

Course Descriptions



— AGRIBUSINESS MANAGEMENT —

ABM 111 - Records and Business Planning I

9 Credits

Guides the student in the collection of necessary information to implement a computerized record keeping system. Discussion will include computer terminology, application software, balance sheet concepts, accounting principals, computerized accounting reports, and business plan components.

ABM 112 - Records and Business Planning II

9 Credits

Focuses on implementing a computerized record keeping system. Emphasis is placed on the application and maintenance of an accurate set of computerized financial records, use of a filing system and compiling a business plan.

ABM 121 - Financial Analysis I

9 Credits

Covers calculating actual enterprise cost analysis to facilitate the development of whole business projected cash flow statements. All facets of record keeping and updating of data will be emphasized, including refining and maintaining of a current accounting system. This course includes the review and revision of business planning goals and objectives.

ABM 122 - Financial Analysis II

9 Credits

Presents business analysis through the development of accurate cost and market value accrual balance sheets for the beginning and ending period. Emphasis will be on the measurement and analysis of changes between the two balance sheets. Analysis will include the preparation of an accrual income statement. Financial ratios will be generated to understand their importance to business analysis. Data generated from an established record keeping system will provide the basis for the development of these accrual financial statements.

— **AGRI-BUSINESS MANAGEMENT** —

ABM 131 Commodity Marketing I

9 credits

Explores the terminology associated with commodity marketing and management of the risks associated with agricultural production and marketing. Discussion will include cash marketing alternatives as well as the basics of utilizing futures and options contracts. Includes the initial steps towards the development of a marketing plan. Continued maintenance of an established record keeping system is a must to provide cost of production data for enterprises. Cost of production figures for all enterprises will be determined. These enterprise calculations will result in the initial establishment of a cost of production trend for all enterprises.

ABM 132 Commodity Marketing II

9 credits

Explores marketing alternatives in greater depth. Price behavior will be analyzed using technical and fundamental analysis. The marketing plan will be completed through the application of local marketing alternatives, futures contracts, option contracts, and price behavior information. Cost of production figures for all enterprises will be calculated. Includes the initial steps toward developing an enterprise trend analysis.

ABM 135 Marketing and Risk Management I

9 credits

Teaches students to conduct marketing research and analysis for the initial steps for developing a marketing plan. The focus will be on defining markets, analyzing competition, identification of products/services, pricing, and customer wants and needs. In addition, added value products and niche markets will be explored. The maintenance, refining, or implementation of systems to provide accurate sales and expense information will be addressed. Sale and expense calculations will result in the establishment of sale/pricing trends for all enterprises along with margin calculations.

ABM 136 Marketing and Risk Management II

9 credits

Develops an overall marketing plan derived from marketing research and analysis conducted in ABM 135. It includes a look at advertising, promotion, e-commerce, and risk management. This will include the maintenance review of existing software used to track sales and cost information. A trend of historical sales and expenses will be implemented.

— **AGRI-BUSINESS MANAGEMENT** —

ABM 137 Web Production/Utilization I

9 credits

Improved understanding and use of the Internet for business productivity. Emphasis will be on understanding and utilizing the tools available and the technical capabilities of the present business in order to develop a web use plan for the business.

ABM 138 Web Production/Utilization II

9 credits

Focus is on the business web use plan. Emphasis will be placed on the improved utilization of the Internet and implementation and refinement of the web use plan relating to business operations and industry.

ABM 141 - Advanced Business Management I

9 Credits

Explores further in-depth financial analysis of the business. Includes a review of existing financial trends and emphasis of pro-forma activities for further analysis of the business. The maintenance of accurate accrual records and historical data provide the data basis for the pro-forma activities and measuring the business performance past and present.

ABM 142 - Advanced Business Management II

9 Credits

Focuses on revision of the business plan on a periodic basis and strengthening of management skills by focusing on the five main sources of risk. The student will be exposed to various methods of finding resource materials needed to keep the business plan current and to manage for the future. The maintenance of accurate accrual records and historical data provides the foundation needed for analysis.

ABM 143 Integrated Management I

9 Credits

Focuses on the research and identification of data and software technology used in the business and industry. In addition to software applications and data use, research will include areas in online opportunities, credit resources and reduction, and managing risks.

ABM 144 Integrated Management II

9 Credits

Focuses on the analysis and evaluation of data and software currently used in the business. The primary focus will be the development of a management plan that incorporates improved use of software and data through the integration of current and/or new software applications.

— **AGRI-BUSINESS MANAGEMENT** —

ABM 151 Rural Business Entrepreneurship I

9 Credits

Guides the student in collection of data necessary for a new venture business plan. Focuses on identifying the components of a business plan, defining the business and markets, identifying customer wants and needs, and analyzing the competition. A technological emphasis in the development of a plan is used.

ABM 152 Rural Business Entrepreneurship II

9 Credits

Focuses on the financial component of the business plan. Emphasizes the development of financial statements, creation of financial projections with support documentation, and identification of finance issues. A technological approach is used.

ABM 153 Leadership/Human Resource Management I

9 Credits

Explores concepts and skills associated with effective leadership and ethics in the business environment. Focus is on concepts relating to leadership management, characteristics of functional teams, stress management, and identification of human resource tools.

ABM 154 Leadership/Human Resource Management II

9 Credits

Focus of this course is the evaluation and analysis of management practices in the current business environment. Concepts in the development of a leadership and evaluation plan will be looked at.

ABM 175 - Young Farmers

4 Credits

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

— ACCOUNTING —

ACC 101 - Fundamentals of Accounting

3 Credits

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.

ACC 115 - Payroll Accounting

3 Credits

Studies federal and state employment 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 payroll laws and actual experience in applying regulations. Students are exposed to computerized payroll procedures.

ACC 121 - Accounting Principles I

4 Credits

Introduces the study of accounting principles for understanding of the theory and logic that underlie procedures and practices. Major topics include the accounting cycle for service and merchandising companies, special journals and 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.

ACC 122 - Accounting Principles II

4 Credits

Continues the study of accounting principles as they apply to partnerships and corporations. Major topics include stocks and bonds, investments, cash flow statements, financial analysis, budgeting, and cost and managerial accounting.
Prerequisite: ACC 121 or equivalent

ACC 125 - Computerized Accounting

3 Credits

Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 132 – Tax Help Colorado

2 Credits

This course prepares the students for preparation of federal and state income tax returns for individuals. Emphasis is placed on form preparation with the use of tax software.

ACC 133 – Individual Income Tax Site Lab

1 Credit

This course allows students to prepare actual federal and state income tax returns for individuals in a real time environment.

— **AGRICULTURE BUSINESS** —

AGB 228 - Agri-Business Management

3 Credits

Provides the student with basic management principles and practical experience in applying principles of economics, business, marketing, and finance to the management of an agri-business operation.

— **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 Archeology

3 Credits

Introduces the science of recovering the human prehistoric and historic past through excavation, analysis, and interpretation of material remains. Includes a survey of the archaeology of different areas of the Old and New Worlds. Also includes 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.

— ART —

ART 107 - Art Education Methods

3 Credits

Focuses on a multimedia approach to teaching art. Emphasizes strong creative presence, philosophy and techniques in drawing, painting, printmaking, and other media.

ART 110 - Art Appreciation

3 Credits

Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology.

ART 111 - Art History: Ancient to Medieval

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: Renaissance to Modern

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

Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 122 - Drawing II

3 Credits

Explores expressive drawing techniques with an emphasis on formal composition, color media and content or thematic development.

Prerequisite: ART 121

— ART —

ART 124 - Watercolor II

3 Credits

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

Prerequisite: ART 121, its equivalent or permission of instructor.

ART 131 - Visual Concepts 2-D Design

3 Credits

Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

ART 150 - Digital Art Foundations I

3 Credits

Explores visual problem solving using digital tools for fine art. Students will learn to draw and paint in a variety of artistic modalities using color and grayscale. Two-dimensional to three-dimensional observation exercises in composition will be explored. Students will develop their skills in gesture and contour drawing, painterly expression and artistic elements while using the computer as an art tool. Use of systematic applications for development and presentation of ideas is practiced using vector and raster software. No computer experience is necessary.

