

Course Descriptions



COURSE NUMBERING NOTES

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Course Numbering Notes

Courses numbered less than 100 are considered non-transferable unless otherwise noted. Courses marked (P/T) are part of a professional-technical program and are transferable at the discretion of the receiving institution.

Many departments offer courses in their specific fields entitled Special Projects or Special Studies. These courses are numbered 198/298 and 199/299. These courses fulfill elective credit requirements but not distribution or foundational skills credit.

Cooperative Work Experience courses are numbered 280 and are also available for credit (up to a limit of 12 credits toward graduation).

Following is a general description of the course content of each:

198/298 1-3 Credits

INDEPENDENT STUDY/SPECIAL PROJECTS

Offers individualized study at an advanced level in areas not considered in other courses to meet special interest or program requirements. Students complete a term project and readings approved by the instructor. Prior study in the selected field and permission of instructor are required.

199/299 1-3 Credits

SPECIAL STUDIES

Offers special topics, activities, or projects in an area not usually covered in depth in other courses on a temporary or experimental basis.

280 1-6 Credits

COOPERATIVE WORK EXPERIENCE

On-the-job experience (paid or volunteer) which enables the student to apply the knowledge, skills, and experience gained through the on-campus program to all aspects of the industry.

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Course Descriptions

AGRICULTURE ENGINEERING TECHNICIAN

AET 207 (P/T) 4 Credits
AGRICULTURE MACHINE & FABRICATION
 Stresses the modification and building of farm equipment. Emphasizes engineering skills through hands-on applications.

AET 211 (P/T) 3 Credits
ENGINEERING PROBLEMS
 Utilizes practical math for solving problems in agriculture. Includes horse power, electricity, hydraulics, pumps, calibrations, chains, sprockets, belts and pulleys, and land measurement. Prerequisite: MATH 025 or suitable placement score.

AET 212 (P/T) 1 Credit
AGRICULTURE SAFETY AND MANAGEMENT
 Examines and identifies prevention methods for various hazards associated with the agriculture industry. Areas examined include machinery, environmental, and confined spaces. Safety management and governmental compliance will also be addressed.

AET 221 (P/T) 3 Credits
SHOP SKILLS
 Builds competency through hands-on experience, covering power and hand tools, tool reconditioning, building construction, electricity, fasteners, and farm safety. Lab required.

AET 222 (P/T) 3 Credits
INDUSTRIAL MACHINES
 Discusses the important aspects of industrial machines such as safe operation, maintenance, and repairs. It also covers some machine design and fabrication techniques. It acquaints students with electrical and mechanical controls for machines.

AET 251 (P/T) 3 Credits
HYDRAULIC AND PNEUMATIC SYSTEMS
 Provides instruction in the fundamental principles of hydraulic and pneumatic systems. Investigates the basic components of hydraulic and pneumatic systems such as pumps, valves, cylinders, and motors.

AGRICULTURE

AG 111 (P/T) 3 Credits
AG COMPUTERS
 Acquaints students with the use of a micro-computer and software for agricultural uses. Includes farm accounting, spreadsheets, depreciation schedules, rations, PowerPoint, internet/email, and financial analysis.

AG 201 1 Credit
CURRENT ISSUES IN AGRICULTURE
 Examines current issues in agriculture. Investigates and considers opposing viewpoints of different groups through email contact, and written and oral presentations. Uses guest speakers extensively.

AG 207 (P/T) 1 Credit
AGRICULTURE SEMINAR
 Provides information and self-evaluation in areas of goal setting, educational planning, student activities, electronic student accounts, study skills, and successful navigation of the college system. Emphasizes academic and career plans for students interested in Agriculture.

AG 211 (P/T) 3 Credits
SURVEY & CONSTRUCTION
 Provides specific information for farm and ranch use, including field drainage systems, cut and fill for field leveling, laying out building foundations, farm facilities, land descriptions, and the use of the farm level. Covers field observation, note taking, and office computations.

AG 212 (P/T) 3 Credits
ENGINE THEORY & OPERATION
 Studies power units and their relationship to internal combustion engines, including theory of operation, component parts, and accessories. Class projects include repair of small power units.

AG 215 (P/T) 4 Credits
IRRIGATION AND DRAINAGE
 Instructs students how to design an irrigation system, considering engineering, soil types, crops, seasons, irrigation methods, best management practices, and erosion control measures. Includes a cost estimation of an actual irrigation project.

AG 221 (P/T) 3 Credits
METALS AND WELDING
 Teaches the techniques of operating electric welding machines, oxyacetylene torches and welding, heating, brazing and cutting of all common types of ferrous metals in all positions. Stresses some fabrication of farm projects. Lab included.

ANIMAL SCIENCE

ANS 107 (P/T) 3 Credits
BASIC HOOF MAINTENANCE
 Teaches the basic fundamentals and procedure for shoeing and trimming a horse, including tools and safety issues.

ANS 108 (P/T) 3 Credits
ADVANCED HORSESHOEING
 Examines principles and techniques for properly trimming and shoeing the horse with conformation and/or disease problems. Prerequisite: ANS 107.

ANS 121 3 Credits
INTRO TO ANIMAL SCIENCE
 Introduces animal science, offering a foundation in breeds, genetics, nutrition, marketing, management, ration formulation and facilities planning. Co-requisite: ANS 122.

ANS 122 1 Credit
INTRO TO ANIMAL SCIENCE OPERATIONS
 Introduces a variety of livestock industries and how each operation works, developing a broad knowledge base of several livestock industries through visits and labs. Applies to real life the knowledge and skills acquired in ANS 121. Prerequisite/Co-requisite: ANS 121.

ANS 141 (P/T) 3 Credits
BASIC HALTER TRAINING
 Provides the skills needed to train a young horse to lead, stand square, pick up feet, turn on forehand and haunches. Includes grooming and fitting.

ANS 142 (P/T) 4 Credits
GREEN BREAKING
 Provides opportunity for the student and young horse to learn together. Features ground training, saddling, and riding of a horse that hasn't been ridden before. Prerequisite: ANS 192.

COURSE DESCRIPTIONS

ANS 201 to ANS 241

ANS 201 ADVANCED HORSE TRAINING Teaches the student to take a green horse onto the bridle. Prepares horses to move onto several different horse activities, such as ranch horse, rope horse, or a show horse. Prerequisite: ANS 142.	(P/T)	3 Credits	anatomy of the skeletal and muscular system, and parts of the horse and their functions. Discusses the maintenance and purchase of horse equipment, including bits, bridles, grooming supplies, and saddles.
ANS 192 HORSEMANSHIP Teaches the basic fundamentals of horsemanship and safety issues when handling horses while saddling, bridling, mounting, dismounting and riding. Provides the background to move on to other avenues of the horse world.	(P/T)	3 Credits	ANS 222 EQUINE HEALTH & DISEASE Studies horse health and soundness, including in depth anatomy, diseases, nutrition, soundness or lameness issues, and the available treatments.
ANS 200 LIVESTOCK SKILLS Presents the proper techniques of basic livestock skills, such as branding, implanting, and heat synchronization. Emphasizes livestock handling, sanitation, facility design, quality beef assurance, and personal safety. Includes skills demonstrated by a qualified veterinarian.	(P/T)	3 Credits	ANS 223 EQUINE BUSINESS & MARKETING Examines correct procedures in genetic selection, pedigree and performance. Covers developing a bookkeeping system, and how to market, purchase and evaluate horses according to conformation.
ANS 201 BEEF QUALITY ASSURANCE Teaches state-of-the-art technology and trends in the beef industry to produce a safe, competitive, wholesome food source for consumers. Taught on a workshop basis with many industry expert presentations and local field trips.		2 Credits	ANS 224 PUREBRED HERD IMPROVEMENT Applies principles learned in livestock breeding to dairy, horses, pigs, and sheep. Provides students a hands-on opportunity to apply what they have learned about selection. Includes several field trips to local farms/ranches to learn breeding program management.
ANS 210 FEED AND RATION FORMULATION Covers feedstuffs, their analysis, and animal use. Studies how processing affects bio-availability of feeds, mixing feeds to meet specific animal requirements, and meeting animal needs as they change due to increased production, reproduction, and growth. Teaches ration formulation by hand methods and computer.	(P/T)	3 Credits	ANS 231 INTRO TO LIVESTOCK EVALUATION Covers, in depth, basic fundamentals of livestock evaluation and selection of cattle, sheep, and swine for herd replacement and market. Teaches students to “see” differences between two or more animals in the areas of structure, muscle, capacity/volume, femininity/masculinity, and eye appeal.
ANS 211 APPLIED ANIMAL NUTRITION Covers all aspects of animal nutrition, including analysis of feedstuffs, the anatomy of ruminant and non-ruminant, nutrient metabolism, and the in-depth discussion on the required nutrients (water, protein, lipids, carbohydrates, minerals, and vitamins).	(P/T)	3 Credits	ANS 232 INTERMEDIATE LIVESTOCK EVALUATION Reviews performance data (including EPD’s), and situations/scenarios. Teaches students to describe written and oral differences between cattle, sheep, and swine; also to take notes and describe differences between animals with proper terms and phrases. Prerequisite: ANS 231
ANS 215 BEEF/DAIRY CATTLE PRODUCTION Covers the history and development of beef cattle, their distribution and adaptation, the types and breeds of beef and dual-purpose cattle, and the fundamental principles of establishing a beef production herd. Discusses cattle, genetics, problems in breeding and feeding, buildings, and equipment.	(P/T)	3 Credits	ANS 233 ADVANCED LIVESTOCK EVALUATION Combines all information from the Introduction and Intermediate Livestock Evaluation classes. Teaches students to place livestock classes based on the situation/scenario, performance data, and visual evaluation. Requires students to express their placings with written and oral reasons. Prerequisites: ANS 231 and 232.
ANS 216 BEEF PREGNANCY TESTING Teaches proper techniques for checking beef cows for pregnancy. Discusses anatomy and physiology of cows, the estrous cycle, and a review of diseases associated with reproduction. Much of the class taught in the “field” under actual ranch conditions.	(P/T)	3 Credits	ANS 234 LIVESTOCK JUDGING TEAM Provides the opportunity to compete at regional and national livestock judging contests. Prepares for competition with weekly work-outs, placing livestock classes based on the situation/scenario, performance data, and visual evaluation. Requires students to express their placings with written and oral reasons. Prerequisites: ANS 231, 232, and 233.
ANS 217 ARTIFICIAL INSEMINATION Teaches proper procedure in thawing and placing semen in the target area of cattle through “hands-on” experience. Includes nitrogen tank procedure, pregnancy testing, health factors, and genetic selection. Concludes with testing for the Artificial Insemination Certification for Oregon.	(P/T)	3 Credits	ANS 240 INTRO TO ULTRASOUND TECHNOLOGY Presents information on what ultrasound technology is and how it can be used in animal agriculture. Familiarizes students with ultrasound terminology and machine operations. Includes hands-on opportunities.
ANS 220 INTRO TO HORSE PRODUCTION Introduces various breeds of horses and their characteristics, including	(P/T)	3 Credits	ANS 241 ADVANCED ULTRASOUND TECHNOLOGY Reviews ultrasound terminology, machine operations, preparing the animal for scanning, and proper procedure for scanning. Practices scanning cattle, sheep, and hogs for fat thickness, ribeye/loineye area, and percent intramuscular fat. Includes interpreting and entering data into a spreadsheet to make carcass predictions. Prerequisite: ANS 240.

COURSE DESCRIPTIONS

ANS 250 to AREC 221

ANS 250 3 Credits
INTRO TO MEAT SCIENCE

Follows market animals (cattle, sheep and swine) from the finishing phase to the meat counter. Includes slaughter, meat grading and evaluation, inspection, structure and composition of muscle, conversion of muscle to meat, microbiology and sanitation, cookery of meat, and nutritive value of meat.

ANS 263 (P/T) 3 Credits

BUILDING & STABLE MANAGEMENT

Covers the practical application of designing and managing a stable for all ages of horses.

ANS 265 (P/T) 3 Credits

INTRO TO FOOD SAFETY AND HACCP

Prepares a student to train a horse for all aspects of ranching, including cattle sorting, gate work, packing, and roping. Prerequisite: ANS 192.

ANS 277 (P/T) 2 Credits

EQUINE REPRODUCTION

Presents newer ideas and procedures involved with impregnating mares, along with common problems facing the mares and stallion during the breeding.

ANS 278 (P/T) 3 Credits

PRINCIPLES OF ANIMAL BREEDING

Covers reproduction anatomy of male and female livestock, and basic genetic terms and principles. Teaches students to design a breeding program utilizing EPD's and performance data based on different breeding systems used in today's livestock operations.

ANS 294 (P/T) 2 Credits

COW CUTTING

Introduces horse and rider to the fundamentals of training and competing on a cutting horse. Prerequisite: ANS 192.

ANS 295 (P/T) 2 Credits

REINING

Introduces horse and rider to the fundamentals of training and competing on a reining horse. Includes working experience in the arena. Prerequisite: ANS 192.

ANS 297 (P/T) 3 Credits

WORKING COW-HORSE

Prepares a student to train a horse for all aspects of ranching, including cattle sorting, gate work, packing, and roping. Prerequisite: ANS 192.

ANTHROPOLOGY

ANTH 110 3 Credits

INTRO TO CULTURAL ANTHROPOLOGY

Studies the diverse cultures of the modern world, emphasizing the role of culture in human behavior and social structure.

APPRENTICESHIP

APP 0901 (P/T) 4 Credits

ELECTRICAL APPRENTICE FIRST YEAR

Covers trade math, fundamental concepts of electricity, resistance, Ohm's Law, series circuits, parallel circuits, grounding, grounding electrode systems, principles of induction, capacitance, transformer fundamentals, generator fundamentals, electric motors, enclosure grounding and the National Electrical Code as it applies to these topics. Taught as a year-long course presented over three terms Prerequisite: Indentured Apprenticeship.

APP 0902 (P/T) 4 Credits

ELECTRICAL APPRENTICE SECOND YEAR

Covers principles of induction, capacitance, transformer fundamentals, generator fundamentals, electric motors, enclosure grounding, and the National Electrical Code as it applies to these topics. Taught as a year-long course presented over three terms. Prerequisites: Indentured Apprenticeship and APP 0901.

APP 0903 (P/T) 4 Credits

ELECTRICAL APPRENTICE THIRD YEAR

Covers reading electrical blueprints, commercial building, electrical plans and specification, branch circuits and feeders, panel boards, electrical theory and applications for grounding systems, emergency power systems, over current protection systems, fuses and circuit breakers, and the National Electrical Code as it applies to these topics. Taught as a year-long course presented over three terms. Prerequisites: Indentured Apprenticeship and APP 0902.

APP 0904 (P/T) 4 Credits

ELECTRICAL APPRENTICE FOURTH YEAR

Covers special equipment, ventilating systems, electrical systems protection, site lighting, motor controls and installation, hazardous locations, formulas for AC/DC, single and three phase power, horsepower and voltage drop, over-current protection devices, calculations for branch circuit feeders and service entrance, single family dwellings, and the National Electrical Code as it applies to these topics. Taught as a year-long course presented over three terms. Prerequisites: Indentured Apprenticeship and APP 0903.

AGRICULTURE RESOURCE ECONOMICS

AREC 201 (P/T) 3 Credits

AGRICULTURE ACCOUNTING

Teaches proper farm record keeping, including income, expenses, inventory, depreciation, crop and livestock. Utilizes a computerized system for such records, and calculates end-of-year totals for income tax purposes.

AREC 210 (P/T) 3 Credits

FARM BUSINESS MANAGEMENT

Teaches students about basic hand record keeping, including inventory, depreciation, and income/expenses. Reviews income tax laws and current regulations for employee records. Discusses basic farm business management terms, forms, and farm ownership types.

AREC 211 (P/T) 4 Credits

MANAGEMENT IN AGRICULTURE

Applies economic and business principles to the management of agribusiness firms, including farms and ranches; goal setting and management information; planning and decision-making tools; and acquiring, organizing, and managing land, labor and capital resources.

AREC 221 3 Credits

MARKETING IN AGRICULTURE

Presents organization and functions of domestic and international markets, market channels for various agricultural commodities, and roles of agribusiness, cooperatives, and government in marketing decisions. Discusses, in full detail, the futures market and forward contracting.

