREREQUISITE: WFD 170, WFD 174, WFD 175, or instructor's approval

WFD 230 COMPUTER PROGRAMMING INTRODUCTION 3 CREDITS

This course introduces students to computer programming. Students will learn the fundamental concepts and terminology of software application development and develop skills in designing and writing simple computer programs. The course assumes no programming background and provides an overview of the software development process in addition to introducing important programming constructs and methodologies. The course covers such topics as programming language characteristics, integrated development environments, flowcharts, algorithms and pseudocode, variables, operators, conditional statements, looping statements, procedures, error-handling and debugging, object-oriented programming techniques, user interface design, software modeling, and Extensible Markup Language (XML) Web services

PREREQUISITE(S): None

WFD 233 PROGRAMMING WITH THE MICROSOFT.NET FRAMEWORK 3 CREDITS

This course assists students in understanding the Microsoft® .NET Framework. In addition to offering an overview of the .NET Framework and an introduction to key concepts and terminology, the course provides a series of labs, which introduce and explain .NET Framework features that are used to code, debug, tune, and deploy applications.

PREREQUISITE(S): CSC 261 or instructor's approval

WFD 236 XML PROGRAMMING USING JAVA 3 CREDITS

This course teaches students the basics of XML form and syntax, use Java to implement XML web applications, and use XML to pass data between distributed Java applications. Emphasis is placed on writing well-formed and valid XML, parsing techniques and converting Legacy data with XML.

PREREQUISITES: CWB 164, or instructor's approval

WFD 251 MICROSOFT PUBLISHER 5 CREDITS

This course teaches students the basic features of Microsoft Publisher. Students will learn to create multiple-page documents, add graphics, and formatting text

PREREQUISITE(S): None

WFD 252 PHOTOSHOP LEVEL 1 1 CREDIT

This course teaches students to use several tools to select parts of images and move, duplicate, and resize images. Students will also learn to use layers and apply layer effects and filter to create special effects.

PREREQUISITE(S): None

WFD 253 PHOTOSHOP LEVEL 2**1 CREDIT**

This course teaches students to use vector paths for a variety of purposes such as masking, clipping paths, and illustration

PREREQUISITE(S): WFD 252

WFD 254 ILLUSTRATOR LEVEL 1**5 CREDITS**

This course will introduce students to the basics of Adobe® Illustrator®. Students will learn to create complex illustrations and type effects.

PREREQUISITE(S): None

WFD 255 ILLUSTRATOR LEVEL 2**5 CREDITS**

In this course, students will use Adobe® Illustrator® to create dynamic graphics using advanced drawing and editing tools, path editing techniques, filter effects, and masks.

PREREQUISITE(S): WFD 254

WFD 256 ILLUSTRATOR LEVEL 3**5 CREDITS**

This course teaches students to use Adobe® Illustrator® to work with several graphic formats. Students will learn create dynamic effects using patterns and brushes.

PREREQUISITE(S): WFD 255

WFD 257 QUARKXPRESS LEVEL 1**5 CREDITS**

In this course, students will use QuarkXpress to lay out professional quality single and multiple-page documents that include text and graphics, and are designed for professional printing and publications.

PREREQUISITE(S): None

WFD 258 QUARKXPRESS LEVEL 2**5 CREDITS**

In this course, students will build on their existing skills to learn some of the more advanced features of QuarkXpress and techniques to improve workflow

PREREQUISITE(S): WFD 258

WFD 259 PAGEMAKER LEVEL 1**5 CREDITS**

This course teaches students the basic techniques and skills to create newsletters and give them an understanding of how to create professional publications using Adobe PageMaker software.

PREREQUISITE(S): None

WFD 260 PAGEMAKER LEVEL 2**5 CREDITS**

In this course, students will learn advanced techniques such as creating a color advertisement for publication and a catalog with tables in both printed from and as an Acrobat PDF file designed for desktop printing or electronic distribution via the Web.

PREREQUISITE(S): WFD 259

WFD 275 SPECIAL TOPICS**NETWORKING II:****NETWORK+ TEST PREP****1 CREDIT**

This course is a co-requisite of Networking II: Network+ (CNG 125). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 125

WFD 275 SPECIAL TOPICS LINUX+**TEST PREP****1 CREDIT**

Linux+ covers basic installation, operating, and troubleshooting services for the Linux operating system and hardware on workstations and servers. It also covers basic system administration tasks. Prepares the student to take the CompTIA Linux+ certification exam.