ART 161 - Ceramics I

3 Credits

Introduces traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel.

— ART —

ART 162 - Ceramics II

3 Credits

A continuation of ART 161, this course emphasizes skill, technique and form.

Prerequisite: ART 161

ART 175 - Special Topics

3 Credits

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

ART 208 - Culture Studies

3 Credits

Studies the arts and history of a particular culture at the location of that culture. Students view the arts and architecture of the culture in the historical and spatial contexts for which they were designed and in galleries and museums.

ART 211 - Painting I

3 Credits

Explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting to depict form and space on a two-dimensional surface.

ART 212 - Painting II

3 Credits

Further explores techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

ART 275 - Special Topics

3 Credits

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

— *AUTOMOTIVE TECHNOLOGY* —

ASE 110 - Brakes I

3 Credits

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

Corequisite: ASE 210

ASE 120 - Basic Automotive Electricity

2 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 123, ASE 220, ASE 221, ASE 231

ASE 123 - Automotive Battery, Starting, and Charging Systems

2 Credits

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: ASE 160, ASE 161

Corequisite: ASE 120, ASE 220, ASE 221, ASE 231

ASE 130 - General Engine Diagnosis

2 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 132, ASE 134, ASE 233, ASE 235

ASE 132 - Ignition System Diagnosis and Repair

2 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 130, ASE 134, ASE 233, ASE 235

ASE 134 - Automotive Emissions

2 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 130, ASE 132, ASE 233, ASE 235

— AUTOMOTIVE TECHNOLOGY —

ASE 140 - Suspension and Steering I

3 Credits

Focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components.

Corequisite: ASE 240

ASE 150 - U-joint & Axle Shaft Services

2 Credits

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

Corequisite: ASE 151, ASE 152

ASE 151 - Automotive Manual Transmission/Transaxles & Clutches

2 Credits

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

Corequisite: ASE 150, ASE 152

ASE 152 - Differentials & 4WD/AWD Service

2 Credits

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

Corequisite: ASE 150, ASE 151

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.

Corequisite: ASE 161

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.

Corequisite: ASE 160

— **AUTOMOTIVE TECHNOLOGY** —

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.

Corequisite: 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: ASE 160, ASE 161

Corequisite: ASE 120, ASE 123, ASE 221, ASE 231

ASE 221 - Automotive Body Electrical

4 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 120, ASE 123, ASE 220, ASE 231

ASE 231 - Automotive Computers

2 Credits

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

Prerequisite: ASE 160, ASE 161

Corequisite: ASE 120, ASE 123, ASE 220, ASE 221

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: ASE 160, ASE 161

Corequisite: ASE 130, ASE 132, ASE 134, ASE 235

— **AUTOMOTIVE TECHNOLOGY** —

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: ASE 160, ASE 161

Corequisite: ASE 130, ASE 132, ASE 134, ASE 233

ASE 240 - Suspension and Steering II

3 Credit

Emphasizes lecture and related laboratory experience in diagnosis of service of electronic suspensions and steering systems and their components.

Corequisite: ASE 140

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.

Corequisite: ASE 251

ASE 251 - Automatic Transmission/Transaxle Diagnosis and Assemblies

5 Credits

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.

Corequisite: ASE 250

ASE 265 - Automotive Heating and Air Conditioning

5 Credits

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

— **AMERICAN SIGN LANGUAGE** —

ASL 101 - Basic Sign Language I

3 Credits

Provides students with the basic knowledge of communicating with the deaf community. Students will develop basic vocabulary and conversational skills and will be introduced to aspects for the deaf culture and community.

ASL 102 - Basic Sign Language II

3 Credits

Continues the sequence for students who want to learn basic conversational patterns to communicate with the deaf community. The material covers basic vocabulary and conversational skills, and aspects of the deaf culture and community.

Prerequisite: ASL 101 or permission of instructor.

— **ASTRONOMY** —

AST 101 - Astronomy I

4 Credits

Focuses on the history of astronomy, the tools of the astronomer and the contents of the solar system including the planets, moons, asteroids, comets, and meteoroids. Incorporates laboratory experience.

AST 102 - Astronomy II

4 Credits

Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Incorporates laboratory experience.

— **BIOLOGY** —

BIO 105 - Science of Biology

4 Credits

Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Explores biology as a science - a process of gaining new knowledge - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 106 - Basic Anatomy And Physiology

4 Credits

Focuses on basic knowledge of body structures and function, and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program, Paramedic Program and the Medical Office Technology program.

— **BIOLOGY** —

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. The course includes laboratory experience.

BIO 112 - General College Biology II with Lab

5 Credits

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

BIO 148 - Basic Ecology

4 Credits

Studies the interrelationships between organisms and their environment. Includes population dynamics and the diversity of ecosystems. Laboratory includes field experience.

BIO 154 - Biology of Plants

4 Credits

Focuses on the diversity of plants, the structure and function of plants, the ecology of plants, and human use of plants. Emphasizes seed-producing vascular plants, especially flowering plants. Laboratory and field experience is included.

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, and nervous 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: BIO 111 or pass a placement test.

— **BIOLOGY** —

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: endocrine, 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: BIO 201 or equivalent or permission of instructor.

BIO 204 - Microbiology

4 Credits

Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification, and identification. The laboratory experience includes culturing, identifying, and controlling microorganisms with an emphasis on their role in infectious disease.

Prerequisite: BIO 111 or BIO 201

BIO 211 - Cell Biology

4 Credits

This course is an intensive study of the cell and its organelles. Emphasis will be on the molecular mechanisms involved in cell communication, metabolism, motility, genetics, growth, and reproduction. This course requires hands-on laboratory experience.

BIO 216 - Human Pathophysiology

4 Credits

Focuses on the alterations in physiological, cellular, and biochemical processes, the associated homeostatic responses, and the manifestations of disease. Prior knowledge of cellular biology, anatomy, and physiology is essential for the study of pathophysiology.

Prerequisite: BIO 201, BIO 202 or permission of instructor

— **BUSINESS TECHNOLOGY** —

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 108 - Ten-Key by Touch

1 Credit

Introduces touch control of the ten-key pad. Emphasizes the development of speed and accuracy using proper technique.

BTE 225 - Office Management

3 Credits

Emphasis is placed on functions of the office. Includes office organization, work in the office, office layout, equipment and supplies, procurement and control, work flow, forms design, record storage and retrieval systems, personnel administration and problems, and government control.

BTE 287 - Cooperative Education/Internship

1 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.

— **BUSINESS** —

BUS 115 - Introduction to Business

3 Credits

Focuses on the operation of the American business system. Covers fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities.

BUS 120 - Introduction to E-Commerce

3 Credits

Provides an introduction to electronic commerce-the business trend of the future. Covers definition of e-commerce, technology and software requirements, security issues, electronic payment and marketing strategies. Focuses on what to expect when creating a dot com as well as the business-to-business use of e-commerce.

BUS 216 - Legal Environment of Business

3 Credits

Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 217 - Business Communication & Report Writing

3 Credits

Emphasizes effective business writing and covers letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication.

Prerequisite: ENG 090

BUS 226 - Business Statistics

3 Credits

Focuses on statistical study, descriptive statistics, probability, and the binomial distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation. Intended for the business major. PreRequisite: MAT 090

— **COMPUTER ASSISTED DRAFTING** —

CAD 256 - SolidWorks Basics

6 credits

Examines the basics of SolidWorks software to produce parametric models.

CAD 257 - SolidWorks Intermediate

6 credits

Teaches the student to apply intermediate SolidWorks applications to produce parametric models of parts and assemblies.

Prerequisite: CAD 256, MAT 107

— **CHEMISTRY** —

CHE 101 - Introduction to Chemistry I with Lab

5 Credits

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

Prerequisite: MAT 090 or Corequisite: MAT 090

CHE 102 - Introduction to Chemistry II with Lab

5 Credits

Focuses on introductory organic and biochemistry. Includes the study of hybridization of atomic orbitals for carbon, nomenclature of both organic and biochemical compounds, physical and chemical properties of various functional groups of organic chemistry, and physical and chemical properties of biochemical compounds along with their biochemical pathways. Incorporates laboratory experiments.