COURSE DESCRIPTIONS

ART 101 to ART 266

ART

ART 101 3 Credits

INTRO TO VISUAL ARTS

Introduces many facets of art, including an overview of major art movements throughout history, the formal elements of art, various art media, art criticism, and exercises designed to build perceptual skills. Includes lecture illustrated with slides and art gallery visitations.

ART 115 3 Credits

BASIC DESIGN

Introduces the fundamental processes and vocabulary of the artist's design studio. Examines the principles and concepts of line, shape, texture, space, and color to enable students to express their personal vision in an academic manner.

ART 116 3 Credits

BASIC DESIGN

An introduction to fundamental processes and vocabulary of the artist design studio. Introduction of the principles and concepts of shape, line, texture, space, color, etc. which enable the student to express his or her personal vision in a more organized and academic manner. The student will produce designs using the computer in a graphic format.

ART 117 3 Credits

BASIC DESIGN

An introduction to fundamental processes and vocabulary of the artist design studio. Introduction of the principles and concepts of shape, line, texture, space, color, etc. which enable the student to express his or her personal vision in a more organized and academic manner. The student will produce designs using the 3D sculpture format.

ART 131 3 Credits

BEGINNING DRAWING

Teaches students to acquire and refine representational skills using a variety of techniques and media. Presents contemporary art concepts with the intention of leading each student toward a personal direction. Introduces each new concept, medium, or technique with slide lectures and discussions.

ART 132 3 Credits

INTERMEDIATE DRAWING

Continues, on a more ambitious level, skills and ideas that were introduced in ART 131. Explores techniques to achieve more gestural surfaces. Introduces color media (both color pencil and oil pastel). Prerequisite: ART 131.

ART 133 3 Credits

ADVANCED DRAWING

Continues, on a more ambitious level, skills and ideas that were introduced in ART 132. Explores techniques to achieve more gestural surfaces. Introduces color media (both color pencil and oil pastel). Prerequisite: ART 132.

ART 204 3 Credits

HISTORY OF WESTERN ART/ANCIENT

Presents art from the Prehistoric, Ancient Near East, Aegean, Egyptian, Greek, early Christian, Byzantine, Medieval, Gothic and Roman periods. Includes lectures illustrated by slides and supplemented by occasional movies.

ART 205 3 Credits

HISTORY OF WESTERN ART/RENAISSANCE

Presents art from the late Gothic, early Renaissance, Italian Renaissance, Northern Renaissance, and Baroque periods. Includes lectures illustrated with slides and supplemented by art history videos.

ART 206 3 Credits

HISTORY OF WESTERN ART/MODERN

Presents art from the Rococo, Romantic, 19th century, and 20th century periods.

ART 253 3 Credits

CERAMICS I

Introduces the history of contemporary ceramics, including materials, methods, and techniques. Stresses both wheel thrown and hand built ceramic construction. Includes gallery visitation.

ART 254 3 Credits

CERAMICS II

Continues the broad introduction to the history of contemporary ceramics, including materials, methods, and techniques. Stresses both wheel thrown and hand built ceramic construction. Introduces glazing and firing. Includes gallery visitation.

ART 255 3 Credits

CERAMICS III

Continues the broad introduction to the history of contemporary ceramics, including materials, methods, and techniques. Stresses both wheel thrown and hand built ceramic construction. Introduces glazing and firing. Develops fundamental skills to foster artistic growth. Includes gallery visitation.

ART 256 3 Credits

CERAMICS IV

Continues the broad introduction to the history of contemporary ceramics, including materials, methods, and techniques. Stresses both wheel thrown and hand built ceramic construction. Introduces Raku glazing and firing. Develops fundamental skills to foster artistic growth. Includes gallery visitation.

ART 261 3 Credits

BEGINNING PHOTOGRAPHY

Covers functions of both film and digital cameras. Explores electronic and traditional darkroom procedures. Includes both demonstrations and individual assignments designed to enhance understanding of basic photographic principals.

ART 262 3 Credits

INTERMEDIATE PHOTOGRAPHY

Covers advanced electronic and traditional darkroom techniques including toning, printing filters, burning and dodging, and hand coloring. Includes electronic slide show presentation and advanced camera techniques, such as shutter speeds and apertures. Prerequisite: ART 261.

ART 265 3 Credits

BEGINNING DIGITAL PHOTOGRAPHY

Introduces digital photography focusing on camera handling, camera functions, capturing images, composition and editing. This will also introduce the image adjusting software program Adobe Photoshop Elements. Basic manipulation of images and presentation of projects will be stressed.

ART 266 3 Credits

INTERMEDIATE DIGITAL PHOTOGRAPHY

Continues to explore and investigate the digital camera and its many functions. The class will continue to stress composition, lighting and presentation. It involves more complex Photoshop tools and computer skills. Prerequisite: ART 265.

BUSINESS

<p>BA 101 INTRO TO BUSINESS Emphasizes business organization, operation, and management. Assists students interested in business determine their major field of concentration.</p>	4 Credits
<p>BA 104 (P/T) BUSINESS MATH Applies mathematical skills to solve business and consumer problems. Includes business applications such as computing finance charges, taxes, discounts, markups, inventory value, bond discount/premium, and present/future value analysis. Prerequisite: MATH 60.</p>	4 Credits
<p>BA 131 INTRO TO BUSINESS COMPUTING Introduces students to a variety of computer concepts, operating environments, computer applications, and technologies; emphasizes achieving intermediate competency in each area listed. Appropriate ethical conduct related to computer environments is also discussed.</p>	4 Credits
<p>BA 153 (P/T) CRITICAL/CREATIVE THINKING Emphasizes critical and creative thinking to help students understand the thinking process, including purposeful, reasoned, and goal directed thinking involved in solving problems, formulating inferences, calculating likelihoods, and decision-making. Explores examples of vertical and lateral thinking.</p>	3 Credits
<p>BA 200 (P/T) APPLIED ACCOUNTING I Emphasizes the basic principles of bookkeeping for both service and retail merchandise business, including analyzing transactions, journalizing, posting, doing end-of-year work, and preparing financial statements. Integrates computer applications into course material.</p>	4 Credits
<p>BA 201 (P/T) APPLIED ACCOUNTING II Emphasizes purchasing, sales, installment sales, consignment sales, inventory, long-lived assets, and accrual accounting applied to all merchandising-type business. Integrates computer applications into course material. Prerequisite: BA 200.</p>	4 Credits
<p>BA 202 (P/T) APPLIED ACCOUNTING III Emphasizes accounting for the corporate form of business, including capital stock, corporate earnings, and corporate bonds. Integrates computer applications into course material. Prerequisite: BA 201.</p>	4 Credits
<p>BA 203 INTERNATIONAL BUSINESS Introduces business activities that cross national boundaries. Studies the concepts of international business and its theories and framework for analysis of international transactions.</p>	3 Credits
<p>BA 204 (P/T) TEAMWORK DYNAMICS Introduces the formation, development, and management of groups. Examines problems and characteristics common to group situations and generates strategies for improving group productivity.</p>	3 Credits
<p>BA 206 PRINCIPLES OF MANAGEMENT Introduces the principles of management, concentrating on organizational structures, planning principles, organizing, leading, controlling, and management techniques.</p>	3 Credits

<p>BA 211 PRINCIPLES OF ACCOUNTING I Introduces financial accounting concepts and reporting of financial information in accordance with generally accepted accounting principles. Emphasizes external financial reporting for business enterprises and the use of financial statement information for economic decision making. Introduces computerized accounting concepts.</p>	4 Credits
<p>BA 212 PRINCIPLES OF ACCOUNTING II Introduces the valuation of accounts receivable and inventories. Appraises concepts of cost, depreciation, depletion, and amortization of capital assets as reported on financial statements. Includes corporate accounting for capital acquisition and reporting of stock, corporate bonds, dividends, stock splits, and donated capital. Continues computerized accounting concepts. Prerequisite: BA 211.</p>	4 Credits
<p>BA 213 PRINCIPLES OF ACCOUNTING III Introduces managerial accounting, including methods of cost systems and appropriate use of information obtained for improved management decision-making. Conducts analysis of cost behavior, cost/volume/profit relationships, budgeting, evaluating performance, and capital investment decision. Continues computerized accounting concepts. Prerequisite: BA 212.</p>	4 Credits
<p>BA 214 BUSINESS COMMUNICATION Applies written communication skills to writing and analyzing business letters, memos, email, and short reports. Incorporates correct format, grammar, and punctuation. Prerequisite: WR 121</p>	3 Credits
<p>BA 215 (P/T) COST ACCOUNTING Focuses on the role of the cost accountant in providing accounting information to managers as an aid in economic decision making. Emphasizes the development and application of cost systems as they apply to cost inputs (materials, labor, overhead), and job order versus process costing. Examines actual versus standard cost accounting, direct costing versus full absorption costing, and budgeting.</p>	3 Credits
<p>BA 223 PRINCIPLES OF MARKETING Surveys activities by which a firm seeks to anticipate customer needs by directing a flow of need-satisfying goods and services from producer to consumer. Includes market research, buying behavior, product planning, physical distribution, retailing, wholesaling, promotion, and pricing policy.</p>	3 Credits
<p>BA 225 THE LEGAL ENVIRONMENT OF BUSINESS Introduction to the legal environment of business. Emphasis is on the legal principles and laws which affect business. Topics covered include the history of the legal environment in US court systems, administrative law and regulatory processes, crimes, torts, contracts, property law, legal aspects of business entities, and employment law.</p>	4 Credits
<p>BA 226 BUSINESS LAW I Introduces business law, emphasizing contract law. Discusses history of legal development, crimes, torts, and courts systems.</p>	3 Credits
<p>BA 227 BUSINESS LAW II Continues study of business law, emphasizing sales law, commercial paper, bailments, and agency agreements. Prerequisite: BA 226, or instructor approval.</p>	3 Credits

COURSE DESCRIPTIONS

BA 228 to BIOL 213

BA 228 3 Credits
COMPUTER-ASSISTED ACCOUNTING
Examines methods of performing accounting functions and solving accounting problems using popular computer software, including collecting, organizing, and reporting large amounts of information.

BA 230 (P/T) 3 Credits
PAYROLL ACCOUNTING
Presents a comprehensive overview of federal and state payroll procedures, including computing and recording gross wages, withholding amounts, and net wages. Introduces use of computerized and manual systems to maintain employee earnings records and payroll registers, compute employer and other payroll-related costs, make payroll tax deposits, complete payroll and W-2's, and make general journal entries for all payroll transactions. Prerequisite: BA 200 or BA 211.

BA 236 (P/T) 3 Credits
COMPUTER-ASSISTED ACCOUNTING II
Introduces methods of performing accounting functions using accounting software currently utilized by business firms. Prerequisite: BA 200 or BA 211.

BA 239 3 Credits
PRINCIPLES OF ADVERTISING
Examines in detail the purpose, preparation, placement, and analysis of various types of advertisements within each of the media. Analyzes and compares the relative merits of the media on local and national advertising.

BA 240 (P/T) 3 Credits
FUND ACCOUNTING
Familiarizes the student with the principles and unique terminologies of governmental and nonprofit fund accounting. Explores conceptual, procedural, and reporting issues of the fund accounting process. Prerequisite: BA 200 or BA 211.

BA 243 (P/T) 3 Credits
CONSUMER BEHAVIOR
Introduces the dynamic interaction of affect and cognition, behavior, and the environment by which people conduct the exchange aspects of their lives.

BA 249 3 Credits
RETAIL MANAGEMENT
Presents the principles of retail strategy and structures, emphasizing trading area analysis, consumer behavior, store location, and pricing in retailing.

BA 250 3 Credits
SMALL BUSINESS MANAGEMENT
Presents the fundamentals of owning and managing a small business, including organizational, financial, marketing, and management concepts. Studies the dominant impact of small business. Prerequisites: BA 211, BA 206, and BA 223.

BA 254 (P/T) 3 Credits
INTERNET MARKETING
Introduces the principles and operational aspects of electronic/computer marketing, including e-marketing for organizations.

BA 255 3 Credits
PERSONNEL SUPERVISION
Introduces the supervisor's special place in management and the essential skills that all managers have in common. Focuses on the unique problems of being a supervisor in any kind of organization, and closely examines the special skills, responsibilities, roles and attributes required of supervisors.

BA 256 3 Credits
INCOME TAX PROCEDURES
Introduces preparation of federal income taxes, including gross income, adjustments to income, deductions, tax credits and exemptions. Examines potential tax consequences of decisions, and evaluates costs and benefits of alternatives. Assists decision makers minimize tax and maximize after-tax profits. Integrates computer applications into course material.

BIOLGY

BIOL 101 4 Credits
GENERAL BIOLOGY
Studies cellular biology, including scientific method, taxonomy, cell organelles and cell membrane, photosynthesis, cellular respiration, mitosis and meiosis, Mendelian genetics, DNA structure and function and evolution. Lab required. Intended for non-science majors.

BIOL 102 4 Credits
GENERAL BIOLOGY
Studies human evolution and the body system, including circulation, immune system, digestion, respiration, body fluid regulation, nervous system, sense organs, muscles, reproduction and endocrine system. Lab required. Intended for non-science majors.

BIOL 103 4 Credits
GENERAL BIOLOGY
Studies evolution and diversity of plants, plant structure and organization, plant nutrition and transport, control of growth in plants, plant reproduction. Examines ecology of populations, communication, ecology and conservation biology. Lab required. Intended for non-science majors.

BIOL 107 4 Credits
PRINCIPLES OF ECOLOGY & FIELD BIOLOGY
Emphasizes the broad concepts of ecology in a field setting using natural ecosystems as a model. Introduces concepts in the classroom then examines them in detail using student collected field data. Lab and/or field trip required.

BIOL 121 5 Credits
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY
Covers body organization with an emphasis on anatomy and function of all the human body systems. Topics include the cell, skin, heart and circulation, nervous system, special senses, blood, immunity, respiration, digestion, bones, muscles, and reproduction. This course is designed for the allied health student. Lab required.

BIOL 211 5 Credits
COLLEGE BIOLOGY
Examines the theoretical bases of biology as a scientific discipline, emphasizing cytology, genetics, and biological adaptation. Lab required. Intended for science and pre-professional majors.

BIOL 212 5 Credits
COLLEGE BIOLOGY
Provides an introduction to the basic concepts of biology with a special emphasis on zoology. Discusses functional relationships between different orders of animals. Lab required. Intended for science and pre-professional majors.

BIOL 213 5 Credits
COLLEGE BIOLOGY
Studies botany and ecology. Presents an overview of the evolution and organization of the plant kingdom followed by a study of the anatomy and physiology of flowering plants. Examines ecological relationships observed among plants, animals, and their environment. Lab required. Intended for science and pre-professional majors.

BIOL 231 4 Credits
HUMAN ANATOMY & PHYSIOLOGY
 Studies body organization and function with an emphasis on histology and the integumentary, skeletal, and muscular systems. Lab required. Prerequisites: CHEM 104, or 121, or 221, and BIOL 101 or 211.

BIOL 232 4 Credits
HUMAN ANATOMY & PHYSIOLOGY
 Studies the organization, structure, and function of the nervous, sensory, endocrine, and cardiovascular systems. Lab required. Prerequisite: BIOL 231.

BIOL 233 4 Credits
HUMAN ANATOMY & PHYSIOLOGY
 Studies respiratory, digestive, excretory, and reproductive systems. Lab required. Prerequisite: BIOL 231 or BIOL 232.

BIOL 234 4 Credits
MICROBIOLOGY
 Examines the fundamental principles and techniques of microbial study. Emphasizes the structural, functional, and disease causing properties of bacteria and viruses. Lab required. Prerequisites: CHEM 104, or 121, or 221, and BIOL 101 or 211 or 231.

CHEMISTRY

CHEM 104 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
 Studies the fundamental concepts of chemistry including metric system, atomic structure, chemical reactions and gas laws, buffers, solution chemistry and acids and bases. Examines the relationship of chemical principles to current environmental and health related topics. Lab required. Prerequisites: MATH 60, or suitable placement score.

CHEM 105 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
 Studies the fundamental concepts of chemistry, including nuclear radiation, energy, and organic chemistry. Lab required. Prerequisite: CHEM 104.

CHEM 106 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
 Studies the fundamental concepts of chemistry, including carbohydrates, lipid and protein metabolism, RNA and DNA synthesis, action of enzymes, hormones and steroids, and overall integration of metabolism. Lab required. Prerequisite: CHEM 105.