COREQUISITE: CIS 235

WFD 275 SPECIAL TOPICS I-NET+**TEST PREP****1 CREDIT**

This course is a co-requisite of i-Net+ (CNG 137). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 137

WFD 275 SPECIAL TOPICS**SECURITY+TEST PREP****1 CREDIT**

This course is a co-requisite of Security+ (CNG 118). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 118

WFD 275 SPECIAL TOPICS SERVER+**TEST PREP****1 CREDIT**

This course is a co-requisite of Server+ (CNG 123). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 123

WFD 275 SPECIAL TOPICS:**MANAGING A MICROSOFT****WINDOWS NETWORK****ENVIRONMENT TEST PREP****1 CREDIT**

This course is a co-requisite of Managing a Microsoft 2000 Network Environment (CNG 215). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 215

WFD 275 SPECIAL TOPICS:**ADMINISTERING A****MICROSOFT SQL SERVER****DATABASE TEST PREP****1 CREDIT**

This course is a co-requisite of Administering a Microsoft SQL Server Database (CNG 227). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 227

WFD 275 SPECIAL TOPICS:**PROGRAMMING A****MICROSOFT SQL SERVER****2000 DATABASE TEST PREP****1 CREDIT**

This course is a co-requisite of Programming a Microsoft SQL Server 2000 Database (CIS 253). It goes further in depth and provides instruction for course exam.

COREQUISITE: CIS 253

WFD 275 SPECIAL TOPICS:**WINDOWS XP****CONFIGURATION TEST****PREP****1 CREDIT**

This course is a co-requisite of Windows XP-CNG 211. It goes further in depth and provides instruction for course exam

COREQUISITE: CNG 211

WFD 275 SPECIAL TOPICS:**INTERCONNECTING CISCO****NETWORK DEVICES TEST****PREP****1 CREDIT**

This course is a co-requisite of Interconnecting Cisco Network Devices + (CNG 259). It goes further in depth and provides instruction for course exam

COREQUISITE: CNG 259

WFD 275 SPECIAL TOPICS:**SECURING CISCO IOS****NETWORK TEST PREP****1 CREDIT**

This course is a co-requisite of Securing Cisco IOS Networks (SECUR) (CNG 244). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 244

WFD 275 SPECIAL TOPICS:**CISCO SECURE FIREWALL****ADVANCED TEST PREP****1 CREDIT**

This course is a co-requisite of Cisco Secure PIX Firewall Advanced (CNG 241). It goes further in depth and provides instruction for course exam.

COREQUISITE: CNG 241

WFD 280 INCREASE THE**PROBABILITY OF WINNING****5 CREDITS**

This course will provide student with the tools and techniques to increase sales ratios. It covers how to sell, improve a sales forecast, reduce cost of sales, and instruct customers on the buying process

PREREQUISITE(S): None

WFD 281 DEVELOPING NEW**BUSINESS****5 CREDITS**

This course offers the opportunity to learn to effectively develop new business through the successes and challenges of prospecting customers.

PREREQUISITE(S): None

**WFD 282 QUALIFICATION AND
BUSINESS VALUE**

1 CREDIT

This course will instruct students on how to increase sales opportunities, reduce cost of sales, assist customers in the purchasing process, and increase the win ratio.

PREREQUISITE(S): None

**WFD 283 SELLING BUSINESS VALUE
TO NEGOTIATE TO A
WIN-WIN**

1 CREDIT

This course provides students with the tools and techniques that will increase win ratios through minimizing loss due to no decision; maximize deal size, and increase margins by minimizing discounting. It discusses the tools and techniques necessary to work through a cost/benefit analysis and negotiations.

PREREQUISITE(S): None

**WFD 284 CUSTOMER CENTRIC
SELLING**

5 CREDITS

This course teaches students the tactical selling skills and practice required to successfully implement the sales process. It covers the sales process, skills management, and management skills of planning, organization, delegation, and economy.

PREREQUISITE(S): None

WFD 285 ERROR MANAGEMENT

1 CREDIT

This course teaches students to use the proper tools to address and solve real situations within the team or department. Students will learn to improve individual operating effectiveness by reducing errors, promote departmental and team effectiveness by reducing errors, understand how “traps” in human nature impede productivity and lead to costly mistakes, learn the tools that can detect, avoid, mitigate and preclude recurrence of factors that contribute to human error

PREREQUISITE(S): None

WFD 286 MEDICAL SPANISH LEVEL 1

1 CREDIT

This course focuses on basic Spanish that the medical professional will need to meet and greet patients. It covers greetings and introductions, common conversations and basic grammar.

**WFD 287 MEDICAL SPANISH
LEVEL 2**

1 CREDIT

This course focuses on basic grammar and sentence structure so students may begin to communicate with patients in Spanish. It includes medical situations such as performing physical, processing and admitting patients. Students act out medical situations in Spanish.

**WFD 288 DIMENSIONS OF
INTERNATIONAL
TERRORISM NOW
CONFRONTING AMERICA**

2 CREDITS

This course will examine the dimensions of International Terrorism now confronting America, post 9/11. The seminar is divided by blocks of lecture and visual aid presentation by experts in their respective fields to assist the student in assessing further educational needs in this area of study. This seminar is designed to enable the student to interpret world events and provide a foundation for terrorism concerns. This seminar is for Government, Military, Law Enforcement, and Private Industry Security Professionals.