Prerequisite: CHE 101 or permission of instructor.

CHE 105 - Chemistry In Context

5 Credits

Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

— CHEMISTRY —

CHE 111 - General College Chemistry I with Lab

5 Credits

Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry and thermochemistry. Covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory and molecular orbital theory. Includes gases, liquids, and solids. Problem-solving skills are emphasized. Incorporates laboratory experiments.

Prerequisite: One year of high school chemistry or equivalent.

CHE 112 - General College Chemistry II with Lab

5 Credits

Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. Emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

Prerequisite: CHE 111

CHE 211 - Organic Chemistry I with Lab

5 Credits

Focuses on compounds associated with the element carbon. Includes structure and reactions of aliphatic hydrocarbons and selected functional group families. Covers nomenclature of organic compounds, stereochemistry, reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry.

Prerequisite: CHE 112

CHE 212 - Organic Chemistry II with Lab

5 Credits

Continues the investigation into the chemistry of carbon-based compounds, their reactions and synthesis. Includes the structure, physical properties, reactivities, and synthesis of organic functional groups not covered in the first semester. Explores functional groups including alcohols, ethers, aromatics, aldehydes, ketones, amines, amides, esters, and carboxylic acids. Includes reactions and reaction mechanisms of aromatic compounds. An introduction to biochemical topics may be included if time permits. Laboratory experiences demonstrate the above concepts and the laboratory techniques associated with organic chemistry.

Prerequisite: CHE 211

— **COMPUTER INFORMATION SYSTEM** —

CIS 118 - Intro PC Applications

3 Credits

Introduces basic computer terminology, file management, and PC system components. Provides an overview of office application software including word processing, spreadsheets, databases, and presentation graphics. Includes the use of a web browser to access the Internet.

CIS 135 - Complete PC Word Processing

3 Credits

Explores a complete array of word processing skills. The skills needed to create, edit, format, and printing documents are covered. Other topics include character, paragraph, and page formats, the use of spelling checkers and thesaurus, hyphenation, tables, mail merge, document design, and graphics.

Prerequisite: CIS 118 or permission of instructor.

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.

PreRequisite: CIS 118 or permission of instructor.

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.

Prerequisite: CIS 118 or permission of instructor.

— **COMPUTER & NETWORKING TECHNOLOGY** —

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.

CNG 109 – Basic Computer Networking

3 credits

Demonstrates problem-solving skills in data communications, telecommunications and networking. Covers workstation operation, wiring and cabling, network construction using a variety of network/internet devices, and configuring and managing server operating systems.

CNG 116 - Microcomputer Hardware

3 credits

Introduces computer hardware. Since hardware depends upon specific software to make it work properly, the course also explores relevant software topics. The course covers taking computers apart, diagnosing and fixing minor problems, and upgrading PCs with new components.

CNG 131 - Network Security Fundamentals

3 credits

Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, e-mail, the Web, directory and file transfer, and wireless data. Common network attacks are introduced. Cryptography basics are incorporated, and operational/organizational security is discussed as it relates to physical security, disaster recovery, and business continuity. Computer forensics is introduced.

CNG 280 - Internship

1 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 business location and with the direct guidance of the instructor.

CNG 289 - Capstone

9 credits

Provides a demonstrated culmination of learning within a given program of study. Prerequisite: CNG 101, CNG 116, CNG 131, CNG 109

— **COMPUTER SCIENCE** —

CSC 160 - Computer Science I: (Java)

4 Credits

Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 161 - Computer Science II: (Java)

4 Credits

Continues the structured algorithm development and problem solving techniques begun in Computer Science I. Enables students to gain experience in the use of data structures and design of larger software projects. Requires intensive computer laboratory experience.

Prerequisite: CSC 160

— **COMMUNICATIONS** —

COM 115 - Public Speaking

3 Credits

Combines the basic theory of speech communication with public speech performance skills. Emphasizes is on speech delivery, preparation, organization, support, and audience analysis.

COM 125 - Interpersonal Communication

3 Credits

Examines the communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

— **COSMETOLOGY** —

COS 103 - Shampoo/Rinses/Conditioners

1 Credit

Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp, and hair disorders. Provides training in a lab or classroom setting.

COS 110 - Introduction to Hair Coloring

2 Credits

Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge, and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 111 - Intermediate I: Hair Coloring

2 Credits

Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 120 - Introduction to Hair Cutting

2 Credits

Introduction to the theory relevant to patron protection, angles, elevations, and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair cutting implements. Focuses on basic hair cutting techniques using all cutting implements. Disinfection, sanitation procedures as they relate to cutting hair.

COS 121 - Intermediate I: Hair Cutting

2 Credits

Focuses on the related facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 130 - Introduction to Hair Styling

2 Credits

Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 131 - Intermediate I: Hair Styling

2 Credits

Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

— **COSMETOLOGY** —

COS 140 - Introduction to Chemical Texture

1 Credit

Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 141 - Intermediate I: Chemical Texture

1 Credit

Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 150 - Laws, Rules and Regulations

1 Credit

Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry. The affects these have on the student, licensed individual, salons and school owners.

COS 160 - Introduction to Disinfection, Sanitation & Safety

2 Credits

Introduces the various methods of disinfection, sanitation, and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 161 - Intermediate I: Disinfection, Sanitation & Safety

1 Credit

Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 203 - Shampoos/Rinses/Conditioners II

1 Credit

Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

— COSMETOLOGY —

COS 210 - Intermediate II: Hair Coloring

2 Credits

Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 211 - Advanced Hair Coloring

2 Credits

Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 220 - Intermediate II: Hair Cutting

2 Credits

Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of hair cutting techniques.

COS 221 - Advanced Hair Cutting

2 Credits

Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 230 - Intermediate II: Hair Styling

2 Credits

Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 231 - Advanced Hair Styling

1 Credit

Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

— COSMETOLOGY —

COS 240 - Intermediate II: Chemical Texture

1 Credit

Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 241 - Advanced Chemical Texture

1 Credit

Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 250 - Management, Ethics, Interpersonal Skills & Salesmanship

1 Credit

Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 260 - Intermediate II: Disinfection, Sanitation & Safety

2 Credits

Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 261 - Advanced Disinfection, Sanitation & Safety

1 Credit

Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

COS 262 - Advanced II: Disinfection, Sanitation & Safety

3 Credits

This course is the extra hours/credits required for the hairstylist program, per State Board of Colorado Barber/Cosmetology Board. Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

— **COSMETOLOGY** —

COS 289 - Special Topics: Cosmetology Preparation for State Board

3 Credits

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

COS 279 - Seminar/Workshop: Cosmetology Occupation

1 Credit

This course provides students with an experiential learning opportunity.

COS 288 - Cosmetology Practicum

4 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.

— **CRIMINAL JUSTICE** —

CRJ 230 - Criminology

3 Credits

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

— **COMPUTER WEB-BASED** —

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 130 - Web Editing Tools

3 Credits

Provides tools used for designing and building Web pages that are easy to use and have a pleasing look. The student will develop Web pages using a web page development program. Use of images, forms, frames, tables, templates and layers will be covered.

— **EARLY CHILDHOOD EDUCATION** —

ECE 101 - Introduction to Early Childhood Education

3 Credits

Provides an introduction to Early Childhood Education. Includes the eight key areas of professional knowledge: Child Growth and Development; Health, Nutrition and Safety; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age 8.

Corequisite: ECE 102

ECE 102 - Introduction to Early Childhood Lab Techniques

3 Credits

Focuses on a classroom seminar and 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. Addresses ages birth through age 8.

Corequisite: 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

Presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety and nutrition issues.

Corequisite: ECE 112

ECE 112 - Intro to Infant/Toddler Lab Techniques

3 Credits

Includes a classroom seminar and 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. Addresses ages prenatal through age 2.

Corequisite: ECE 111

— **EARLY CHILDHOOD EDUCATION** —

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 205 - Nutrition, Health and Safety

3 Credits

Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children. Includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Addresses ages from prenatal through age 8.