CHEM 121 4 Credits
GENERAL CHEMISTRY
 Provides an introduction to the fundamentals of inorganic chemistry, including metric system, atomic structure, chemical reactions and gas laws, buffers, solution chemistry, and acids and bases. Lab required. Prerequisite: MATH 65 or suitable placement score.

CHEM 122 4 Credits
GENERAL CHEMISTRY
 Covers the radiation and environmental issues. Introduces organic nomenclature, functional groups and reactions. Prerequisite: CHEM 121 or 104.

CHEM 123 4 Credits
GENERAL CHEMISTRY
 Covers the basics of organic and biochemistry. Lab required. Prerequisite: CHEM 122.

CHEM 221 5 Credits
COLLEGE CHEMISTRY
 Studies measurement, chemical reactions, stoichiometry, thermo chem-

istry, atomic structure, chemical bonding and gas laws. Lab required. Prerequisite: MATH 95 or suitable placement score. Previous chemistry experience recommended.

CHEM 222 5 Credits
COLLEGE CHEMISTRY
 Includes molecular bonding, solution chemistry, chemical reactions, oxidation reduction, chemical equilibrium and acid base equilibrium. Lab required. Prerequisite: CHEM 221.

CHEM 223 5 Credits
COLLEGE CHEMISTRY
 Includes thermodynamics, electrochemistry, nuclear chemistry, metals, nonmetals and transition elements and brief survey of organic and biochemistry. Lab required. Prerequisite: CHEM 222.

CHEM 227 5 Credits
ORGANIC CHEMISTRY
 Presents alkanes, alkenes, stereochemistry, role of solvents and organic reactions. Lab required. Prerequisite: CHEM 223.

CHEM 228 5 Credits
ORGANIC CHEMISTRY
 Examines alkynes, aromaticity, aromatic substitution, spectroscopy, NMR, CMR, IR, aldehydes and ketones and carboxylic acids. Lab required. Prerequisite: CHEM 227.

CHEM 229 5 Credits
ORGANIC CHEMISTRY
 Includes amines, phenols, molecular orbital theory, carbohydrates, lipids, proteins and nucleic acids. Lab required. Prerequisite: CHEM 228.

COMPUTER INFORMATION SYSTEMS

CIS 101 (P/T) 4 Credits
COMPUTER NET I: HOME/SMALL BUSINESS
 First of four networking courses. Fundamentals of networking. Design, build, and support a home or small business network. Prerequisite: CIS 140 or instructor approval.

CIS 102 (P/T) 4 Credits
NETWORKING 2: SMALL/MEDIUM BUSINESS
 Design, configure, implement, and troubleshoot network infrastructure. Prerequisite: CIS 101.

CIS 103 (P/T) 4 Credits
NETWORKING 3: ROUTING & SWITCHING
 Configure and implement a Local Area Network. Perform LAN, WAN, and VLAN troubleshooting. Prerequisite: CIS 102.

CIS 104 (P/T) 4 Credits
NETWORKING 4: DESIGNING & SUPPORTING
 Analyze client needs to design and support effective computer internetworks. Prerequisite: CIS 103.

CIS 110 (P/T) 3 Credits
INFORMATION TECHNOLOGY ESSENTIALS I
 Fundamentals and advanced concepts of computer hardware and software. Assembly and installation of computer components and operating systems. Troubleshooting tools and diagnostic software. Includes laptops, portable devices.

COURSE DESCRIPTIONS

CIS 111 to CJ 120

CIS 111 (P/T) 3 Credits
INFORMATION TECHNOLOGY ESSENTIALS 2
Install network operating systems, and troubleshoot using system tools and diagnostic software. Connect to the internet and share resources in a network environment. Prerequisite: CIS 110.

CIS 133 CS (P/T) 4 Credits
C++ PROGRAMMING I
C++ programming language and its subset, the C programming language. Program structure, blocks, storage types, console and file I/O, functions, arrays, strings, pointers, call-by-reference, call-by-value, and dynamic memory allocation and difference between C++ and C. Introduction to the concept of classes. Prerequisite: CIS 140.

CIS 140 (P/T) 4 Credits
INTRO TO OPERATING SYSTEMS
Effectively utilizing the Command Line Interface (CLI), Microsoft Windows, and Linux operating systems to manage microcomputer operations.

CIS 195 (P/T) 3 Credits
WEBSITE FUNDAMENTALS
Fundamental concepts and techniques used for design, development, and implementation of Web pages using Hypertext Markup Language, specifically XHTML. Also introduce concepts and methods of Javascript, CGI, as well as other topics in web development.

CIS 225 (P/T) 4 Credits
END USER SUPPORT
Effective communication with end users. Training and support functions within Information Systems. Examination of existing models and complete projects demonstrating their understanding of planning, developing, implementing, and evaluating training and support systems. Prerequisite: CIS 120 or instructor approval.

CIS 240 (P/T) 4 Credits
SERVER OPERATING SYSTEMS
Planning, installing, and maintaining a Web server. Internet and Intranet issues, system optimization, server activity monitoring, and server/client security. Prerequisite: CIS 140.

CIS 240 W (P/T) 4 Credits
WINDOWS SERVER OPERATIONS
Provides knowledge and skills required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server 2003 environment. Prerequisite: CIS 240.

CIS 244 (P/T) 4 Credits
PROJECT MANAGEMENT: ANALYSIS & DESIGN
Computer systems development process, covering aspects of project initiation, analysis, and design. Includes introduction to project management techniques in business environments. Prerequisites: BA 204, WR 101, CIS 120.

CIS 284 (P/T) 4 Credits
NETWORK SECURITY
Introduction to proven techniques for protecting information systems from intruders, while allowing the required access to authorized users. Prerequisite: CIS 240.

COMPUTER SCIENCE

CS 120 4 Credits
COMPUTER CONCEPTS
Introduces students to a variety of computer concepts, operating environments, computer applications, and technologies; emphasizes achieving intermediate competency in each area listed. Appropriate ethical conduct related to computer environments is also discussed.

CS 125 A 4 Credits
DATABASE APPLICATIONS
Introduces microcomputer database systems, including their application, design, and construction. Begins with basic tables, forms, queries, reports, and relational database concepts, and progresses to more advanced concepts and skills, including creating modules, macros and advanced forms and reports. Prerequisite: BA 131, or CS 120 or 160, or instructor approval.

CS 125 SS 4 Credits
SPREADSHEET APPLICATIONS
Presents the features in Microsoft Excel needed to efficiently produce spreadsheets and supporting documents. Provides the skills necessary for MOS certification. Prepares students to create, edit, and format spreadsheets, create formulas, use certain functions, create charts, do business related analysis, work with data lists, create and edit macros, create pivot tables and charts, and display worksheets on the web. Prerequisite: BA 131, or CS 120 or 160, or instructor approval.

CS 160 4 Credits
ORIENTATION TO PROGRAMMING
Explores the field of computer science, providing an overview of machine architecture, software development and engineering, data organization, problem-solving strategies, ethics, and theory of computation. Explores career options and develops rudimentary software development skills. Prerequisite: MATH 65 or suitable placement score.

CS 161 4 Credits
COMPUTER SCIENCE I
Introduces structured methods, including program design concepts, algorithm development, use of pseudo code in designing algorithms, elementary data types, and introduction to programming using the language Java. Prerequisite: CS 160.

CS 162 4 Credits
COMPUTER SCIENCE II
Continues the study of computer science, including linear data structures, file access, recursion, and object oriented programming. Prerequisite: CS 161.

CRIMINAL JUSTICE

CJ 100 3 Credits
INTRO TO CRIMINAL JUSTICE
Introduces the philosophy, history, objectives and functions of the American criminal justice system. Focuses on crime in America and policing.

CJ 111 3 Credits
CONCEPTS OF ENFORCEMENT SERVICES
Studies the concepts, theories, and principles of police operation and behavior in an era of changing community attitudes, special interest groups, and minority relations.

CJ 112 (P/T) 3 Credits
PATROL PROCEDURES
Describes the nature and purpose of patrol activities for law enforcement officers. Includes routine and emergency procedures and types of controls.

CJ 113 (P/T) 3 Credits
ACCIDENT INVESTIGATION/TRAFFIC LAWS
Studies the principles and procedures used to investigate and report traffic accidents. Includes basic traffic laws.

CJ 120 3 Credits
INTRO TO JUDICIAL PROCESS
Studies the basic processes in the criminal justice system, covering the steps in a criminal prosecution from the decision to prosecute through sentencing.

COURSE DESCRIPTIONS

CJ 205 to CJ 232

<p>CJ 205 INTRO TO CORRECTIONS Surveys the history and evolution of corrections, law and legal processes, and the correctional process.</p>	3 Credits	<p>CJ 211 CRIMINAL INVESTIGATIONS II Continues the study and application of investigative techniques for various offenses. Includes collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interview and interrogation, follow up and case preparation. Prerequisite: CJ 210. Co-requisite: CJ 226.</p>	(P/T) 3 Credits
<p>CJ 132 INTRO TO PAROLE & PROBATION Introduces the use of parole and probation as a means of controlling criminal offenders within the community. Includes the philosophy, historical development and contemporary functioning of parole and probation agencies and officers.</p>	3 Credits	<p>CJ 212 CRIMINAL INVESTIGATIONS III Continues the study and application of investigative techniques for various crimes. Stresses scientific method, thoroughness and presentation of evidence. Explores follow up case preparation, including familiarization with the state crime lab facilities and its assistance to law enforcement agencies. Prerequisite: CJ 211. Co-requisite: CJ 236.</p>	(P/T) 3 Credits
<p>CJ 140 U.S. CRIMINAL JUSTICE SYSTEM Emphasizes the adjunction and correctional aspects of the criminal justice system. Prerequisite: CJ 100.</p>	3 Credits	<p>CJ 216 CRIME SCENE TECHNICIAN I Presents techniques of locating, collecting, and identifying physical evidence. Includes the use of fingerprinting, casts and molds, photography, and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite CJ 210.</p>	(P/T) 1 Credit
<p>CJ 200 COMMUNITY RELATIONS Examines how the relationship between the community and the criminal justice system is clarified and enhanced. Investigates how community misunderstandings, lack of cooperation, and mistrust may paradoxically be generated by the system's efforts to make the community a safer place.</p>	(P/T) 3 Credits	<p>CJ 220 CRIMINAL LAW Examines the basic concepts of criminal law through studying the essential elements of a crime, the defenses to criminal conduct, and the justifications for criminal laws and punishment. Familiarizes the student with the various crimes against persons and property.</p>	3 Credits
<p>CJ 201 INTRO TO JUVENILE JUSTICE Presents the concept of delinquency, the history and development of the juvenile justice system, theories of delinquency, environmental influences on delinquency, and controlling juvenile offenders.</p>	3 Credits	<p>CJ 222 PROCEDURAL LAW Examines the United States Constitution and Bill of Rights and their impact upon law enforcement, with emphasis on search warrants, interviews, arrest and booking, search and seizure issues, 5th Amendment rights, right to counsel, evidentiary issues and the criminal trial.</p>	3 Credits
<p>CJ 202 VIOLENCE & AGGRESSION Explores the causes and extent of violence in society and the family, and examines preventative measures available to reduce violence in society.</p>	(P/T) 3 Credits	<p>CJ 223 RULES OF EVIDENCE Reviews basic concepts of the requirements for admissibility of evidence, the various burdens of proof, how evidence is used at trial, relevance, competency, privileges, opinion and expert testimony, the hearsay rule and its exceptions, and an introductory review of evidence obtained in violation of the Constitution.</p>	3 Credits
<p>CJ 203 CRISIS INTERVENTION Presents techniques and approaches to crisis intervention for entry level criminal justice professionals. Covers initial intervention, defusing and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening, and mediation.</p>	(P/T) 3 Credits	<p>CJ 225 CORRECTIONS LAW Explores several historical and current cases involving inmate crimes and malpractice with inmates. Examines prisoner's rights, correctional staffs' rights, and emerging trends resulting from recent court cases.</p>	3 Credits
<p>CJ 205 VICTIMS OF CRIME Examines the role of victims of crime in the justice system and their treatment by different criminal justice agencies, national and state data on victimization by types of crime, psychology trauma suffered by victims of violent crimes and paths to recovery, programs available to victims, and victim-related legislation.</p>	(P/T) 3 Credits	<p>CJ 226 CRIME SCENE TECHNICIAN II Presents techniques of locating, collecting, and identifying physical evidence. Includes the use of fingerprinting, casts/molds, photography and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite: CJ 211.</p>	(P/T) 1 Credit
<p>CJ 209 INTRO TO CAREERS IN CRIMINAL JUSTICE Surveys careers in law, law enforcement, courts, and corrections. Includes facility visitation and contact with persons working in the criminal justice system.</p>	3 Credits	<p>CJ 232 CORRECTIONS CASEWORK Studies the basic concepts of interviewing and counseling techniques used by correctional officers in one-to-one contacts with clients. Builds rudimentary skills through role-playing and demonstration in preparation for practice in the field and to foster an appreciation for further training.</p>	(P/T) 3 Credits
<p>CJ 210 CRIMINAL INVESTIGATION I Introduces the fundamentals, theory, and history of criminal investigation in the justice system. Describes crime scene-to-courtroom aspects with emphasis on techniques to specific crimes. Co-requisite: CJ 216.</p>	(P/T) 3 Credits		

COURSE DESCRIPTIONS

CS 236 to DRFT 167

CJ 236 (P/T) 1 Credit
CRIME SCENE TECHNICIAN III
Presents techniques of locating, collecting and identifying physical evidence. Includes the use of fingerprinting, casts and molds, photography and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite: CJ 212.

CJ 260 3 Credits
INTRO TO CORRECTIONS II
Explores the correctional client, rights of sentenced offenders, corrections as a profession, and correctional systems. Prerequisite: CJ 130.

CROP AND SOIL SCIENCE

CSS 200 (P/T) 4 Credits
PRINCIPLES OF CROP SCIENCE
Studies the origin and adaptability of crops important in world food production. Emphasizes production and management of food and forage crops important to US Agriculture. Includes field trips to area farms, experiment stations and marketing facilities to augment classroom instruction. Lab required.

CSS 205 (P/T) 3 Credits
GENERAL SOILS
Studies basic soil science, including genesis and morphology of soils, and their physical and chemical properties. Covers soil-water relationships, diagnosis, classification, management, essential nutrients, erosion, and soil as a medium for plant growth. Students use soil survey reports. Lab required.

CSS 210 (P/T) 3 Credits
FORAGE PRODUCTION
Identifies the annual feed requirements for a livestock operation and the selection and management of feed and forage crops to meet these needs. Studies grazing and harvest systems and alternatives, and plant growth characteristics in the development of practical farm and ranch programs. Lab required.

CSS 215 (P/T) 3 Credits
SOIL NUTRIENTS AND FERTILIZER
Addresses the nine macronutrients and six micronutrients essential for plant growth. Instructs students in fertilizer selection as well as interpreting soil sample analysis in making fertilizer recommendations. Prerequisite: CSS 205.

CSS 217 (P/T) 1 Credit
PESTICIDE SAFETY AND USE
Presents federal and state pesticide laws and regulations, and the practices necessary for safe, effective handling and distribution of pesticides. Prepares for the "Laws and Safety Examination" for those wanting either a public or commercial license; and the "Private Applicator Examination" administered by the Oregon/Idaho State Department of Agriculture.

CSS 240 (P/T) 3 Credits
INTRO TO NOXIOUS WEEDS
Presents elements needed for a basic understanding of the life cycles, spread, and destructive nature of noxious weeds, including how to distinguish a noxious weed from a weed and identification of the more common noxious weeds found in the Pacific Northwest. Lab required.

CSS 242 (P/T) 3 Credits
INTEGRATED WEED MANAGEMENT
Focuses on how to obtain a desired plant community by learning many kinds of techniques in a mutually supportive manner. Presents how to select, integrate, and implement effective weed control measures with due consideration for economic, ecological and sociological consequences. Lab required. Prerequisite: CSS 240, or Instructor approval.

DRAFTING

DRFT 112 (P/T) 3 Credits
GENERAL DRAFTING
Introduces basic drafting techniques, emphasizing the use of standard drawing instruments, layout procedures, sketching, multi-view projections and geometric construction.

DRFT 131 (P/T) 2 Credits
GIS TERRAIN MAPPING & ANALYSIS
Covers digital elevation models (DEM) and triangular irregular networks (TIN) for incorporating terrain mapping and analysis into a variety of applications. Prerequisite: GEOG 265.