ECE 220 - Curriculum Development: Methods and Techniques

3 Credits

Provides an overview of early childhood curriculum development. Includes processes for planning and implementing developmentally appropriate environments, materials and experiences, and quality in early childhood programs.

Prerequisite and Corequisite: ECE 101 or permission of instructor

ECE 225 - Language and Cognition for the Young Child

3 Credits

Examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. Includes observing, planning, facilitating, creative representation, and evaluating strategies within the context of play. Focuses on language, science, math, problem solving and logical thinking. Addresses ages birth through age 8.

ECE 226 - Creativity and the Young Child

3 Credits

Provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Addresses ages birth through age 8.

ECE 240 - Administration of Early Childhood Care and Education Programs

3 Credits

Examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Focuses on the director's administrative skills and role as a community advocate for young children. Addresses ages birth through age 12.

— *EARLY CHILDHOOD EDUCATION* —

ECE 241 - Administration: Human Relations for Early Childhood Education

3 Credits

Focuses on the human relations component of an early childhood professional's responsibilities. Includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships, and community interaction.

ECE 260 - Exceptional Child

3 Credits

Presents an overview of typical and atypical developmental progression. 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. Focuses on ages birth through age 8.

ECE 288 - Practicum: Early Childhood Education

3 Credits

Provides students with advanced field experience opportunities in early childhood education programs.

ECE 289 - Capstone: Early Childhood Education

3 Credits

Incorporates a demonstrated culmination of learning within a given program of study. Prerequisite: Permission of instructor.

— *ECONOMICS* —

ECO 201 - Principles of Macroeconomics

3 Credits

Focuses on the study of the American economy, stressing the interrelationships among 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

Focuses on the consumer, the firm, 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.

— *EDUCATION* —

EDU 221 - Introduction 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. Special interest will be paid to the topic of diversity in the K-12 school system.

— *ENGINEERING GRAPHICS TECH* —

EGT 230 - Drafting and Design I

6 credits

Introduces the concept of multiple part mechanical assembly and detail drawings. Includes cast, machined, welded and purchased parts and operating mechanisms. Covers part call-outs, material lists, drawing organization and appropriate dimension systems such as precision and/or metric applications.

— *ELECTRICITY IND/COMMERCIAL* —

EIC 105 - Basics of AC & DC Electricity

4 credits

Focuses on resistance, current, voltage and power in AC and DC circuits; measurements; computations of series and parallel circuits; circuit analysis and troubleshooting with basic test equipment.

— **EMERGENCY MEDICAL SERVICES** —

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.

Corequisite: HPR 102

EMS 130 - EMT Intravenous Therapy

2 credits

Focuses on cognitive and skill practice as required by Colorado Prehospital Care program for EMT Basic level IV approval. Examines criteria, procedures and techniques for ICV therapy, discusses fluid and electrolyte balance and principles and treatment for shock.

Prerequisite: Basic EMT Certification

EMS 203 - EMT Intermediate I

6 Credits

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

Prerequisite: EMS 125

EMS 205 - EMT Intermediate II

6 Credits

Serves as the second course for EMT Intermediate certification.

Prerequisite: EMS 203

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.

Corequisite: EMS 205 Prerequisite: EMS 203

EMS 282 - EMT Intermediate Internship

2 credits

Provides the EMT- Intermediate with a supervised clinical learning experience that meets or exceeds the requirements for the State of Colorado Department of Public Health and Environment. Enables the student to work with a preceptor for clinical and internship experience to develop an understanding of advanced life support patient care and assessment.

Prerequisite: EMS 205, EMS 270

— ENGLISH —

ENG 060 - Writing Fundamentals

3 Credits

Focuses on paragraph structure and development and introduces the formal essay. Enables the student to 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.

ENG 090 - Basic Composition

3 Credits

Emphasizes critical thinking as students explore writing for specific purposes and audiences. Enables the student to develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development.
PreRequisite: ENG 060 or appropriate placement score.

ENG 115 - Technical English and Communication

3 Credits

Focuses on the written and oral communication needs of students in vocational and technical fields. Enables the student to practice written, oral, reading, reasoning, and interpersonal communication skills in order to become successful (or to remain successful) in the workplace.

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: ENG 090 or appropriate placement score.

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: ENG 121

ENG 221 - Creative Writing I

3 Credits

Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, literary nonfiction) with emphasis on the student's own unique style, subject matter and needs.

— ENGLISH —

ENG 222 - Creative Writing II

3 Credits

Provides continued development of written expression in such forms as poetry, fiction, and/or nonfiction writing.

Prerequisite: ENG 221

ENG 288 - Practicum

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.

— ENGINEERING TECHNOLOGY —

ENT 133 - Intro to Mechanical Design

3 credits

Focuses on industrial design concepts for mass production. Introduces tolerancing, industrial fasteners, economic considerations, and terminology. Incorporates small design projects.

Prerequisite: CAD 256, MAT 107, CAD 257, EIC 105, PHY 105, ENT 133, EGT 230

ENT 256 - Rapid Product Development

4 credits

Enables the student to develop 3D solid models for prototype products using CAD technology. Covers various types of prototyping including stereolithography, selective laser sintering, laminated object manufacturing and CNC.

Prerequisite: CAD 256, MAT 107, CAD 257, EIC 105, PHY 105, ENT 133, EGT 230

— ENVIRONMENTAL SCIENCE —

ENV 101 - Introduction to Environmental Science

4 credits

Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution, and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

— **ENGLISH AS A SECOND LANGUAGE** —

ESL 011 - Basic Pronunciation

3 Credits

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds and common stress and intonation patterns.

Prerequisite: Appropriate placement scores

ESL 021 - Basic Grammar

3 Credits

Assists the student in mastering basic structures in English grammar through oral and written practice.

Prerequisite: Appropriate placement score

ESL 031 - Basic Conversation

3 Credits

Focuses on listening and speaking activities that help the student communicate more competently. Provides practice with pronunciation, vocabulary, and basic grammatical patterns.

Prerequisite: Appropriate placement score

ESL 041 - Basic Reading

3 Credits

Improves comprehension of simple written texts through vocabulary building and reading strategies.

Prerequisite: Appropriate placement score

ESL 051 - Basic Composition

3 Credits

Serves as an open-entry, open-exit course of study from basic to intermediate to advanced (5 levels) in speaking, listening, reading, and writing English.

— ESTHETICS —

EST 110 - Introduction to Facials and Skin Care

3 Credits

Provides a basic understanding of massage manipulations when providing facials and the study of skin in both theory and practical applications. Benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 111 - Intermediate Facials & Skin Care

2 Credits

Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 210 - Advanced Massage & Skin Care

2 Credits

* Provides the student with advanced techniques in massage, skin care, and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 211 - Facial Make-up

1 Credit

Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 212 - Hair Removal

3 Credits

Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

EST 230 - Esthetician Preparation for State Board

3 Credits

Provides preparation for State Boards. Allows the student the opportunity to gain knowledge in the practical and/or written examination required by the Colorado Board of Barber/Cosmetology.

— *ESTHETICS* —

EST 280 - Internship

3 Credits

This course provides students with the opportunity to supplement coursework with practical work experience related to their educational programs. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

EST 285 - Independent Study

6 Credits

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

EST 290 - Professional Development/Continuing Education

3 Credits

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

— *GEOGRAPHY* —

GEO 105 - World Regional Geography

3 Credits

Facilitates an understanding of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Focuses on analysis of interrelationships between developed and developing regions, and the interactions between human societies and natural environments.

— *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: GEY 111 or permission of instructor.

— HISTORY —

HIS 101 - Western Civilization: Antiquity-1650

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: 1650-Present History

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 - US History to Reconstruction

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 Americans 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 - US History since Civil War

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.

— **HEALTH PROFESSIONAL** —

HPR 102 - CPR for Professionals

0.5 Credits

Meets the requirements for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in Emergency Services, Health Care and other professional areas. Material presented in this course is basic patient assessment, basic airway management, rescue breathing, AED use and CPR for infant, children and adult patients.