DRFT 132 (P/T) 2 Credits
GIS NETWORK MODELING
Covers path analysis and network applications dealing with movement and linear features for vector-based and topologically connected, shortest path analysis applications (in-car navigation). Compares path analysis with raster and vector data for GIS applications, finding a "virtual" least-cost path. Prerequisite: GEOG 265.

DRFT 133 (P/T) 2 Credits
GIS SPATIAL ANALYSIS
Covers vector data analysis, buffering and applications, and overlay applications, and examines spatial statistics for pattern analysis. Presents four common types of raster data analysis for local, neighborhood, and zonal operations, and physical distance measurements. Prerequisite: GEOG 265.

DRFT 134 (P/T) 2 Credits
MAP PROJECTIONS & COORDINATE SYSTEM
Covers basic principles of GIS map coordinate systems. Bridges the two systems of x and y planes with longitude and latitude values transforming the Earth's surface into a plane which can be used for projecting a coordinate system. Prerequisite: GEOG 265.

DRFT 135 (P/T) 2 Credits
INTRO TO VISUAL BASIC
Covers writing VB scripts and creating custom applications. Utilizes object oriented programming and creates simple VB scripts to customize the GIS interface, edit tables and text files, manipulate views and themes, and create dialogs and extensions. Prerequisite: GEOG 265.

DRFT 136 (P/T) 3 Credits
GIS APPLICATIONS
Covers the applications for integration of GIS with GPS and wireless technologies for location based services, in-car navigation, and interactive-mapping websites. Prerequisite: GEOG 265.

DRFT 162 (P/T) 3 Credits
BLUEPRINT READING PIPE L/O
Provides the basic knowledge to create process pipe drawing. Introduces the fundamental concepts and techniques used with the process piping industry.

DRFT 167 (P/T) 4 Credits
COMPUTER AIDED DRAFTING I
Introduces Windows basics, and the Auto CAD program, including 2D drawing, editing, display commands and functions, layer management, and line types and colors. Covers multi and auxiliary view layout and prototype drawing creation. Applies the AutoCAD program to mechanical, schematic, and architectural drawings. Recommended Prerequisite: DRFT 112.

COURSE DESCRIPTIONS

DRFT 168 to EDUC 156

DRFT 168 (P/T) 4 Credits
COMPUTER AIDED DRAFTING II
 Presents intermediate and advanced dimensioning and tolerancing operations. Includes creating and editing multi-line and spline objects, producing full-scale drawing output on a plotting device, and drawing section views and graphic patterns. Prerequisite: DRFT 167.

DRFT 169 (P/T) 4 Credits
COMPUTER AIDED DRAFTING III
 Offers advanced drafting techniques used to create a symbol library, create and edit blocks and attributes, describe and use external references, create viewports in paper space and model space, and create simple isometric and 3D drawings. Prerequisite: DRFT 168.

ECONOMICS

ECON 201 3 Credits
PRINCIPLES OF ECONOMICS: MICRO
 Introduces economics and the economy. Addresses the nature and methods of economics, the economizing problem, practical understanding of individual markets, demand and supply, and private and public economic systems. Uses practical, everyday real life, individual decisions about unlimited demands vs scarce resources.

ECON 202 3 Credits
PRINCIPLES OF ECONOMICS: MACRO
 Introduces macro (group) economics from the student perspective as both a consumer and a producer living in a society of laws and regulations. Studies the political and economic environments through the lens of national income, employment, and fiscal policy; money, banking, and monetary policy; long-run perspectives of aggregate supply/demand; economic growth; and macroeconomic debates.

ECON 203 3 Credits
PRINCIPLES OF ECONOMICS: ISSUES
 Introduces economic issues and applications from the student perspective as both a consumer and a producer living in an economic environment where they are both a seller of their labor and other resources, and a buyer of goods and services. Studies the political and economic environment through specific issues, including labor, agriculture, wages, health care, education industry, international trade, exchange rates, and the economics of developing countries.

EDUCATION

EDUC 101 (P/T) 3 Credits
INTRO TO PARAEDUCATOR
 Explores the role of paraeducator in educational settings, including special education, elementary and secondary classrooms. Includes attendance at faculty meetings, in-service trainings, team building skills, paraeducators' duties, responsibilities, and general strategies.

EDUC 103 (P/T) 3 Credits
INSTRUCTIONAL SUPPORT
 Studies the paraeducator's role in the regular and special education classes K-12, focusing on responsibilities of the paraeducator, working collaboratively with the classroom teacher, planning and implementing tutorial strategies, locating resources for tutoring, and knowing the tenets of NCLB in regards to students, curriculum, assessments, and family involvement. Features working with LEP student.

EDUC 106 (P/T) 3 Credits
CHILD DEVELOPMENT II
 Studies child growth and development from prenatal to toddlerhood. Covers issues such as attachment and separation, sensorimotor learning, infant communication, major theories, and appropriate behavioral expectations.

EDUC 140 (P/T) 3 Credits
INTRO EARLY CHILDHOOD EDUCATION
 Introduces the field of early childhood education, including history, trends of early childhood, state and federal regulations, community resources, social services, and career opportunities.

EDUC 141 (P/T) 3 Credits
CHILD DEVELOPMENT I
 Introduces child development, including theories of growth and development during 0-8 years. Studies children's behaviors from a developmental perspective and implications for care giving of infants, toddlers, and preschoolers. Covers special needs of 0-8 year olds.

EDUC 142 1 Credit
EDUCATION ORIENTATION
 Introduces Eastern Oregon University's education program, focusing on acquiring information about CUESTE, MTE, MUD, reading endorsements, CORE, location of main Campus, satellite campuses, library resources, and development of a four year plan.

EDUC 143 (P/T) 3 Credits
CHILD DEVELOPMENT III
 Studies physical, social, emotional, language development, and cognitive areas of growth and development for children ages 2 1/2 to adolescence.

EDUC 144 (P/T) 3 Credits
OBSERVATION I
 Studies individual patterns of growth and development of young children. Uses objective techniques for observing, recording, interpreting behaviors, and designing appropriate activities. Applies to K-12 and early childhood.

EDUC 145 (P/T) 3 Credits
GUIDANCE I-EARLY CHILDHOOD ED
 Familiarize students with the principles of positive guidance for young children.

EDUC 149 (P/T) 3 Credits
INFANT/TODDLER CAREGIVING
 Presents caregiving techniques for infants and toddlers with special emphasis on group care practices for this age. Studies routines, such as nutrition, feeding, diapering, sleep, and nurturing. Reviews roles of parents, nannies, family daycare provider, and center caregiver provider.

EDUC 150 (P/T) 3 Credits
CURRICULUM I-EARLY CHILDHOOD ED
 Introduces appropriate curriculum for young children. Focuses on creative play curriculum and the whole child approach.

EDUC 153 (P/T) 3 Credits
EARLY CHILDHOOD ENVIRONMENTS
 Studies how the physical environment influences the behaviors of early childhood growth and development. Examines separate areas of emotional, social, cognitive, and language factors that are influenced by the classroom environment.

EDUC 154 (P/T) 3 Credits
LITERATURE & LITERACY FOR ECE
 Studies how emergent literacy and literature develop in young children, including strategies for working with families of diverse learning styles, in order to promote and support literacy in the home.

EDUC 156 (P/T) 1 Credit
COOPERATIVE PLAN SEMINAR I
 Focuses on issues, concerns, and integrative skills necessary to achieve appropriate competency levels in the early childhood and elementary classrooms. Co-requisite: EDUC 281.

COURSE DESCRIPTIONS

EDUC 157 to EDUC 248

EDUC 157 MATH DEVELOPMENT FOR ECE Studies developmentally appropriate practices for readiness in math skills. Focuses on color and shape, number recognition, attribution, sorting, organizing, simple problem solving, calendar events, counting, time, and patterns. Uses manipulatives as the major strategy.	(P/T)	3 Credits	EDUC 230 INTRO TO CHILD ABUSE AND NEGLECT Explores the definition, scope, and impact of child abuse and neglect. Assessment of child neglect, risk and protective factors are also studied. Child neglect prevention and intervention also studied.	(P/T)	3 Credits
EDUC 158 BILINGUAL LANGUAGE DEVELOPMENT Applies theories in first and second language acquisition. Studies cognitive, affective, and social variables influencing language acquisition.	(P/T)	3 Credits	EDUC 233 CRITICAL FACTORS IN PARENT NEGLECT Focuses upon the study of child neglect, neglectful parents, the forces that have damaged parents, and strategies for teachers working with neglectful parents.	(P/T)	3 Credits
EDUC 159 MUSIC DEVELOPMENT FOR ECE Provides background knowledge of how the young child experiences sound and music. Presents appropriate music for young children and how to influence an awareness of music within the young child.	(P/T)	3 Credits	EDUC 240 CURRICULUM II- EARLY CHILDHOOD ED Provides in-depth experiences for students in understanding and creating developmentally appropriate curriculum for young children. Involves student's use of technology as a means of developing curriculum. Familiarizes the student with technology infusion in early childhood education curriculum.	(P/T)	3 Credits
EDUC 160 CURRICULUM STUDIES/MATH Studies how to effectively assist classroom teachers in tutoring students in math and science, including how to effectively assist LEP students in math and science achievement and success. Prerequisite: Math 20.	(P/T)	3 Credits	EDUC 241 CURRICULUM III- EARLY CHILDHOOD ED Emphasizes science, nature, cognition, and large group activities. Includes planning of activities that meet the needs of young children.	(P/T)	3 Credits
EDUC 166 COOPERATIVE PLAN SEMINAR II Focuses on continued mastery of skills for working with competency levels in the early childhood and elementary classrooms. Emphasizes self-evaluation, attitude analysis, and value clarification. Prerequisite: EDUC 156/281. Co-requisite: EDUC 282.	(P/T)	1 Credit	EDUC 242 EDUCATIONAL CONCEPTS Reviews effective teaching, history of education, education philosophies, classroom covert/overt curriculum, school financing, special needs students, classroom responsibilities, career pathways, leadership, and school law. Intended for EOU-bound students.		3 Credits
EDUC 176 COOPERATIVE PLAN SEMINAR III Focuses on strategies for developmentally appropriate competencies in early childhood, working with LEP children and families, special needs practices, and self-evaluation in the workplace. Prerequisite: EDUC 156/281 and EDUC 166/282. Co-requisite: EDUC 283.	(P/T)	1 Credit	EDUC 244 OBSERVATION II- EARLY CHILDHOOD ED Emphasizes observing, recording, and interpreting behaviors of students, including early childhood and elementary classrooms. Explores implementing appropriate programs for the educational setting. Investigates differences between multiple observation forms, and informal and formal observations.	(P/T)	3 Credits
EDUC 200 INTRO TO EDUCATION Surveys the American education system, emphasizing organization, professional practice, technology, governance, law, demographics, effective teaching, philosophies of education, special needs students, covert/overt curriculum, school financing, classroom responsibilities, and rights of teachers, schools, and students. Includes experiences in school teaching, classroom practices, classroom observations, teacher profiles, and professional portfolios.		4 Credits	EDUC 245 GUIDANCE II-EARLY CHILDHOOD ED Surveys principles and practices of guidance, emphasizing conflict resolution, self-esteem builders, classroom management, educator's self-esteem, and effective communication with young children.	(P/T)	3 Credits
EDUC 202 EDUCATIONAL TECHNOLOGY Emphasizes keeping current with effective use of technology in the K-12 classroom. Includes programs, troubleshooting, imaging devices, software, computer support, distance learning, instructional principles, operating systems, evaluations, and human issues in technology learning.	(P/T)	4 Credits	EDUC 246 FAMILY/COMMUNITY RELATIONS-ECE Emphasizes building and maintaining positive relationships among school, family, and community, including the use of conferences, meetings, and other resources as effective methods for fostering cooperation and parent involvement.	(P/T)	3 Credits
EDUC 210 THEORY & PRACTICUM Provides school experience working with classroom teacher and students in areas of reading, outdoor activities, mathematics, language acquisition, learning theories, and use of technology in the classroom. Prerequisite: Instructor approval.		1 Credit	EDUC 247 CLASSROOM MANAGEMENT Focuses on techniques for program organization in early childhood classrooms, such as supervising and evaluating adults, conflict resolution skills, budgeting and supplies, policies and procedures, and other supervisory responsibilities.	(P/T)	3 Credits
EDUC 213 SCHOOL LAW Studies laws relevant to classroom processes, rights and responsibilities of teachers, schools, students, and families.	(P/T)	3 Credits	EDUC 248 SPECIAL NEEDS & MAINSTREAMING Examines specific areas of special needs in the early childhood classroom and the approaches to mainstreaming those students.	(P/T)	3 Credits

COURSE DESCRIPTIONS

EDUC 250 to ENG 109

EDUC 250 (P/T) 4 Credits
EXCEPTIONALITY IN THE SCHOOLS

Surveys the student's ability and disability in the schools, including characteristics of students with disabilities, legal requirements for educating students with disabilities, and basic educational strategies.

EDUC 258 (P/T) 3 Credits
ETHNIC STUDIES FOR ECE EDUCATORS

Studies strategies for assisting classroom teachers in implementing appropriate programs for addressing cultural diversity within the classroom.

EDUC 270 (P/T) 3 Credits
PARAEDUCATOR CURRICULUM STUDIES/LA

Examines strategies for assisting classroom teachers in implementing appropriate programs for Language Arts. Focuses on regular and LEP students. Prerequisite: WR 95.

EMERGENCY MEDICAL TECHNICIAN

EMT 0904 (P/T) 0 Credits
EMT INTERMEDIATE I

Covers theory and practice of procedural responsibilities related to the EMT-Intermediate. Incorporates discussion, demonstration and practical application of roles and responsibilities, patient assessment, oxygenation, ventilation, airway adjuncts, shock, intravenous therapy, intraosseous therapy, basic ECG monitoring, defibrillation, pharmacology, and EMT-Intermediate protocols. Includes 76 hours didactic training and 44 hours clinical training. Presented over two terms. Prerequisite: Oregon certified EMT Basic.

EMT 0905 (P/T) 0 Credits
EMT INTERMEDIATE II

Covers theory and practice of procedural responsibilities related to the EMT-Intermediate. Incorporates discussion, demonstration and practical application of roles and responsibilities, patient assessment, oxygenation, ventilation, airway adjuncts, shock, intravenous therapy, intraosseous therapy, basic ECG monitoring, defibrillation, pharmacology, and EMT-Intermediate protocols. Includes 76 hours didactic training and 44 hours clinical training. Presented over two terms. Prerequisite: Oregon certified EMT Basic, EMT 0904.

EMT 151 (P/T) 5 Credits
EMT BASIC I

Begins EMT-Basic training. With EMT 152, combines 140 hours didactic- and 8 hours practical training in basic pre-hospital emergency medical care and transportation of the sick and injured. Meets Oregon State Health Division and the Federal Department of Transportation requirements for the EMT-Basic. Presents skills and instruction over two terms and prepares students to take and pass the Oregon State Health division certification examination for EMT Basic. Prerequisites: Specific qualifications apply.

EMT 152 (P/T) 5 Credits
EMT BASIC II

Continues EMT-Basic training. With EMT 151, combines 140 hours didactic- and 8 hours practical training in basic pre-hospital emergency medical care and transportation of the sick and injured. Meets Oregon State Health Division and the Federal Department of Transportation requirements for the EMT-Basic. Presents skills and instruction over two terms and prepares students to take and pass the Oregon State Health division certification examination for EMT Basic. Prerequisites: Specific qualifications apply.

EMT 169 (P/T) 3 Credits
EMT RESCUE

Presents elementary procedures of rescue practices, systems, compo-

nents, and control of rescue operations for rough terrain, water rescue, vehicle extrication with patient access and care, and patient packaging. Introduces techniques and tolls of patient extrication. Lab included.

EMT 170 (P/T) 3 Credits
EMERGENCY COMM & PATIENT TRANS

Includes emergency response driving, ORS, OAR, DMV laws, maintenance and safety, route planning, communication systems, radio types, and HEAR system. Prerequisite: valid drivers license.

EMT 175 (P/T) 3 Credits
INTRO EMERGENCY MEDICAL SERVICES

Covers the role and responsibilities of the EMT, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, and stress management.

ENGLISH

ENG 104 3 Credits
INTRO TO LITERATURE

Examines the genre of fiction, primarily through the short story. Emphasizes the basic elements of fiction (plot, characters, conflict, theme, etc.) and how these elements are combined successfully or unsuccessfully to create a story. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 105 3 Credits
INTRO TO LITERATURE

Explores the genre of drama through an examination of its basic elements and history, including required attendance at a play performance. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 106 3 Credits
INTRO TO LITERATURE

Explores the genre of poetry through an examination of its basic elements and styles. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 107 3 Credits
INTRO TO WORLD LITERATURE

Explores the development and variety of world literature from the ancient world to the present, focusing from the ancient world to the Renaissance. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 108 3 Credits
INTRO TO WORLD LITERATURE

Explores the development and variety of world literature from the ancient world to the present, focusing on Neoclassicism, Romanticism, and Realism. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 109 3 Credits
INTRO TO WORLD LITERATURE

Explores the development and variety of world literature from the ancient world to the present, focusing on the Twentieth Century. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

COURSE DESCRIPTIONS

ENG 195 to ETHN 103

ENG 195 3 Credits
FILM STUDIES

Will cover the history, techniques, and art of film. There will be in-class film viewing and discussions with an emphasis on how to analyze and evaluate a variety of stylistic approaches. Prerequisite: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 201 3 Credits
INTRO TO SHAKESPEARE

Covers a cross-section of Shakespeare's major tragedies with attention to his life and times, production techniques, the plays' relevance today, and literary conventions such as structure, theme, and characterization. May include Hamlet, Macbeth, or other selections. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 202 3 Credits
INTRO TO SHAKESPEARE

Covers a cross-section of Shakespeare's major comedies with attention to his life and times, production techniques, the plays' relevance today, and literary conventions such as structure, theme, and characterization. May include Much Ado About Nothing, Twelfth Night, or other selections. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 203 3 Credits
INTRO TO SHAKESPEARE

Covers a cross-section of Shakespeare's major histories with attention to his life and times, production techniques, the plays' relevance today, and literary conventions such as structure, theme, and characterization. May include Julius Caesar, Henry IV, or other selections, and the critics. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 204 3 Credits
ENGLISH LITERATURE

Discusses English literature from the Middle Ages to the Sixteenth Century. Emphasizes the relationship between the work of literature and the author and age. Stresses cultural and historical differences between past ages and ours, and the enduring identities of human experience. Gives special attention to the elements of poetry and prose style. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 205 3 Credits
ENGLISH LITERATURE

Discusses English literature from the Seventeenth Century to the Restoration and Eighteenth Century. Emphasizes the relationship between the work of literature and the author and age. Stresses cultural and historical differences between past ages and ours, and the enduring identities of human experience. Gives special attention to the elements of poetry and prose style. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 206 3 Credits
ENGLISH LITERATURE

Discusses English literature from the Romantic, Victorian and Twentieth Century. Emphasizes the relationship between the work of literature and the author and age. Stresses cultural and historical differences between past ages and ours, and the enduring identities of human experience. Gives special attention to the elements of poetry and prose style. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 253 3 Credits
SURVEY OF AMERICAN LITERATURE

Traces the development of American literature from the age of exploration to the present. Focus: from the age of exploration to the Civil War. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 254 3 Credits
SURVEY OF AMERICAN LITERATURE

Traces the development of American literature from the age of exploration to the present. Focus: from the Civil War to 1910. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 255 3 Credits
SURVEY OF AMERICAN LITERATURE

Traces the development of American literature from the age of exploration to the present. Focus: from 1910 to the present. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ENG 260 3 Credits
INTRO TO WOMEN WRITERS

Introduces the literature and critical perspectives of women writers, emphasizing British and North American Women writers of the twentieth century. Focuses on developing a critical framework for examining issues related to race, gender, identity, and representation in literary works by women. Prerequisite: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

ETHNIC STUDIES

ETHN 101 3 Credits
ETHNIC STUDIES

Studies American race and ethnic relations from a modern sociological perspective, including prejudice, stereotyping, discrimination, inclusion, and social justice. Focuses on early European immigration, Anglo domination, Native Americans and Asian Americans in terms of their cultural heritage, history, and current sociological issues. Covers other minority ethnic groups, and the history and current policies of immigration.

ETHN 102 3 Credits
ETHNIC STUDIES

Studies American race and ethnic relations from a modern sociological perspective, including prejudice, stereotyping, discrimination, inclusion, and social justice. Focuses on African-Americans, Arab and Muslim Americans, and Jewish Americans in terms of their cultural heritage, history, and current sociological issues. Covers other minority ethnic groups, and the history and current policies of immigration.

ETHN 103 3 Credits
ETHNIC STUDIES

Studies American race and ethnic relations from a modern sociological perspective, including prejudice, stereotyping, discrimination, inclusion, and social justice. Focuses on Hispanic Americans, Eastern Europeans, and religious minorities in terms of their cultural heritage, history, and current sociological issues. Covers other minority ethnic groups, and the history and current policies of immigration.

FOOD AND NUTRITION

FNUT 225 4 Credits
NUTRITION
 Examines the basic principles and practices which comprise the science of nutrition. Studies the effect of food and nutrient intake on the body. Examines retention of nutrients and food substances during processing, the role of digestion and absorption, and components of an adequate diet. Includes scientific research paper on therapeutic nutrition and 5 day Dietary Analysis.

FORESTRY

FOR 111 3 Credits
 (P/T)
INTRODUCTION TO FORESTRY
 Provides a broad overview of the forestry discipline. Topics covered will range from importance of forest, forest recreation, forest management, forest wildlife, forest measurement, and other forest uses. Students will be exposed to current issues in forestry with a particular focus on Oregon and the Pacific Northwest. Students will also learn through field trips to local forested regions.

FORESTRY AND WILDLAND RESOURCES

FWR 101 1 Credit
 (P/T)
NATURAL RESOURCES SEMINAR
 Provides information and self-evaluation in areas of goal setting, educational planning, student activities, electronic student accounts, study skills, and successful navigation of the college system. Emphasizes academic and career plans for students interested in Natural Resources.

GEOGRAPHY

GEOG 101 4 Credits
PHYSICAL GEOGRAPHY
 Provides an overview of physical geography, including foundations of geography; solar energy, seasons, and the atmosphere; energy and global temperatures; atmospheric and oceanic circulation; and water and weather.

GEOG 105 3 Credits
INTRO TO CULTURAL GEOGRAPHY
 Studies the patterns of diversity and unity among the world's cultural groups. Examines the spatial interaction of society and how factors such as climate influence cultures by focusing on analysis of settlement, economics, politics, religion, language and other cultural phenomena. Includes globalization and the effects upon culture.

GEOG 265 4 Credits
 (P/T)
GEOGRAPHIC INFO SYSTEMS (GIS) I
 Introduces Geographic Information Systems (GIS) using ArcView desktop mapping software. Emphasizes the management of graphic and textual information within a single system. Uses ArcView's basic tools and object-oriented data structure to create charts, graphs, reports and layouts.

GEOG 285 4 Credits
 (P/T)
GEOGRAPHIC INFO SYSTEMS (GIS) II
 Continues advanced study of Geographic Information Systems using Arc GIS mapping software. Works with a variety of techniques and software to collect and convert data between various formats, projections, and coordinate systems to produce data in usable forms. Prerequisite: GEOG 265.

GEOLOGY

GEOL 201 4 Credits
PHYSICAL GEOLOGY
 Emphasizes theories of the formation of the earth and its evolution as a system. Investigates the nature and distribution of minerals and rocks; igneous, weathering, sedimentary, and metamorphic processes; extraction of mineral resources; and the theory of plate tectonics. Labs and/or field trips required.

GEOL 202 4 Credits
PHYSICAL/HISTORICAL GEOLOGY
 Investigates earth history, earth structure, earthquakes and seismology, mountain building, plate tectonics, and mass wasting. Lab and/or field trip required. Prerequisite: GEOL 201 or GSCI 106 or instructor approval.

GEOL 203 4 Credits
PHYSICAL GEOLOGY
 Investigates the creation and distribution of land forms and the nature and consequence of surface water, ground water, glaciers, wind, deserts and shorelines. Lab and/or field trip required. Prerequisite: GEOL 201 or 202, or instructor approval.

GEOLOGICAL SCIENCE

GSCI 104 4 Credits
PHYSICAL SCIENCE PHYSICS
 Surveys the general principles of physics. May include mechanics, electricity, heat, light, and nuclear physics. Intended for non-science majors. Lab required.

GSCI 105 4 Credits
PHYSICAL SCIENCE CHEMISTRY
 Surveys the fundamentals of inorganic chemistry, including the importance of chemistry in our modern society. Provides practical experience in measurement, density, structure of atom, nuclear chemistry, energy and environmental issues. Intended for non-science majors. Lab required.

GSCI 106 4 Credits
PHYSICAL SCIENCE GEOLOGY
 Introduces minerals and rocks, and a survey of the principles of geology, erosion, plate tectonics and the structure of the earth. Intended for non-science majors. Lab and/or field trip required.

GSCI 107 4 Credits
PHYSICAL SCIENCE ASTRONOMY
 Includes solar and galactic astronomy, a study of the sun, planets, stars and galaxies, and modern discoveries in the field of astronomy. Intended for non-science majors. Lab required.

GSCI 108 4 Credits
PHYSICAL SCIENCE OCEANOGRAPHY
 Introduces the physical, chemical, geological, and biological processes which occur in the oceans. Intended for non-science majors. Lab and/or field trip required.

GSCI 110 4 Credits
PHYSICAL SCIENCE ENERGY
 Surveys the various energy sources used in our society, including fossil fuels, nuclear power, and renewable energy sources. Addresses environmental and societal issues, energy conservation, transportation, air pollution, and global effects. Intended for non-science majors. Lab required.

COURSE DESCRIPTIONS

GSCI 161 to HIST 102

GSCI 161 (P/T) 3 Credits
MEDICAL TERMINOLOGY I
Examines the pronunciation, spelling, origin, meaning, and usage of scientific terms employed by health care professionals. Emphasizes human anatomical terminology. Intended for students preparing for careers in the health professions.

HEAVY EQUIPMENT OPERATOR

HEO 100 (P/T) 12 Credits
HEAVY EQUIPMENT BASICS
Introduction to basic concepts in operation, safety, inspection of Skidsteer, Backhoe, Excavators, Dozer, Scraper, Loader, and Blade. Concepts in grade-setting, lasers, and GPS driven operations will be covered.

HEO 101 (P/T) 7 Credits
HEAVY EQUIPMENT BASICS I
Introduction to basic operation of safety, grade-setting, lasers, GPS, inspection of Skidsteer, Backhoe, and Excavators. Prerequisite: HEO 100.

HEO 102 (P/T) 7 Credits
HEAVY EQUIPMENT BASICS II
Introduction to basic operation of safety, grade-setting, lasers, GPS, inspection of equipment, operation of Dozer, Backhoe, and Scraper. Prerequisite: HEO 100.

HEO 103 (P/T) 7 Credits
HEAVY EQUIPMENT BASICS III
Introduction to basic operation of safety, grade-setting, lasers, GPS, inspection of equipment, operation of Dozer, Backhoe, and Scraper. Prerequisite: HEO 100.

HEO 104 (P/T) 7 Credits
ADVANCED HEAVY EQUIPMENT BASICS I
Advanced operational training on Scraper, Dozer, and Blade. Prerequisite: HEO 100.

HEO 105 (P/T) 7 Credits
ADVANCED HEAVY EQUIPMENT BASICS II
Advanced operational training on Scraper, Dozer, and Blade. Prerequisite: HEO 100.

HEO 106 (P/T) 7 Credits
ADVANCED HEAVY EQUIPMENT BASICS III
Advanced operational training on Scraper, Dozer, and Blade. Prerequisite: HEO 100.

HEO 107 (P/T) 9 Credits
HEAVY EQUIPMENT TRUCK DRIVING
Procedures for moving equipment, including proper tie down, loading/unloading, signage and use of flag cars. Driving training with comprehensive instruction concerning commercial drivers license requirements.

HUMAN DEVELOPMENT

HDEV 112 1 Credit
ORIENTATION TO COLLEGE
Provides information and self-evaluation in areas of goal setting, educational planning, career interest, learning styles, time management, study skills, and successful navigation of the college system (financial aid, resources, policies).

HDEV 113 1 Credit
REDUCING TEST ANXIETY
This course is designed to help the student who suffers from math anxiety. Topics include identifying math strengths, weaknesses and sources of anxiety, study and test-taking techniques specific to math, time management skills, stress and anxiety reducing techniques, using individual learning styles, and memory techniques.

HDEV 116 1 Credit
MINDS OVER MATTERS
Assists new students in the management of the educational, social, and athletic components of their college career with the overall intention of achieving a healthy lifestyle and a positive transition into a higher educational environment. Topics include leadership, diversity, substance abuse law & responsibility, nutrition, money management, community resources and career development. Recommended for student-athletes and physical education majors.

HDEV 120 3 Credits
COLLEGE SURVIVAL & SUCCESS
Provides student success strategies, including analyzing academic needs, developing long-term academic plans, exploring career choices, and accessing electronic and human resources on campus. Presents effective communication skills, time management, test taking, note taking, memory and study techniques, and stress management.

HDEV 202 2 Credits
LIFE TRANSITIONS
Initiates empowerment of those experiencing significant changes or seeking new directions for their lives. Emphasizes personal development by exploring values, interests, strengths, and abilities using assessments and professional guidance. Examines choices in terms of careers, education, volunteer work and personal creativity.

HDEV 208 3 Credits
CAREER PLANNING
Assists students in identifying skills, interests and values as they relate to career choices. Includes self-assessment, career exploration, job search strategies, decision-making, and goal setting. Requires students to conduct informational interviews and begin to build personal portfolios.

HDEV 209 1 Credit
COMPLETE JOB FINDER
Provides intensive instruction in job search skills. Explores local and statewide options for employers. Examines what makes a qualified employee in both hard and soft skills.

HISTORY

HIST 101 3 Credits
HISTORY OF WESTERN CIVILIZATIONS
Examines the major ideas, issues, events and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes the Birth of Civilization, Greece and Rome, Middle Ages, and Renaissance.

HIST 102 3 Credits
HISTORY OF WESTERN CIVILIZATIONS
Examines the major ideas, issues, events and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes the Reaffirmation, Absolutism, the Scientific and Industrial Revolutions, and the French Revolution.

COURSE DESCRIPTIONS

HIST 103 to HPE 180 S

HIST 103 3 Credits
HISTORY OF WESTERN CIVILIZATIONS
 Examines the major ideas, issues, events and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes the age of Napoleon, the age of nation-states, the birth of modern European thought. World War I, Great Depression, World War II, the Vietnam War, and through to the present.

HIST 201 3 Credits
U.S. HISTORY
 Examines the major ideas, issues, events, and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes early migration into North America through nationhood to the eve of the Civil War.

HIST 202 3 Credits
U.S. HISTORY
 Examines the major ideas, issues, events and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes westward movement, Civil War, industrial America, and the Progressive Era.

HIST 203 3 Credits
U.S. HISTORY
 Examines the major ideas, issues, events and personalities of the time. Offers different frameworks of analysis to enhance comprehension and critical thinking. Includes WWI, Depression and New Deal, WWII, Vietnam War, and the 1960's through to the present.

HEALTH AND PHYSICAL EDUCATION

HPE 120 2 Credits
FIRST AID & CPR
 Teaches the proper techniques in administering CPR and rescue breathing on an adult, child and infant and the use of an Automated External Defibrillator (AED) on an adult and child victim. Presents the proper techniques for clearing an obstructed airway on both a conscious and unconscious victim of any age, and the proper first aid procedures to control bleeding, treat for shock, bandage wounds, splint broken bones and numerous other emergency care techniques. Awards two certifications from the American Heart Association upon successful completion of both the American Heart Association's CPR and First Aid exams.

HPE 131 3 Credits
INTRO TO P.E. & HEALTH
 Introduces the broad spectrum of fields related to exercise science. Covers the history, and current and future trends within the exercise field. Includes an introduction to anatomy. Discusses athletic training as a profession, biomechanics and exercise physiology, and modern trends related to nutrition, sports psychology and measurements.

HPE 180 B 1 Credit
ADVANCED BASKETBALL (WOMEN)
 Advanced training in the sport of basketball. Team concepts for basketball will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 BC 1 Credit
BASKETBALL CONDITIONING (WOMEN)
 Advanced conditioning in the sport of basketball. Conditioning basketball athletes to train the aerobic and anaerobic systems for the enhancement of player performance.