HPR 106-Law & Ethics for Health Professionals

2 Credits

Introduces student to the study and application medico-legal concepts in medical careers. This course seeks to establish a foundation for ethical behavior and decision making in health professions.

HPR 109 - Assisting with Medication Administration

1 Credit

Addresses routine knowledge and information required by the Professional Household Health Assistant in attending the home-care patient. It is designed to provide information in support of the family and healthcare providers' directions in client self-administered medication in the home setting. It is not designed to teach administration techniques, calculations, or dispensing of drugs to the client in the home, but rather the support skills required in assisted facilitation of self-medication, storage of medications, and trained observation of the patient with monitoring/documentation of patient self-administered medications.

HPR 178 - Medical Terminology

2 Credits

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.

— *HUMANITIES* —

HUM 121 - Humanities: Early Civilizations

3 Credits

Introduces students to the history of ideas that have defined cultures through a study of the visual arts, literature, drama, music, and philosophy. It emphasizes connections among the arts, values, and diverse cultures, including European and non-European, from the Ancient world to 1000 C.E.

HUM 122 - Humanities: Medieval to Modern

3 Credits

Examines written texts, visual arts and musical compositions to analyze and reflect the evolution and confluence of cultures in Europe, Asia and the Americas from 800 C.E. to 1750 C.E.

HUM 123 - Humanities: Modern World

3 Credits

Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples.

— *HEALTH & WELLNESS* —

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.

— *JOURNALISM* —

JOU 105 - Introduction to Mass Media

3 credits

Places the mass media in an historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy.

JOU 106 - Fundamentals of Reporting

3 credits

Introduces newswriting, reporting and interviewing with an emphasis on clarity, accuracy, completeness, timeliness and fairness.

—LAW ENFORCEMENT ACADEMY—

LEA 101 - Basic Police Academy I

6 Credits

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

Prerequisite: Permission of Academy Director

LEA 102 - Basic Police Academy II

12 Credits

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

Prerequisite: Permission of Academy Director

LEA 105 - Basic Law

8 Credits

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

Prerequisite: Permission of Academy Director

LEA 106 - Arrest Control Techniques

3 Credits

Cover the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

Prerequisite: Permission of Academy Director

LEA 107 - Law Enforcement Driving

3 Credits

Covers the skills, knowledge and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions.

Prerequisite: Permission of Academy Director

—LAW ENFORCEMENT ACADEMY—

LEA 108 - Firearms

3 Credits

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

Prerequisite: Permission of Academy Director.

LEA 175-001 - Heartsmart First Aid/CPR

0.5 Credits

This is an eight-hour basic first aid, cardio pulmonary resuscitation (CPR) and biological contamination certification course. Heartsmart First Aid/CPR is an OJC Law Academy curriculum class open to currently employed peace officers and public individuals.

Prerequisite: Permission of the Academy Director.

LEA 175-002 - Command Spanish

1 Credit

This is a 24-hour certification course limited to learning the basic Spanish phrases and questions necessary to communicate certain specific law enforcement protocols. Instruction includes cross-cultural issues pertaining to relationships between non-Spanish-officers and the Latino/Spanish speaking community. Command Spanish for Law Enforcement Officers is an OJC Law Academy curriculum class with outside enrollment limited to currently employed peace officers.

Prerequisite: Permission of the Academy Director.

LEA 175-003 - Oleoresin Capsicum (OC) Pepper Spray

0.5 Credits

This is an eight-hour certification course in the proper use of oleoresin capsicum (OC) defensive spray. OC is an OJC Law Academy curriculum class with outside enrollment limited to currently employed peace officers.

Prerequisite: Permission of the Academy Director.

LEA 175-004 - TASER

0.5 Credits

This is an eight-hour certification course in the proper use of TASER arrest control weapons. TASER training is an OJC Law Academy curriculum class with outside enrollment limited to currently employed peace officers.

Prerequisite: Permission of the Academy Director.

—LAW ENFORCEMENT ACADEMY—

LEA 175-005 - Anti-Bias Policing

0.5 Credits

This is an eight-hour certification course in preventing the patterns and practices of racial profiling and biased based policing. Anti-Bias Policing is an OJC Law Academy curriculum class with outside enrollment limited to currently employed peace officers. Prerequisite: Permission of the Academy Director.

LEA 175-006 - Roadside Sobriety (SFST)

1 Credit

This is a 24-hour certification course presenting the requirements for stopping, approaching, conducting roadside sobriety tests, and the follow-up procedures necessary for adjudication of D.U.I. charges and revocation requirements. SFST is an OJC Law Academy curriculum class with outside enrollment limited to currently employed peace officers. Prerequisite: Permission of the Academy Director.

LEA 175-007 - Career Management

1 Credit

This is a 21-hour course involving methods for finding, securing and maintaining law enforcement employment. Career Management is an OJC Law Academy curriculum class with limited outside enrollment. Prerequisite: Permission of the Academy Director.

— LITERATURE —

LIT 115 - Introduction to Literature I

3 Credits

Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading.

LIT 201 - World Literature to 1600

3 Credits

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds.

LIT 202 - World Literature after 1600

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 205 – Ethnic Literature

3 credits

Focuses on significant texts by ethnic American's including African-American, Native American, Latino/a, and Asian Americans. Emphasizes careful reading and understanding of the cultural and literary elements of the works.

LIT 225 – Intro to Shakespeare

3 credits

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 255 - Children`s Literature

3 Credits

Evaluates the criteria for selecting appropriate literature for children through exploration of genres, age levels, values taught through literature, and the literary and artistic quality of various texts.

— **MANAGEMENT** —

MAN 102 - Business Ethics and Values

1 Credit

Discusses behavior and identifies what is ethical and appropriate behavior and what is not. This course will identify the role of integrity, character, honesty, self-control, self-sacrifice, and core values in developing ethical and effective behavior in the workplace.

MAN 216 - Small Business Management

3 Credits

Examines the elements necessary for the successful formation of a new small business. It 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 226 - Principles of Management

3 Credits

Presents a survey of the principles of management. Emphasis is on the primary functions of planning, organizing, leading and controlling with a balance between the behavioral and operational approach.

— **MARKETING** —

MAR 160 - Customer Service

3 Credits

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.

— MATHEMATICS —

MAT 060 - Pre-Algebra

3 Credits

Further the study of fractions and mixed numbers. Also included are vocabulary, operations and applications of ratio, proportion, percent, area, perimeter, US and metric measures, integers, and an introduction to algebraic expressions and the solution of basic first-degree equations.

Designed for students with an Accuplacer scores of 45 or less.

MAT 075 – Pre-Algebra and Introductory Algebra

5 credits

Concepts from Pre-Algebra which furthers the study of fractions and mixed numbers, included are vocabulary, operations and applications of ratio, proportion, percent, area, perimeter, US and metric measures, integers, and an introduction to algebraic expressions and the solution of basic first-degree equations. Along with concepts from Introductory Algebra which include; first-degree equations, inequalities, formulas, polynomials, factoring polynomials, solving quadratic equations by factoring, coordinate geometry, graphing linear equations and applications. Algebraic fractions and systems of linear equations may be included. Designed for students with an Accuplacer scores of 35 – 45 who want to accelerate through both Pre-Algebra and Introductory Algebra in one semester.

MAT 090 - Introductory Algebra

4 Credits

Includes first-degree equations, inequalities, formulas, polynomials, factoring polynomials, solving quadratic equations by factoring, coordinate geometry, graphing linear equations and applications. Algebraic fractions and systems of linear equations may be included. Designed for students with an Accuplacer scores of 45 -60.

Prerequisite: Successful completion of Math 060 or appropriate placement score.

MAT 099 - Intermediate Algebra

4 Credits

Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing and applications. A graphing calculator or equivalent software may be utilized.

Prerequisite: Successful completion of Math 090 or Accuplacer score of 61-84.

— MATHEMATICS —

MAT 103 - Math for Clinical Calculations

3 Credits

Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topic may include algebra, graphs, measurements and conversion between various
Prerequisite: MAT 090 or appropriate placement score

MAT 107 - Career Math

3 Credits

Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications.
Prerequisite: MAT 060 or appropriate placement score

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 non-linear 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: MAT 099 or Accuplacer score greater than 84.