HPE 180 C 1 Credit
ADVANCED CROSS COUNTRY (WOMEN)
 Advanced training in the sport of cross country. Team concepts for cross country will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 CC 1 Credit
CROSS COUNTRY CONDITIONING (WOMEN)
 Advanced conditioning in the sport of cross country. Conditioning cross country athletes to train the aerobic and anaerobic systems for the enhancement of player performance.

HPE 180 D 1 Credit
ADVANCED SOFTBALL (WOMEN)
 Advanced training in the sport of softball. Team concepts for softball will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 DC 1 Credit
SOFTBALL CONDITIONING (WOMEN)
 Advanced conditioning in the sport of softball. Conditioning softball athletes to train the aerobic and anaerobic systems for the enhancement of player performance.

HPE 180 F 1 Credit
ADVANCED TRACK & FIELD (WOMEN)
 Advanced training in the sport of track and field. Team concepts for track and field will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 FC 1 Credit
TRACK & FIELD CONDITIONING (WOMEN)
 Advanced conditioning in the sport of track and field. Conditioning track and field athletes to train the aerobic and anaerobic systems for the enhancement of player performance.

HPE 180 G 1 Credit
ADVANCED GOLF (WOMEN)
 Advanced training in the sport of golf. Team concepts for golf will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 GC 1 Credit
GOLF CONDITIONING (WOMEN)
 Advanced conditioning in the sport of golf. Conditioning golf athletes to train the aerobic systems for the enhancement of player performance.

HPE 180 R 1 Credit
ADVANCED RODEO (WOMEN)
 Advanced training in the sport of rodeo. Team concepts for rodeo will be taught that include strategy for competition, drill work associated with player development, and mental preparation.

HPE 180 RC 1 Credit
RODEO CONDITIONING (WOMEN)
 Advanced conditioning in the sport of rodeo. Conditioning rodeo athletes to train the aerobic and anaerobic systems for the enhancement of player performance.

HPE 180 S 1 Credit
ADVANCED SOCCER (WOMEN)
 Advanced training in the sport of soccer. Team concepts for soccer will be taught that include strategy for competition, drill work associated with development, and mental preparation.

COURSE DESCRIPTIONS

HPE 180 SC to HPE 190 TC

HPE 180 SC SOCCER CONDITIONING (WOMEN) Advanced conditioning in the sport of soccer. Conditioning soccer athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit	HPE 190 DC BASEBALL CONDITIONING (MEN) Advanced conditioning in the sport of baseball. Conditioning baseball athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit
HPE 180 T TENNIS (WOMEN) Advanced training in the sport of tennis. Team concepts for tennis will be taught that include strategy for competition, drill work associated with development, and mental preparation.	1 Credit	HPE 190 F ADVANCED TRACK & FIELD (MEN) Advanced training in the sport of track and field. Team concepts for track and field will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit
HPE 180 TC TENNIS CONDITIONING (WOMEN) Advanced conditioning in the sport of tennis. Conditioning tennis athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit	HPE 190 FC TRACK & FIELD CONDITIONING (MEN) Advanced conditioning in the sport of track and field. conditioning track and field athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit
HPE 180 V ADVANCED VOLLEYBALL (WOMEN) Advanced training in the sport of volleyball. Team concepts for volleyball will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit	HPE 190 G ADVANCED GOLF (MEN) Advanced training in the sport of golf. Team concepts for golf will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit
HPE 180 VC VOLLEYBALL CONDITIONING (WOMEN) Advanced conditioning in the sport of volleyball. Conditioning volleyball athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit	HPE 190 GC GOLF CONDITIONING (MEN) Advanced conditioning in the sport of golf. Conditioning golf athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit
HPE 185 - HPE 185 Y CO EDUCATIONAL PHYSICAL EDUCATION Provides instruction and physical exercise and conditioning around a specific activity or sport. Features courses in basketball, aerobic activities, jogging, weight training, yoga, golf, swimming, tennis, and seasonal activity classes.	1 Credit	HPE 190 R ADVANCED RODEO (MEN) Advanced training in the sport of rodeo. Team concepts for rodeo will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit
HPE 190 B ADVANCED BASKETBALL (MEN) Advanced training in the sport of basketball. Team concepts for basketball will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit	HPE 190 RC RODEO CONDITIONING (MEN) Advanced conditioning in the sport of rodeo. Conditioning rodeo athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit
HPE 190 BC BASKETBALL CONDITIONING (MEN) Advanced conditioning in the sport of basketball. Conditioning basketball athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit	HPE 190 S ADVANCED SOCCER (MEN) Advanced training in the sport of soccer. Team concepts for soccer will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit
HPE 190 C ADVANCED CROSS COUNTRY (MEN) Advanced training in the sport of cross country. Team concepts for cross country will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit	HPE 190 SC SOCCER CONDITIONING (MEN) Advanced conditioning in the sport of soccer. Conditioning soccer athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit
HPE 190 CC CROSS COUNTRY CONDITIONING (MEN) Advanced conditioning in the sport of cross country. Conditioning cross country athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit	HPE 190 T ADVANCED TENNIS (MEN) Advanced training in the sport of tennis. Team concepts for tennis will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit
HPE 190 D ADVANCED BASEBALL (MEN) Advanced training in the sport of baseball. Team concepts for baseball will be taught that include strategy for competition, drill work associated with player development, and mental preparation.	1 Credit	HPE 190 TC TENNIS CONDITIONING (MEN) Advanced conditioning in the sport of tennis. Conditioning tennis athletes to train the aerobic and anaerobic systems for the enhancement of player performance.	1 Credit

COURSE DESCRIPTIONS

HPE 194 to HSER 102

HPE 194 2 Credit
PROFESSIONAL ACTIVITIES
 Introduces team and/or individual sports, providing a sound foundation of skill development and knowledge in each area of the sport. Emphasizes methods, and progression and analysis of motor skills needed to become an effective teacher of each selected sport and/or event. Concentrates on one sport each quarter in the following six-quarter rotation: soccer, volleyball, tennis, softball, basketball, and golf. Lab required.

HPE 259 3 Credits
INTRO TO ATHLETIC TRAINING I
 Introduces the history, characteristics and employment opportunities for athletic trainers. Discusses epidemiology of injuries, recognition of specific injuries, and a variety of conditions related to the health of the athlete. Includes civil litigation, preparing to become an athletic trainer, day to day tasks required, structure of a sports medicine team, prevention and management of injuries and how to establish an emergency response plan.

HPE 260 J 3 Credits
INTRO TO ATHLETIC TRAINING II
 Introduces the proper techniques of injury evaluation, treatment, rehabilitation and/or care of athletic injuries. Covers anatomical structures of the foot, ankle, lower leg, knee, thigh, hip, groin, thoracic region, chest, back, ribs, back, fingers, wrist, hand, elbow, shoulder, head, neck, and spinal area. Discusses how each functions and what injuries may occur. Covers the relevant soft tissue structures, including muscle tendon units, cartilage, and ligamentous structures. Teaches students to complete injury evaluations and provides a working knowledge of how each injury occurred.

HPE 261 J 2 Credits
TAPING & BRACING
 Demonstrates multiple techniques in preventing, supporting and protecting athletes from injury by means of taping, bracing, wrapping and/or splinting. Uses various braces, splints and types of tape for numerous body parts, including feet, ankles, lower leg, knees, hip/groin, shoulders, elbows, wrists, hands and fingers.

HPE 294 2 Credits
PE PROFESSIONAL ACTIVITIES METHODS
 Introduces team and/or individual sports, providing a sound foundation of skill development and knowledge in each area of the sport. Emphasizes methods, and progression and analysis of motor skills needed to become an effective teacher of each selected sport and/or event. Concentrates on one sport each quarter in the following six-quarter rotation: soccer, volleyball, tennis, softball, basketball, and golf. Lab required.

HPE 295 3 Credits
HEALTH & FITNESS FOR LIFE
 Explores wellness concepts and emphasizes how to maximize health by making informed choices in regards to total wellness, fitness, nutrition and other lifestyle changes. Covers muscle strength and endurance, cardiovascular issues, lifestyle related diseases and their risk factors, and prevention methods. Lab included.

HORSE PRODUCTION

HPRD 101 (P/T) 3 Credits
ROUGH STOCK I
 Teaches basic skills of rough stock rodeo events and activities. Includes physical and mental aspects of successful rodeo competition. Provides opportunity to practice on live animals.

HPRD 102 (P/T) 3 Credits
 Continues skill acquisition of Rough Stock I, emphasizing sharpening skills, improving techniques and preparing for competition.

HPRD 103 (P/T) 3 Credits
ROUGH STOCK III
 Includes participation in NIRA competition and organizing and conducting a college rodeo event.

HPRD 104 (P/T) 3 Credits
TIMED EVENTS I
 Teaches basic timed event skills, emphasizing sharpening techniques and the mental and physical aspects of rodeo competition. Provides opportunity to practice with live animals. Requires the student to have a suitable horse for timed events competition.

HPRD 105 (P/T) 3 Credits
TIMED EVENTS II
 A continuation of Timed Events I with emphasis on preparation for competition. Prerequisite: HPRD 104.

HPRD 106 (P/T) 3 Credits
TIMED EVENTS III
 Provides students the opportunity to participate in NIRA competitions and organize and conduct their own college rodeo.

HORTICULTURE

HORT 111 3 Credits
INTRODUCTION TO PLANT GROWTH
 Covers basic botany along with a study of principles of plant growth and reproduction. Emphasis is on understanding how plants grow and the factors which influence yield and quality. Students will learn basic plant parts and their functions.

HORT 211 3 Credits
INTRODUCTION TO PLANT GROWTH
 Presents theory and methodology for reproducing plants by seed and rootstock. Covers anatomy, physiology, and genetics related to plant propagation as well as grafting.

HORT 250 3 Credits
PLANT PATHOLOGY
 Covers symptoms, causal agents, diagnosis, and prevention of plant diseases with emphasis on fungi, bacteria, nematode, and virus pathogens.

HUMAN SERVICES

HSER 101 4 Credits
ADDICTIONS PHARMACOLOGY
 Explains how alcohol and other drugs are processed in the body and the brain. Includes the physiological effects of alcohol and other drugs on the human body, and the possible implications for the treatment and prevention of problems that arise from their use. Recommended co-requisites: HSER 102 and HSER 200.

HSER 102 (P/T) 4 Credits
DRUG USE, MISUSE & ADDICTION
 Introduces students to drug classification systems and specific drugs within each classification, including physiological and psychological effects, signs and symptoms of use, abuse, dependence, overdose and withdrawal. Examines treatment modalities and the recovery process. Recommended co-requisites: HSER 101 and HSER 200.

COURSE DESCRIPTIONS

HSER 152 to MATH 10

HSER 152 1 Credit
STRESS MANAGEMENT
Identifies specific personal stressors and develops skills that enable students to more effectively deal with stress. Applies techniques including breathing, meditation, systematic desensitization, visualizations, and progressive muscle relaxation to reduce physical and psychological manifestations of stress.

HSER 200 (P/T) 3 Credits
ALCOHOL/DRUGS & FAMILY
Explores the role of the counselor in the chemically dependent family, from identification of roles through intervention strategies and treatment modalities. Includes competency-based education techniques, including group activities, presentations, research, readings, role playing, attendance in community meetings, and interviewing professionals in the field of family therapy. Recommended co-requisites: HSER 101 and HSER 102.

HSER 202 (P/T) 4 Credits
COUNSELING TECHNIQUES I
Introduces a variety of techniques used in group and individual counseling practices, emphasizing those relevant to addictions treatment. Explores cultural diversity, self-awareness in one's personal and professional life, and clients with disabilities. Discusses establishing a helping relationship with the client, professional responsibilities, adapting counseling strategies to individual characteristics of the client, and crisis management skills. Recommended prerequisites: HSER 102 and 200.

HSER 219 3 Credits
CASE MANAGEMENT
Introduces a variety of techniques used in case management practices, emphasizing those relevant to addictions treatment. Includes counselor ethics, values, attitudes and conduct. Explores cultural diversity, self-awareness in one's personal and professional life, and clients with disabilities. Discusses establishing a helping relationship with the client, professional responsibilities, adapting case management strategies to individual characteristics of the client, crisis management skills, and brokering services and referral. Prerequisite: HSER 228.

HSER 224 (P/T) 3 Credits
GROUP COUNSELING SKILLS
Investigates group skills, offering the opportunity to practice and develop beginning skills for group facilitation. Includes knowledge of the group experience and experiential learning of the group process. Emphasizes the effective use of skills and knowledge in chemical dependency and family systems group work. Prerequisite: HSER 202.

HSER 226 (P/T) 3 Credits
ETHICS FOR ADDICTIONS COUNSELING
Provides information on personal and professional ethics that apply to addictions counselors. Discusses personal issues and values, client rights, confidentiality, when to report abuse, self-care, sexual dilemmas, cultural diversities and standards, dual relationships and professional code of ethics.

HSER 228 (P/T) 4 Credits
SCREENING & ASSESSMENT
Surveys the process of obtaining and interpreting client information to determine substance abuse and substance dependence issues. Investigates how to utilize collateral information to determine client characteristics and needs, courses of action and available resources with the client's community. Presents the importance of gathering and interpreting information necessary for treatment planning and evaluating the progress of clients. Recommended prerequisites: HSER 101, 102, and 200.

HSER 248 (P/T) 2 Credits
INFECTIOUS DISEASE: ADDICTION RISK ASSESSMENT AND REDUCTION
Discusses the HIV/AIDS, STD's and Tuberculosis epidemic. Reviews the epidemiology of various STD's and the treatment options available. Presents chemical dependency and chemical use, and ways in which these behaviors promote STD's. Introduces routes of exposure and the manner in which various populations are infected. Covers basic directives for counseling individuals at high risk for STD's.

HUMANITIES

HUMN 148 3 Credits
INTRO TO HUMANITIES
Explores the question, "What does it mean to be human?" through examining the interrelationships of literature, art, and music. Focus: Classical and Medieval periods. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

HUMN 149 3 Credits
INTRO TO HUMANITIES
Explores the question, "What does it mean to be human?" through examining the interrelationships of literature, art, and music. Focus: Renaissance through Neoclassical periods. Prerequisites: Pass WR 115 with a C or better, or suitable placement score and pass READ 12, or suitable placement score.

HUMN 150 3 Credits
INTRO TO HUMANITIES
Explores the question, "What does it mean to be human?" through examining the interrelationships of literature, art, and music. Focus: Romanticism to the present. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

INDUSTRIAL EDUCATION

INED131-INED134 (P/T) 1-4 Credits
SPECIAL PROJECTS
Informs and updates awareness of current trends and changes in trade and industrial fields. Includes lab experience each week.

INED 156 (P/T) 1 Credit
EMPLOYMENT STRATEGIES
Prepares students to create a resume and cover letter, research internet job sources and job search techniques, prepare a portfolio of work examples, and contact potential employers. Provides practical experience through "mock interviews". Discusses appropriate dress for interviews. Includes different work place personality types and conflict resolution.

INED 281-INED 284 (P/T) 1-4 Credits
LABORATORY ACTIVITIES
Offers individual laboratory experience to familiarize the participant with those concepts, theories, techniques and procedures learned in technical coursework of their chosen field. Provides a direct supervision learning experience, including lab experience each week.

MATHEMATICS

MATH 10 3 Credits
BASIC MATHEMATICS I
Introduces basic math concepts, emphasizing the ability to understand and use basic operations with whole numbers applied to real-life situations. Includes the concepts of fractions and operations with fractions. Prerequisite: Suitable placement score.