MAT 122 - College Trigonometry

3 Credits

Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence.
Prerequisite: MAT 121 or equivalent

MAT 123 - Finite Mathematics

4 Credits

Covers topics including functions, matrix algebra, linear programming, and an introduction to probability and counting techniques. Emphasis is on applications. This course may include other topics such as statistics when time permits. This course is primarily intended for business, life science, or social science majors.
Prerequisite: MAT 099 or equivalent

— **MATHEMATICS** —

MAT 125 - Survey of Calculus

4 Credits

Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.

Prerequisite: MAT 121 or equivalent or appropriate placement score

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: MAT 090 or appropriate placement score

MAT 155 - Integrated Math I

3 Credits

Engages students in the concepts of school mathematics, the course will include the recognition of numerical and geometric patterns and their application to a variety of mathematical situations; mathematical problem-solving, reasoning, critical thinking, and communication; algebraic thinking, representation, analysis, manipulation, generalizations and extensions.

Prerequisite: MAT 099 or equivalent competency

MAT 156 - Integrated Math II

3 Credits

Furthers MAT 155 concepts, the course will include fundamentals of probability, statistics, and Euclidean geometry. Mathematical problem-solving, reasoning, critical thinking and communication will continue to be an integral part of this sequence.

Prerequisite: MAT 155

— MATHEMATICS —

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: MAT 121 and MAT 122 or appropriate placement score

MAT 202 - Calculus II

5 Credits

Continuation of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series.

Prerequisite: MAT 201 or appropriate placement score

MAT 203 - Calculus III

4 Credits

Completes the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application.

Prerequisite: MAT 202 or appropriate placement score

MAT 255 - Linear Algebra

3 Credits

Includes vector spaces, matrices, linear transformations, matrix representation, eigenvalues, and eigenvectors.

Prerequisite: MAT 202

MAT 265 - Differential Equations

3 Credits

Emphasizes 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: MAT 202

— **MULTIMEDIA GRAPHIC DESIGN** —

MGD 102 - Introduction to Multimedia

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.

— **MEDICAL OFFICE TECHNOLOGY** —

MOT 132 - Medical Transcription I

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 208 - Introduction to CPT-4 Coding

2 Credits

Teaches basic coding concepts using the CPT-4 coding system for insurance claims. The course will introduce student to the HCFA 1500 form, HCPCS codes, and modifiers to be used for insurance claim filing.

MOT 209 - Introduction to ICD-9 Coding

2 Credits

Covers how to use the ICD-9-CM coding system for insurance claims. The course will introduce student to using the HCFA 1500 form generated from the physician's office.

— *MUSIC* —

MUS 120 - Music Appreciation

3 Credits

Covers the basic materials of music, musical forms, media, genres and musical periods. Emphasizes the development of tools for intelligent listening and appreciation.

MUS 151 - Ensemble I: Choir

1 Credit

Rehearses and performs various types of musical literature. First year, first term.

MUS 152 - Ensemble II: Choir

1 Credit

Rehearses and performs various types of musical literature. First year, second term.

— *NAIL TECHNICIAN* —

NAT 110 - Introduction to Manicures & Pedicures

3 Credits

Provides a basic introduction in the proper use of implements used in manicures and pedicures. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures and pedicures is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 111 - Intermediate Manicures & Pedicures

2 Credits

Presents theory and practical application dealing with different types of manicures, pedicures, nail art and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon clinical setting, using models or customer service. Proper sanitation and sterilization as it pertains to all aspect of manicures, pedicures and nail art is taught.

NAT 210 - Advanced Manicures & Pedicures

2 Credits

Presents theory and practical application dealing with different types of manicures, pedicures massage techniques and nail art. Theory and practical application of procedures, products, nail shapes and maintenance of the natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

— NAIL TECHNICIAN —**NAT 211 - Application of Artificial Nails**

5 Credits

Provides advanced theory and practical application of nail wraps, tip overlays, acrylics and product knowledge to ready the student for employment. Theory and practical application of removal techniques for artificial nails is covered. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to artificial nails is covered.

NAT 230- Nail Technician Preparation for State Board

3 Credits

Provides preparation for State Boards. Allows the student the opportunity to gain knowledge in the practical and/or written examination required by the Colorado Board of Barber/Cosmetology.

NAT 280 - Internship

6 Credits

This course provides students with the opportunity to supplement coursework with practical work experience related to their educational programs. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

NAT 288 - Practicum

10 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.

NAT 290 - Advanced Nail Technician Studies

3 Credits

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

— **NATURAL RESOURCES** —

NRE 251 - General Oceanography I

4 Credits

Provides a comprehensive introduction to modern geological and chemical oceanography. Includes earth history, plate tectonics, geophysics, geochemistry, marine sediments, the hydrosphere, physical properties of salt water, major and minor components of seawater, and ocean-atmosphere interactions. This course includes laboratory experience.

— **NURSING** —

The following Nursing Program courses include a combination of theory, laboratory practice and clinical practice for each course. Students must pass each of the theory, laboratory and clinical portions of each course to receive a passing grade in that course.

Most of the Nursing Program courses are sequential and must be completed successfully before proceeding into the next course.

Theory hours for each course are calculated on a 1:1 credit to contact ratio, laboratory and clinical hours are calculated on a 1:2 credit to contact ratio.

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.

Prerequisite: Admission to the Nursing Program

— **NURSING** —

NUR 106 - Medical and Surgical Nursing Concepts

9 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: Admission to the Nursing Program

NUR 109 - Fundamentals of Nursing

8 Credits

Introduces theories and skills basic to the role of the nurse as provider of care, manager of care and member of the nursing profession. Emphasis is placed on introduction to critical thinking and the nursing process. Students will demonstrate a beginning level of competence in providing therapeutic nursing care for clients with common health alterations across the health continuum.

Prerequisite: Admission to the Nursing Program

NUR 112 - Basic Concepts of Pharmacology

2 Credits

Utilizes nursing process to introduce the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classification, and the basic pharmacology of commonly used medications. Emphasis is placed on therapeutic interventions and client education. Learners will apply knowledge gained in selected clinical settings situations in caring for a diversity of clients across the lifespan health illness continuum.

Prerequisite: Admission to the Nursing Program

— **NURSING** —

NUR 150 - Nursing Care of Obstetric and Pediatric Clients

7 Credits

Provides a family centered approach to professional nursing practice of the childbearing family and children across the health continuum. Emphasis is placed on the care of the perinatal client and children from birth through adolescence. The impact of psychosocial and cultural values and practices are explored. Legal and ethical accountability are integrated throughout the course.

Prerequisite: Admission to the Nursing Program

NUR 169 - Transition to Practical Nursing

5 Credits

Provide the student with a transition into the role of the practical nurse. Emphasis will be placed on distinguishing the practical nurses defined scope of practice related to clinical practice, communication, nursing process, ethical/legal issues and leadership skills. The student practices in the role of the practical nurse in the associated clinical experience.

Prerequisite: Admission to the Nursing Program

NUR 189 - Transition from LPN to ADN

4 credits

Focuses on assisting the LPN to transition into a new role as an Associate Degree Nursing Student. Emphasis will be placed on roles and responsibilities of the ADN, nursing process, critical thinking, legal and ethical issues and nursing practice issues related to specialized skills and the care of special populations. The clinical focus will be care of the pediatric and obstetric client.

Prerequisite: LPN Licensure or permission of Nursing Director

NUR 201 - IV Therapy for LPNs

5 Credits

Provides LPNs with an opportunity to expand their nursing roles by learning appropriate procedures for intravenous therapy and venous blood withdrawal. The course includes lecture, laboratory practice and clinical experiences. The course prepares the student for IV certification under State Board of nursing Guidelines.

Prerequisite: Current License as an LPN in Colorado; current CPR certificate and clinical malpractice insurance.

— NURSING —

NUR 206 - Advanced Concepts of Medical Surgical Nursing I

8 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: Admission to the Nursing Program

NUR 211 - Nursing Care of Psychiatric Clients

4 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: Admission to the Nursing Program

NUR 212 - Pharmacology II

2 Credits

Builds upon the concepts introduced in NUR 112 Pharmacology I regarding the safe administration of medications to clients across the health continuum. Utilizing the nursing process the student demonstrates understanding of the role of the nurse as provider of care, manager of care, and member of the profession. Emphasis is placed upon the therapeutic use of medications in the nursing care of individuals with complex health needs. The student is introduced to the calculation of complex intravenous drip rates. Prerequisite: Admission to the Nursing Program

NUR 216 - Advanced Concepts of Medical Surgical Nursing II

6 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: Admission to the Nursing Program

NUR 230 - Leadership, Management and Trends

5 Credits

Introduces students to current trends in leadership and management concepts affecting the healthcare continuum and the practice of nursing. The student assumes the role of provider, manager of care and member of the discipline at the entry level into professional nursing. There is a practicum for application which may occur across the healthcare continuum, as the student manages groups of clients and health care personnel. The course will facilitate transition from student to the role of the graduate nurse. Prerequisite: Admission to the Nursing Program

— **PHYSICAL EDUCATION** —

PED 100 - Beginning Golf

1 Credit

Introduces 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. Includes driving range, putting green, and on-course play.

PED 101- Baseball

1 Credit

Assesses the student's skill level in baseball. Emphasizes skill testing and game participation.

PED 102 - Volleyball

1 Credit

Introduces and improves student skill level in volleyball. The primary emphasis is on teaching the student the elements of volleyball including rules, offensive and defensive play, passing, serving, setting, attacking, team play and game strategies.

PED 103 - Softball

1 Credit

Introduces and improves skill level in softball. Emphasizes the elements of softball including rules of play, variations of play, equipment, skill technique, and offensive and defensive play and strategies.

PED 105 - Basketball

1 Credit

Introduces basketball and focuses on improving student skill level. Emphasizes teaching the student the elements of basketball rules, offensive and defensive footwork, shooting, passing, dribbling, rebounding, team play, and game strategies.

PED 107 - Soccer

1 Credit

Gives the student the opportunity to gain knowledge and skills in the subject of soccer, including history, governing organizations, laws of the game, skills techniques, offensive and defensive tactics and conditioning.

PED 110 - Fitness Center Activity I

1 Credit

Focuses on improving total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Covers the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are incorporated to elicit improvements in fitness.

— **PHYSICAL EDUCATION** —

PED 111 - Fitness Center Activity II

1 Credit

Serves as an advanced course for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are used to elicit improvements in fitness.

PED 112 - Conditioning Lab

1 Credit

Offers an independent self-paced format of conditioning exercises to meet individual needs. Emphasizes the value of lifetime fitness and its contribution to achieving personal health and wellness. Students utilize cardiorespiratory, muscular strength and endurance exercises to promote positive changes in health-related fitness components.

PED 116 - Weight Training

1 Credit

Offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasizes weight training equipment orientation, correct lifting techniques, and basic program design for men and women. 30 Contact Hours

PED 117 - Cross Training

1 Credit

Introduces basic cross-training techniques designed to improve physical work capacity of an individual. Enables the student to gain an understanding of the basic principles of cross training, the effects cross training has upon the body's energy systems and muscles, program design and terminology.

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.

PED 137 - Varsity Sports

1 Credit

Allows the student-athletes an opportunity to participate in a competitive varsity sports program.

— *PHYSICAL EDUCATION* —

PED 176 - Special Topics

1 Credit

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

PED 210 - Fitness Center Activity III

1 Credit

Serves as an advanced exercise course designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength and endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track available in the Fitness Center.

PED 211 - Fitness Center Activity IV

1 Credit

Focuses on advanced instruction designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track found in the Fitness Center.

— *PHYSICAL EDUCATION & RECREATION* —

PER 126 - Introduction to Coaching

2 Credits

Acquaints the learner with the knowledge, requirements and responsibilities of coaching, including sport philosophy, sport medicine, and sport management. Fulfills requirements for ACEP Leader Level I.

PER 129 - Intro to Sport Management

3 Credits

Provides the student with knowledge of management in the areas of facilities, professional organizations, educational institutions, promotions, as well as the different managerial styles that can be applied. This course will also provide the student with individual topics such as quality control, leadership, strategic planning, information systems, and sport research.

— **PHILOSOPHY** —

PHI 111 - Introduction to Philosophy

3 Credits

Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes human condition, knowledge, freedom, history, 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 more fulfilled 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.

— **PHYSICS** —

PHY 105 - Conceptual Physics

4 Credits

Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. This course includes laboratory experience.

PHY 111- Physics: Algebra-Based I with Lab

5 Credits

Enables the student to explore the truth about physical reality through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advance sciences should register for PHY 211.

Prerequisite: MAT 121

— **PHYSICS** —

PHY 112- Physics: Algebra-Based II with Lab

5 Credits

Expands upon PHY 111 and covers sound waves, electric fields, electric circuits, magnetic fields, optics, and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments.

Prerequisite: PHY 111

PHY 211- Physics: Calculus-Based I with Lab

5 Credits

Enables the student to examine the truth about physical reality through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics, fluids and waves. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences.

Prerequisite: MAT 201

PHY 212- Physics: Calculus-Based I with Lab

5 Credits

Expands upon PHY 211 and examines thermodynamics, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments.

Prerequisite: PHY 211

— **POLITICAL SCIENCE** —

POS 105 - Introduction to Political Science

3 Credits

Focuses on 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, and civil liberties. Examines 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

Emphasizes the structure and function of state, county, and municipal governments including their relations with each other and with national government. Includes a study of Colorado government and politics.

POS 205 - International Relations

3 Credits

Examines 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 225 - Comparative Government

3 Credits

Focuses on a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups, and governmental institutions. Prerequisite: POS 105 recommended.

— **PSYCHOLOGY** —

PSY 101 - General Psychology I

3 Credits

Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory.

PSY 102 - General Psychology II

3 Credits

Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, and social psychology.

PSY 235 - Human Growth and Development

3 Credits

Examines human development from conception through death emphasizing physical, cognitive, emotional and psycho-social factors.
Prerequisite: Three hours of psychology or permission of instructor

PSY 238 - Child Development

3 Credits

Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional, and psychosocial factors.
Prerequisite: Three hours of psychology or permission of instructor

PSY 239 - Adolescent and Adult Psychology

3 Credits

Examines the growth and development of the individual from adolescence to death, emphasizing physical, cognitive, emotional and psychosocial factors.
Prerequisite: Three hours of psychology or permission of instructor

— **READING** —

REA 090 - College Preparatory Reading

3 Credits

Enables the student to apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks.

— **REAL ESTATE** —

REE 201 - Real Estate Brokers I

6 Credits

Enables the student, in conjunction with REE 202 - Real Estate Brokers II, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers` license. This course includes Real Estate Law and Practice, practical applications, and Current Legal Issues.

Corequisite: REE 202

REE 202 - Real Estate Brokers II

6 Credits

Enables the student, in conjunction with REE 201 - Real Estate Brokers I, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers` license. This course includes Colorado Contracts and Regulations, Closings, and Recordkeeping and Trust Accounts.

Corequisite: REE 201.

— **SMALL BUSINESS MANAGEMENT** —

SBM 121 Small Business Planning I

9 Credits

Provides business owners systematic instruction to give them the tools to make sound business decisions based on the fields of study in Small Business Management. This course guides the student in the collection of necessary information to implement a computerized record keeping system, and to prepare a business plan. Discussions will include computer terminology, balance sheet concepts, accounting principles, computerized account reports, legal structures of a business, the basics of contract law, basic human resource management and the business plan components.

SBM 122 Small Business Planning II

9 Credits

Guides the student in the collection of necessary information to implement a computerized record keeping system, and to prepare a business plan. Discussions will include computer terminology, balance sheet concepts, accounting principles, computerized account reports, legal structures of a business, the basics of contract law, basic human resource management and the business plan components. Focuses on implementing a computerized record keeping system.