COURSE DESCRIPTIONS

MATH 20 to MATH 251

<p>MATH 20 BASIC MATHEMATICS II Reviews basic math up to algebra, equipping the student with everyday math skills, and preparing for success in later math courses. Prerequisite: Pass MATH 10, or suitable placement score.</p>	3 Credits	<p>MATH 111 COLLEGE ALGEBRA Emphasizes critical thinking and use of graphical calculator technology to solve problems. Explores functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities. Prerequisite: Pass MATH 95 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 25 PRE ALGEBRA Extends the study of fractions, decimals, ratio/proportion/percent, measurement, and integers in an algebra setting. Covers algebraic expressions and equations, and introduces graphing. Bridges the gap between the concrete operations of arithmetic and the abstract concepts of algebra for students needing additional preparation in order to succeed in the algebra sequence. Prerequisite: Pass MATH 20, or suitable placement score.</p>	4 Credits	<p>MATH 112 ELEMENTARY FUNCTIONS Studies trigonometry and problem solving, including trigonometric functions and their graphs and inverse functions, trigonometric identities and equations, and vectors. Prerequisite: Pass MATH 111 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 60 BEGINNING ALGEBRA I Presents introductory algebra topics and elementary problem solving techniques, including real numbers, linear equations, introduction to graphing, and the concept of functions. No familiarity with algebra is expected prior to this course. Prerequisite: Pass MATH 25 with a "C" or better, or suitable placement score.</p>	4 Credits	<p>MATH 113 ANALYSIS/GEOMETRY/PRECALCULUS Studies pre-calculus, including matrices, determinants, sequences, series, probability, and analytical geometry. Prerequisite: Pass MATH 111 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 63 TECHNICAL MATH I Meets the needs of technical/vocational students. Includes the real number system, accuracy and precision concepts, basic algebraic concepts and operations, functions and graphs, and basic geometry. Familiarity with algebra is expected. Prerequisite: Pass MATH 60 with a "C" or better, or suitable placement score.</p>	4 Credits	<p>MATH 211 FUND OF ELEMENTARY MATH I Prepares the future elementary school teacher to teach math more effectively by giving them a deeper understanding of math. Covers problem solving, sets, numeration, whole numbers, and number theory. Prerequisite: Pass MATH 95 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 65 BEGINNING ALGEBRA II Presents introductory algebra and extends critical thinking and problem solving techniques. Includes factoring polynomials, solving quadratic equations, simplifying and solving rational and radical expressions. Prerequisite: Pass MATH 60 with a "C" or better, or suitable placement score.</p>	4 Credits	<p>MATH 212 FUNDAMENTALS OF ELEMENTARY MATH II Prepares the future elementary school teacher to teach math more effectively by giving them a deeper understanding of math. Covers fractions, decimals, integers, real numbers, statistics and probability. Prerequisite: Pass MATH 95 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 070 ALGEBRA REVIEW Integrates the use of technology to solve problems and aid the study of the functions of real numbers. Includes the study of data tables, elementary variable manipulation, function, linear and quadratic functions, linear systems of equations, and inequalities. Prerequisite: Pass MATH 65 with a "C" or better, or suitable placement score.</p>	5 Credits	<p>MATH 213 FUNDAMENTALS OF ELEMENTARY MATH III Prepares the future elementary school teacher to teach math more effectively by giving them a deeper understanding of mat, including geometry. Prerequisite: Pass MATH 95 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 095 INTERMEDIATE ALGEBRA Emphasizes critical thinking skills and integration of technology to solve problems. Includes quadratic equations, inequalities, linear models and graphs of nonlinear models, rational, exponential and logarithmic functions, and systems of equations. Prerequisite: Pass MATH 70 with a "C" or better, or pass both MATH 60 and 65 with an "A" or "A-", or suitable placement score.</p>	5 Credits	<p>MATH 243 INTRO TO PROBABILITY & STATISTICS I Introduces elementary statistics, including frequency, descriptive statistics, correlation, regression, measures of center probability, binomial and standards distributions and central limit theorem. Prerequisite: Pass MATH 111 or 105 with a "C" or better, or suitable placement score.</p>	4 Credits
<p>MATH 103 INTRO TO GRAPHING CALCULATORS Introduces graphing technology with an emphasis on mathematical applications. Presents graphing calculator skills which are normally acquired in Math 70 and 95.</p>	1 Credit	<p>MATH 244 INTRO TO PROBABILITY & STATISTIC II Continues the study of statistics, covering inferential statistics, hypothesis testing, rank correlation, signed rant test, population proportions, Kruskal-Wallis test, Chi-Square, and non-parametric methods. Prerequisite: Pass MATH 243 with a "C" or better.</p>	4 Credits
<p>MATH 105 CONTEMPORARY MATHEMATICS Explores everyday applications of mathematics, including geometry, trigonometry, finance, probability, statistics, US and metric measurement. Prerequisite: Pass MATH 95 with a "C" or better, or suitable placement score.</p>	4 Credits	<p>MATH 251 CALCULUS I Explores differential calculus of single real variable functions, including limits, continuity and differentiation, maxima and minima, curve sketching, applications, and anti-differentiation. Prerequisites: Pass MATH 112 with a "C" or better, or suitable placement score. Math 113 strongly recommended.</p>	5 Credits

COURSE DESCRIPTIONS

MATH 252 to MUP 205

MATH 252 5 Credits
CALCULUS II

Explores integral calculus of single, real variable functions, including definite and indefinite integrals, and techniques and applications of integration. Prerequisite: Pass MATH 251 with a "C" or better.

MATH 253 5 Credits
CALCULUS III

Explores differential equations, sequences, series, and applications. Prerequisite: Pass MATH 252 with a "C" or better. MATH 113 recommended.

MEDICAL RECORDS

MREC 110 (P/T) 3 Credits
MEDICAL TRANSCRIPTION I

Provides transcription practice of authentic physician-dictated medical reports organized by body systems or medical specialties. Emphasizes development of accuracy, speed, medical knowledge for the transcription of medical reports, and the efficient use of reference materials and other resources. Emphasizes editing and proofreading techniques, and grammar and punctuation review. Prerequisite: OA 226.

MREC 111 (P/T) 3 Credits
MEDICAL TRANSCRIPTION II

Provides transcription practice of authentic physician-dictated medical reports organized by body systems or medical specialties. Emphasizes development of accuracy, speed, medical knowledge for the transcription of medical reports, and the efficient use of reference materials and other resources. Emphasizes editing and proofreading techniques, and grammar and punctuation review. Prerequisite: MREC 110.

MREC 116 (P/T) 3 Credits
MEDICAL OFFICE PROCEDURES

Covers work routines of a medical office assistant, including scheduling appointments, maintaining patient account records, preparing a variety of health insurance forms, and other medically related document preparation. Requires transcription of medical documents and letters. Lab included. Medical Terminology recommended.

MREC 120 (P/T) 3 Credits
SURGICAL TRANSCRIPTION

The SUM Program Surgery Transcription Unit contains 8 hours of surgical dictation at an intermediate level. This training prepares students for surgical transcription for multispecialty clinics, group practices, medical centers, hospitals, and transcription services. Prerequisites: MREC 111 or previous experience transcribing medical dictation for family practice physicians..

MREC 125 (P/T) 1 Credit
CARDIOLOGY TRANSCRIPTION

Teaches cardiology dictation and transcription training, including H&P's, discharge summaries, operative reports, and more. Includes dictations of electrocardiograms, cardiac bypass, Doppler studies, arteriosclerosis, catheterizations, treadmill tests, and others. Lab included. Prerequisite: MREC 110.

MREC 126 (P/T) 1 Credit
GASTROINTESTINAL TRANSCRIPTION

Presents gastrointestinal dictation and transcription training, including H&P's, discharge summaries, operative reports, and more. Dictations include laparoscopy, hernia repair, cholecystectomy, appendectomy, pancreatic tumor, colon carcinoma, esophageal varices, and upper endoscopy. Lab included. Prerequisite: MREC 110.

MREC 127 (P/T) 1 Credit
ORTHOPEDIC TRANSCRIPTION

Teaches orthopedic dictation and transcription training, including H&P's, discharge summaries, operative reports, and more. Dictations include herniated cervical disk, carpal tunnel syndrome, torn rotator cuff, ilizarov leg lengthening, arthroscopy, hip replacement, luque rod insertion, fractures, and others. Lab included. Prerequisite: MREC 110.

MREC 128 (P/T) 1 Credit
PATHOLOGY TRANSCRIPTION

Teaches pathology dictation and transcription training in autopsy and surgical pathology reports. Dictations include 1 hour of gross and microscopic autopsy dictations and 2 hours of gross and microscopic descriptions of tissue specimens. Lab included. Prerequisite: MREC 110.

MREC 129 (P/T) 1 Credit
RADIOLOGY TRANSCRIPTION

Teaches radiology dictation and transcription training, sequenced by body system, to include bones and soft tissues, CAT and MRI scans, interventional radiology, mammography, nuclear medicine, contrast media studies and others. Lab included. Prerequisite: MREC 110.

MREC 210 (P/T) 3 Credits
MEDICAL BILLING I

Covers the roles and compliance issues for an insurance billing specialist; claims processes and introductions to procedural and diagnostic coding; health care payers - the "Blues", Medicare, Medicaid and other programs. Recommended: Medical terminology background or concurrent enrollment in GSCI 161.

MREC 211 (P/T) 3 Credits
MEDICAL BILLING II

Continues, with additional emphasis, addressing areas covered in MREC 210. Covers hospital billing for both inpatient and outpatient. Prerequisite: MREC 210.

MUSIC-PERFORMANCE

MUP 114 1 Credit
SPECIAL ENSEMBLES

Offers applied instruction and participation in small performance groups (i.e. vocal solos, duets, trios, quartets, etc.) and small instrumental groups for the first year student. Offers experience in varied styles and numerous performances.

MUP 171 - MUP 192 1 Credit
APPLIED MUSIC INSTRUCTION

Offers private instruction in voice, piano, organ, woodwinds, brasses, percussion, strings, guitar, and other instruments for the first year student. Fee Required.

MUP 202 1 Credit
CONCERT BAND

Offers applied study and performance to anyone in the community with previous band experience, from high school age to adults. Studies and performs traditional and contemporary band literature. Rehearses evenings.

MUP 205 2 Credits
JAZZ BAND

Offers applied study and performance in an ensemble, by audition. Concentrates on big band jazz arrangements and jazz ensemble styles.

COURSE DESCRIPTIONS

MUP 214 to MUS 211

MUP 214 SPECIAL ENSEMBLES	1 Credit
Offers applied study in small performance groups (i.e. vocal solos, duets, trios, quartets, etc.) and small instrumental groups for the second year student. Offers experience in varied styles of music chosen by students and instructor. Includes numerous community performances. Prerequisite: instructor approval.	
MUP 215 WIND ENSEMBLE	1 Credit
Offers applied study and performance in wind ensemble format. Includes study of traditional and contemporary concert band literature and at least one major concert per term.	
MUP 221 TREASURE VALLEY CHORALE	1 Credit
Offers rehearsal and performance of choral literature. Open to all singers.	
MUP 222 CONCERT CHOIR	2 Credits
Performs choral literature of all styles and historical periods.	
MUP 225 VOCAL JAZZ ENSEMBLE	1 Credit
Performs vocal jazz repertoire and other styles of music. Open by audition only.	
MUP 242 SYMPHONY ORCHESTRA	1 Credit
Offers applied study and performance for string and wind players interested in playing orchestral literature with the Treasure Valley Symphony. Rehearses evenings and is open to all interested musicians, including high school students.	
MUP 271 - MUP 292 APPLIED MUSIC INSTRUCTION	1 Credit
Offers private instruction in voice, piano, organ, woodwinds, brasses, percussion, guitar, or other instrument for the second year student. Fee required.	

MUSIC

MUS 101 MUSIC FUNDAMENTALS	3 Credits
Acquaints students with the elements of music fundamentals. Includes note reading, rhythm skills, and basic theory.	
MUS 111 MUSIC THEORY	4 Credits
Examines the elements, structures, and patterns of music and analyzes the styles of major composers. Includes beginning level music writing. Co-requisite: MUS 114.	
MUS 112 MUSIC THEORY	4 Credits
Examines the elements, structures and patterns of music and analyzes the styles of major composers. Includes writing music manuscript. Prerequisite: MUS 111, or instructor approval. Co-requisite: MUS 115.	
MUS 113 MUSIC THEORY	4 Credits
Examines the elements, structures, and patterns of music and analyzes the styles of major composers. Includes writing music manuscript. Prerequisite: MUS 112, or instructor approval. Co-requisite: MUS 116.	

MUS 114 SIGHT SINGING/EAR TRAINING	1 Credit
Offers practice in dictation and reading music. Stresses solfège, written dictation of rhythms and intervals. Co-requisite: MUS 111.	
MUS 115 SIGHT SINGING/EAR TRAINING	1 Credit
Offers practice in dictation and reading music. Stresses solfège, written dictation of rhythm and intervals Co-requisite: MUS 112.	
MUS 116 SIGHT SINGING/EAR TRAINING	1 Credit
Offers practice in dictation and reading music. Stresses solfège, written dictation of rhythm and intervals. Co-requisite: MUS 113.	
MUS 131 CLASS PIANO	2 Credits
Offers theory and practice in piano and basic keyboard techniques for the first year student.	
MUS 132 CLASS PIANO	2 Credits
Offers theory and practice in piano and basic keyboard techniques for the first year student.	
MUS 133 CLASS PIANO	2 Credits
Offers theory and practice in piano and basic keyboard techniques for the first year student.	
MUS 201 INTRO TO MUSIC & ITS LITERATURE	3 Credits
Studies the elements, forms and historical styles of music with emphasis on listening to recordings. Introduces musical terminology, the instruments of the orchestra, and music through the middle ages.	
MUS 202 INTRO TO MUSIC & ITS LITERATURE	3 Credits
Studies the elements, forms and historical styles of music with emphasis on listening to recordings. Studies music and composers of the Renaissance and Baroque Eras. Prerequisite: MUS 201, or instructor approval.	
MUS 203 INTRO TO MUSIC & ITS LITERATURE	3 Credits
Studies the elements, forms and historical styles of music with emphasis on listening to recordings. Includes music and composers of the Classical and Romantic Eras. Prerequisite: MUS 201, or instructor approval.	
MUS 205 INTRODUCTION TO JAZZ HISTORY	3 Credits
The student will learn about what jazz music represents, the historical creation of jazz, and the great jazz masters and their music from the early African and European influences to contemporary trends.	
MUS 211 MUSIC THEORY	4 Credits
Offers a brief review of Music Theory I with emphasis on the basics of four-part writing. Studies different types of modulation (composition and analysis). Includes construction and usage of altered chords in the context of the chord progression and analysis. Prerequisite: MUS 113. Co-requisite: MUS 214	

COURSE DESCRIPTIONS

MUS 212 to NATR 116

MUS 212 4 Credits
MUSIC THEORY
Examines the structure and elements of music through analysis of the styles of major composers. Includes some composition. Prerequisite: MUS 211. Co-requisite: MUS 215.

MUS 213 4 Credits
MUSIC THEORY
Examines the structure and elements of music through analysis of the styles of major composers. Includes some composition. Prerequisite: MUS 212. Co-requisite: MUS 216.

MUS 214 2 Credits
KEYBOARD HARMONY
Offers theory and practice in piano techniques such as modulation, transposition, chord reading and extemporaneous playing. Co-requisite: MUS 211.

MUS 215 2 Credits
KEYBOARD HARMONY
Offers theory and practice in piano techniques such as modulation, transposition, chord reading and extemporaneous playing. Co-requisite: MUS 212.

MUS 216 2 Credits
KEYBOARD HARMONY
Offers theory and practice in piano techniques such as modulation, transposition, chord reading and extemporaneous playing. Co-requisite: MUS 213.

MUS 260 1 Credit
BASIC CONDUCTING
Presents fundamental techniques of conducting, including baton fundamentals, rehearsal techniques, and score reading.

NATURAL RESOURCES

NATR 101 (P/T) 3 Credits
INTRO TO WILDLAND FIRE (FFT 2)
Includes S-130, S-190, and L-180 training. Provides entry level firefighter skills, including the primary factors affecting the start and spread of wild-fires, and recognition of potentially hazardous situations. Meets the fire behavior training needs of a firefighter type 2 (FFT 2) on an incident as outlined in the PMS 310-1.

NATR 102 (P/T) 2 Credits
L-280 FOLLOWERSHIP TO LEADERSHIP
Offers a self-assessment opportunity for individuals preparing to step into a leadership role. Combines one day of classroom instruction followed by a second day in the field, working through a series of problem solving events. Prerequisite: NATR 101.

NATR 103 (P/T) 3 Credits
APPLIED FOREST/RANGE BOTANY
Introduces plant identification. Familiarizes students with basic field characteristics necessary for identifying forest and range plants. Includes terminology, morphology, nomenclature and classification with basic techniques for using plant keys. Introduces ecological concepts and plant relationships. Lab required.