— **SMALL BUSINESS MANAGEMENT** —

SBM 131 - Records and Computerization I

9 Credits

Guides the student in the collection of necessary information to implement a computerized record keeping system for the small business owner/operator. Discussion will include computer terminology, application software, balance sheet concepts, accounting principles, computerized accounting reports and business plan components.

SBM 132 - Records and Computerization II

9 Credits

Covers the implementation of a computerized record keeping system for the small business owner/operator. Emphasis will be placed on the application and maintenance of an accurate set of computerized financial records, use of a filing system, and compiling a business plan. This course is a continuation of SBM 131.

Prerequisite: SBM 131

SBM 141 - Financial Analysis and Planning I

9 Credits

Covers how actual enterprise cost analysis is calculated to facilitate the development of whole business projected cash flow statements. All facets of record keeping and updating of data will be emphasized, including refining and maintaining of a current accounting system. This course includes the review and revision of business planning goals and objectives.

Prerequisite: SBM 132 or instructor's approval

SBM 142 - Financial Analysis and Planning II

9 Credits

Covers business analysis through the development of accurate cost and market value accrual balance sheets for the beginning and ending period for the small business owner/operator. Emphasis will be on the measurement and analysis of changes between the two balance sheets. Analysis will include the preparation of an accrual income statement. Financial ratios will be generated to understand their importance to business analysis. Data generated from an established record keeping system will provide the basis for the development of these accrual financial statements.

Prerequisite: SBM 141

SBM 151 - Marketing and Risk Management I

9 Credits

Emphasizes the identification of the strengths and weaknesses of the business and applying them in the development of plans for the business. Includes the development of marketing goals and objectives. The development of budgets, including marketing, into the total operating budget and activities of the business. Provide a review of existing financial trends and activities for further analysis of the small business, measuring past and present performance, and developing risk management plans.

Prerequisite: SBM 142 or instructor's approval

— *SMALL BUSINESS MANAGEMENT* —

SBM 152 - Marketing and Risk Management II

9 Credits

Continues from SBM 151 and provides more in-depth processes and planning to strengthen the operator's business through evaluation and planning based on the strengths and weaknesses of the business. The business operator will develop appropriate business, marketing, and risk management goals and objectives and be ready to initiate their implementation.

Prerequisite: SBM 151

SBM 153 - Marketing, Risk Management and E-Commerce I

9 Credits

Introduces the development of web pages using structured design to document layout. This course provides the student with hands on, practical application in creating and maintaining a web page for small business owners. May include such concepts as, web page layout, text manipulation hyperlinks, graphics, graphics formats, data tables and file downloading requirements, development of the basic marketing plan, defining your market, listing your page with search engines, and working with multimedia and the web site.

SBM 154 - Marketing, Risk Management and E-Commerce II

9 Credits

Introduces the development of web pages using structured design to document layout. This course is a continued study in e-commerce and marketing for small business owners. It provides the student with hands on, practical application in creating and maintaining a web page for small business owners.

— *SCIENCE* —

SCI 155 - Integrated Science I - Physics and Chemistry

4 Credits

Examines the nature of energy and matter, their interactions and changes, and the application of fundamental concepts to the study of our natural world. These concepts will be explored in hands-on laboratory experiments. This course integrates the fundamental concepts and ideas about the nature of physics and chemistry with the natural world.

SCI 156 - Integrated Science II - Earth and Life Science

4 Credits

Examines earth and biological systems, living and non-living environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments.

Prerequisite: SCI 155

— *SOCIOLOGY* —

SOC 101 - Introduction to Sociology I

3 Credits

Examines the basic concepts, theories, and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class, and race.

SOC 102 - Introduction 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 215-Contemp. Social Problems

3 Credits

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.

Prerequisite: SOC 101 or PSY 101

SOC 231 Sociology-Deviant Behavior

3 Credits

Examines the nature, identification, and explanation of deviant categories. Theories, and philosophies as well as methods of treatment related to deviancy will also be considered. The course will study society's attempts to control, change, and institutionalize those acts, individuals or groups that a population may deem unacceptable.

Prerequisite: SOC 101 or PSY 101

— *SPANISH* —

SPA 109 – Spanish for Travelers

2 credits

Introduces the basic vocabulary and expressions useful to travelers in the Spanish speaking countries. The course will concentrate on the customs, traditions and cultural attitudes to be discovered by a visitor to the destination country. Cultural diversity and global awareness are integral to this course of study. This course does not fulfill Humanities Area Requirements. Not intended for transfer.

— *SPANISH* —

SPA 111 - Spanish Language I

5 Credits

Deals with the development of functional proficiency in listening, speaking, reading and writing the Spanish language.

SPA 112 - Spanish Language II

5 Credits

Continues Spanish Language I in the development of functional proficiency in listening, speaking, reading and writing the Spanish language.

Prerequisite: SPA 111 or permission of instructor

SPA 211 - Spanish Language III

3 Credits

Continues Spanish Language I and II in the development of increased functional proficiency in listening, speaking, reading and writing the Spanish language.

Prerequisite: SPA 112 or permission of instructor

SPA 212 - Spanish Language IV

3 Credits

Continues Spanish Language I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the Spanish language.

Prerequisite: SPA 211 or permission of instructor

— *STUDENT LEADERSHIP PROGRAM* —

SLP 106- Student Government I

1 Credit

Provides the academic vehicle to complement the work of and support students serving in a student government organization. Students will learn to work together in a governance environment overseeing the allocation of funding for campus events, and serving as a resource for other campus leadership teams (first year, first semester).

SLP 107 - Student Government II

1 Credit

Provides the academic vehicle to complement the work of and support students serving in a student government organization. Students will learn to work together in a governance environment overseeing the allocation of funding for campus events, and serving as a resource for other campus leadership teams (first year, second semester).

— *STUDENT LEADERSHIP PROGRAM* —

SLP 206 - Student Government III

1 Credit

Provides the academic vehicle to complement the work of and support students serving in a student government organization. Students will learn to work together in a governance environment overseeing the allocation of funding for campus events, and serving as a resource for other campus leadership teams (second year, first semester).

SLP 207 - Student Government IV

1 Credit

Provides the academic vehicle to complement the work of and support students serving in a student government organization. Students will learn to work together in a governance environment overseeing the allocation of funding for campus events, and serving as a resource for other campus leadership teams (second year, second semester).

— *THEATRE* —

THE 105 - Introduction to Theatre Arts

3 Credits

Includes discussions, workshops, and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism, and theory.

THE 111 - Acting I

3 Credits

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

Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate script analysis. It includes practical application through classroom performance.

THE 131 - Theatre Production I

3 Credits

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.

— THEATRE —

THE 132 – Theatre Production II

3 credits

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 188 – Practicum

1-3 credits

Provides students an opportunity to gain practical experience in applying their 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 practicum supervisor.

THE 211 - Development of Theatre I

3 Credits

Surveys the history and evolution of drama from Ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance.

THE 212 - Development of Theatre II

3 Credits

Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance.

THE 231 – Theatre Production III

3 credits

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 232 – Theatre Production IV

3 credits

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.

— **WATER QUALITY MANAGEMENT** —

WQM 120 – Water Quality Equipment Maintenance

4 Credits

Provides an in-depth understanding of mechanical and electrical equipment maintenance. Topics include correct use of power and hand tools, preventive maintenance and repair maintenance of pumps, motors, chlorinators, motor control units and other treatment plant equipment and safety procedures.

WQM 124 - Water Certification Review for Class C and D

3 Credits

Helps prepare students for the operator's certification test in water at the C and D level. Topics include water principles, mathematics, hydraulics, water filtration, chemical treatment, source control, basic operations, Colorado Primary Drinking Water Regulations, housekeeping, and laboratory analysis.

WQM 125 - Wastewater Certification Review for Class C and D

3 Credits

Helps prepare students for the operator's certification test in wastewater at the C and D level. Topics include wastewater principles, mathematics, hydraulics, conventional treatment of wastewater, wastewater sedimentation, Colorado Water Quality Control Act, biological treatment of wastewater, effluent standards for wastewater, sludge handling and disposal, disinfection, pumps, safety, housekeeping, and laboratory analysis.