NATR 104 (P/T) 3 Credits
S-290 INTERMEDIATE FIRE BEHAVIOR
Prepares the prospective supervisor to undertake safe and effective fire management operations. Develops fire behavior prediction knowledge and skills. Discusses fire environment differences. Prerequisite: NATR 101.

NATR 105 (P/T) 3 Credits
FIELD METHODS IN NATURAL RESOURCES
Introduces the fundamentals of surveying, including the basics of right angle trigonometry, leveling, and the various types of traverses by using a level and transit. Lab required.

NATR 106 (P/T) 3 Credits
INTRO TO FIRE EFFECTS
Introduces the physical and biological effects of fire on ecosystems. Includes effects on individual plants and animals, range sites, timbered areas, air quality, watersheds, soil, and other related resources. Lab required.

NATR 107 (P/T) 2 Credits
S-260 INTERAGENCY INCIDENT BUS MGT
Provides general training needs for all positions requiring an understanding of interagency incident business management. Prerequisite: NATR 101.

NATR 108 (P/T) 2 Credits
S-270 BASIC AIR OPERATIONS
Discusses aircraft types and capabilities, aviation management and safety for flying and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Prerequisite: NATR 101.

NATR 109 (P/T) 2 Credits
S-200 INITIAL ATTACK IC
This course will provide the individual in charge of the initial attack of small non-complex fires, the training needed for size-up, deployment of forces, suppression, mop-up, communications, and administrative duties. Prerequisite: NATR 101, NATR 104.

NATR 111 (P/T) 5 Credits
INTRO TO NATURAL RESOURCES
Surveys the interrelationships between uses of forest and rangeland. Examines elementary surveying, forest measurements, basic silviculture, forest soils, tree and plant identification and forest ecology. Lab required.

NATR 112 (P/T) 2 Credits
GLOBAL POSITIONING SYSTEMS (GPS)
Acquaints the student with global positioning systems or GPS. Includes what GPS is, its uses, its short-comings, and field experience in the use of the equipment. Lab required.

NATR 115 (P/T) 2 Credits
S-230 CREW BOSS-SINGLE RESOURCE
Produces student proficiency in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Includes operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities. Prerequisite: NATR 101, NATR 102, NATR 104. Recommended prerequisite: NATR 121.

NATR 116 (P/T) 2 Credits
S-215 FIRE OPERATION WILDLAND/URBAN
Assists structure and wildland firefighters in making tactical decisions when confronting wildland fire that threatens life, property, and improvements, in the wildland/urban interface. Includes size-up, initial strategy, structure triangle, tactics, action assessment, public relations, and follow-up and safety.

COURSE DESCRIPTIONS

NATR 117 to NURS 184

NATR 117 (P/T) 1 Credit
S-231 ENGINE BOSS-SINGLE RESOURCE
 Produces student proficiency in the performance of the duties associated with engine boss, single resource, including engine and crew capabilities and limitations, information sources, fire size-up consideration, tactics, and wildland/urban interface. Prerequisites: NATR 101, NATR 104, NATR 115.

NATR 121 (P/T) 1 Credit
S-131 SQUAD BOSS
 Meets the advanced training needs of the Firefighter Type I (FFT 1) in an interactive format. Contains several tactical decision games designed to facilitate learning the objectives. Prerequisite: NATR 101 and one year experience in the field.

NATR 122 (P/T) 2 Credits
S-390 WILDLAND FIRE BEHAVIOR CALC
 Introduces fire behavior calculations by manual methods, using nomograms and the Fire Behavior Handbook Appendix B. Examines the determinants of fire behavior through studying inputs (weather, slope, fuels, and fuel moisture). Instructs how to interpret fire behavior outputs, documentation processes, and fire behavior briefing components. Prerequisites: NATR 101, NATR 104, NATR 115.

NATR 123 (P/T) 2 Credits
S-330 TASK FORCE/STRIKE TEAM
 Provides training for the positions of Task Force Leader and Strike Team Leader specific to wildland fire suppression, as outlined in the Wildland Fire Qualification System Guide and the Position Task Books. Prerequisites: NATR 101, NATR 104, NATR 122.

NATR 127 (P/T) 3 Credits
S-336 TACTICAL DECISION MAKING
 Provides training requirements for the Operations Section of the Incident Command System. Prerequisites: NATR 101, NATR 104, NATR 115.

NATR 140 (P/T) 4 Credits
MAP USE AND ANALYSIS
 Introduces the development, understanding, and practical use of planimetric and topographic maps, along with aerial photographs. Includes map and photo scale, finding distances, directions, and area on maps and photos, and identification of map and photos features. Lab required.

NATR 202 (P/T) 3 Credits
S-212 WILDLAND FIRE CHAIN SAWS
 Introduces the function, maintenance and use of internal combustion engine powered chain saws, and their tactical wildland fire application. Provides entry level training for firefighters with little or no previous experience in operating a chain saw. Does not constitute certified faller designation. Prerequisites: Qualified FFT 2, and current first aid/CPR certification.

NATR 203 (P/T) 2 Credits
S-211 PORTABLE PUMPS & WATER USE
 Consists of three skill areas: supply, delivery and application of water. Requires set up, operation, and maintenance of pump equipment in a field exercise.

NATR 217 (P/T) 3 Credits
INTRO TO WATERSHED MANAGEMENT
 Surveys the theory, principles and practices involved before water is utilized for commercial production projects. Studies the microclimate, hydrology, and soil as influenced by the vegetation in relation to the regional variables of climate, geology, topography, and vegetation type and structure. Follows the water from the atmosphere, to the ground, and down the watershed to the area where it can be used for natural resources, industry, recreation, and domestic needs. Lab required.

NATR 221 (P/T) 3 Credits
INTRO TO NATURAL RESOURCE ECOLOGY
 Introduces ecology, including history, terminology, ecological relationships and interactions in individual ecosystems, and global ecological principles. Stresses the ecology of the northwest.

NATR 241 (P/T) 4 Credits
INTRO TO RANGE MANAGEMENT
 Introduces the science of range management, including identification, physiology, and ecology of range plants; stocking rate considerations; grazing system selection; range improvement methods; range inventory methods and analysis; and nutrition. Emphasizes range management objectives to provide society with meat, water, wildlife, and recreational opportunities on a sustained basis from lands unsuited for permanent cultivation. Lab required.

NATR 251 (P/T) 3 Credits
RECREATION RESOURCE MANAGEMENT
 Surveys recreation resource management, including a brief history, legislative response to public pressure, recreational planning, financing forest recreation, site selection and implementation (the development and design of a forest campground). Lab required.

NATR 252 3 Credits
INTRO TO WILDLIFE MANAGEMENT
 Introduces the principles of wildlife management and some of the practices and techniques used in controlling wild animal populations. Emphasizes the multiple use concept necessary for natural resource management.

NURSING

NURS 101 (P/T) 10 Credits
NURSING I
 Introduces nursing principles relating to Maslow's hierarchy of needs, including death and dying, of persons throughout the life span. Includes content in communication, body mechanics, body alignment, medical asepsis, aids in comfort in activities of daily living, wellness, and nutrition. Integrates into curriculum the scope of nursing practice and perspectives in caring, legal aspects, and special needs relating to ethnic and cultural groups. Course based on the nursing process, in the framework of the art and science of nursing. Prerequisites: Official Admission into Nursing Program, and Pass BIOL 231 and 232 with a "C" or better.

NURS 102 (P/T) 10 Credits
NURSING II
 Building on prior knowledge, includes three basic components of care: crisis, regulatory, and body systems. Includes oxygenation, pharmacology, pediatrics, diagnostic procedures, health maintenance, and the care of patients with common conditions of illness. Prerequisite: Pass NURS 101, and WR 121 and BIOL 233 with a "C" or better.

NURS 103 (P/T) 10 Credits
NURSING III
 Continues to build on the previous content in the care of patients with common conditions of illness and health maintenance, including maternal/child health. This course completes the nursing requirements for the Practical Nursing Certificate, with the graduate eligible to take the licensing examination for Practical Nurse (NCLEX-PN). Prerequisites: Pass NURS 102, BIOL 234, and PSYC 201, 202, or 203 with a "C" or better.

NURS 184 3 Credits
MEDICAL TERMINOLOGY II
 Presents advanced vocabulary, extending and reinforcing those terms acquired in Medical Terminology I.

COURSE DESCRIPTIONS

NURS 198 to OA 290

NURS 198 (P/T) 1 Credit
LEARNING LABORATORY
Provides opportunity for students to plan independent study and activities each week for completion of specified objectives in the nursing sequence. Co-requisites: NURS 101, 102, 103, 201, 202, 203.

NURS 200 (P/T) 5 Credits
ROLE DEVELOPMENT
Builds on prior learning of nursing principles and concepts. Theory and clinical emphasis is on physical assessment, evaluation of nursing practice and development of the Registered Nurse role. Clinical time provides for demonstration of nursing practice, knowledge and skills. Prerequisites: Pass NURS 103, and WR 122, with a 3.0 gpa in the nursing courses and a 2.70 in first year general education courses; or by advanced placement.

NURS 201 (P/T) 9 Credits
NURSING IV
Builds on prior learning of nursing principles with application to the obstetrical, neonate and the acutely ill person with complex health problems. Presents and implements increasingly complex nursing concepts and skills based on the nursing process. Prerequisites: Pass NURS 200 and FNUT 255 with a "C" or better.

NURS 202 (P/T) 9 Credits
NURSING V
Builds on prior knowledge and is based on the nursing process problem solving concepts. Emphasizes nursing care related to patients with more complex health care needs. Clinical experiences focus on caring for pediatric and adult patients and beginning leadership principles in a variety of community settings. Prerequisites: Pass NURS 201, and WR 123 or SP 111 or SP 219, and PHRC 211 with a "C" or better.

NURS 203 (P/T) 10 Credits
NURSING VI
Builds on prior knowledge. Facilitates synthesis and application of concepts, theories and nursing interventions learned in all previous nursing courses, integrating the role of the registered nurse. Based on the nursing process problem solving concepts, emphasizes nursing care relating to mental health needs and more complex, acute health care needs. Addresses nursing interventions for the client with crisis, regulatory and body systems needs. Emphasizes priority setting and evaluation in giving care to even larger groups of clients with increasingly complex problems. Covers leadership principles and the transition from student to graduate in the practice of nursing and as a member of the health care team. Clinical experiences focus on patients with acute medical and mental health needs.

OFFICE ADMINISTRATION

OA 116 (P/T) 3 Credits
OFFICE PROCEDURES
Provides the foundation necessary for entry-level employment as an office assistant with exercises that simulate entry-level administrative work situations.

OA 121 (P/T) 3 Credits
KEYBOARDING I
Emphasizes proper techniques of keyboarding through meaningful practice and speed development. Does not include word processing concepts. Lab included.

OA 122 (P/T) 3 Credits
KEYBOARDING II
Applies drills specific to speed building and achieving 60 wpm or better. Does not include word processing concepts. Lab included. Prerequisites: Minimum typing speed of 35 wpm.

OA 124 (P/T) 2 Credits
KEYBOARDING SKILL BUILDING
Emphasizes improvement of proficiency in keyboarding skills (speed and accuracy). Lab included.

OA 131 (P/T) 3 Credits
LEGAL PROCEDURES I
Introduces substantive areas of law and legal principles as they pertain to the tasks required of the legal secretary, legal office assistant, or paralegal. Covers law topics, including the law office structure, administrative functions, court structure, civil law, criminal law, and the trial process. Lab included. Prerequisite: OA 201.

OA 132 (P/T) 3 Credits
LEGAL PROCEDURES II
Continues topics of Legal Office Procedures I. Covers law topics, including probate and estate planning, family law, business organizations, real property, and contract law. Lab included. Prerequisite: OA 131.

OA 201 (P/T) 3 Credits
WORD PROCESSING PROCEDURES I
Uses Microsoft Word to create and format Word documents using various formatting tools. Covers the skills needed for MOS certification. Lab included. Keyboarding skills recommended.

OA 202 (P/T) 3 Credits
WORD PROCESSING PROCEDURES II
Presents advanced features in Microsoft Word to efficiently produce professional documents. Covers the skills necessary for MOS certification. Lab included. Prerequisite: OA 201 or instructor approval.

OA 225 3 Credits
MACHINE TRANSCRIPTION
Introduces transcription skills in order to produce mailable business documents efficiently. Emphasizes punctuation, proofreading, and word study. Lab included. Keyboarding skills recommended.

OA 226 (P/T) 3 Credits
ADVANCED MACHINE TRANSCRIPTION
Covers legal or medical transcription activities representative of actual transcription done in a legal or medical setting. Prerequisites: OA 201, and a minimum keyboarding speed of 50 wpm or permission of instructor.

OA 240 (P/T) 3 Credits
RECORDS MANAGEMENT
Focuses on Records Information Management (RIM). Covers terminology, data, employment opportunities, current developments, technology, and legal and ethical concerns in RIM. Includes field trips to selected businesses to provide further emphasis.

OA 290 (P/T) 3 Credits
INTEGRATED OFFICE APPLICATIONS
Provides in-depth, hands on projects with integrated applications and Internet research, including importing/exporting functions of technology and software as they relate to business documents. Emphasizes technical skills and the ability to work in teams. Provides the culminating activity (capstone course) at the end of the associate degree program for Office Administration majors. Lab included.

PHILOSOPHY

PHIL 101 3 Credits
PHILOSOPHICAL PROBLEMS
 Introduces the problems and systems of philosophy, including metaphysics, epistemology, ethics, social and political philosophy, and religion. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

PHARMACODYNAMICS

PHRC 211 2 Credits
 (P/T)
PHARMACODYNAMICS
 Builds on basic concepts and principles of drug related mathematics, administration of medications, and actions and classifications of drugs. Provides background knowledge necessary for further understanding of actions and effects of drugs on the human body as well as nursing implications. Deals with specific groups of drug classifications. Co-requisite: NURS 201, or instructor approval.

PHRC 212 2 Credits
 (P/T)
PHARMACODYNAMICS
 Builds on basic concepts and principles of drug related mathematics, administration of medications, and actions and classifications of drugs. Provides background knowledge necessary for further understanding of actions and effects of drugs on the human body as well as nursing implications. Deals with specific groups of drug classifications. Co-requisite: NURS 202, or instructor approval.

PHYSICS

PHYS 201 4 Credits
GENERAL PHYSICS I
 Explores classical mechanics, including motion, forces, and energy. Intended for students without a calculus background. Lab required. Prerequisite: MATH 112.

PHYS 202 4 Credits
GENERAL PHYSICS II
 Explores fluids, elasticity, waves and sound, thermodynamics, and electrostatics. Intended for students without a calculus background. Lab required. Prerequisite: PHYS 201.

PHYS 203 4 Credits
GENERAL PHYSICS III
 Explores electric and magnetic theory, electronics, light, and optics. Intended for students without a calculus background. Lab required. Prerequisite: PHYS 202.

PHYS 211 5 Credits
CLASSICAL PHYSICS I
 Explores classical mechanics, including motion, forces, and energy. Intended for students with a calculus background. Lab required. Prerequisite: MATH 251 or concurrent enrollment in MATH 251.

PHYS 212 5 Credits
CLASSICAL PHYSICS II
 Explores fluids, elasticity, waves and sound, thermodynamics, and electrostatics. Intended for students having a calculus background. Lab required. Prerequisites: PHYS 211 and MATH 251 and 252, or concurrent enrollment in MATH 252.

PHYS 213 5 Credits
CLASSICAL PHYSICS III

Explores electric and magnetic theory, electronics, light, and optics. Intended for students with a calculus background.. Lab required. Prerequisites: PHYS 212, and MATH 252, and MATH 253, or concurrent enrollment in MATH 253.

POLITICAL SCIENCE

POSC 201 3 Credits
AMERICAN GOVERNMENT
 Introduces the principles of the American constitutional system, and examines civil liberties, minority rights, and issues of social equality.

POSC 202 3 Credits
AMERICAN GOVERNMENT
 Examines issues of public opinion, interest groups, and their impact upon government systems; political party structures; campaigning and elections; the influence of media; and state and local governments.

POSC 203 3 Credits
AMERICAN GOVERNMENT
 Examines the three branches of government plus governmental bureaucracies. Analyzes major policy areas of national government.

PSYCHOLOGY

PSYC 101 3 Credits
PSYCHOLOGY OF HUMAN RELATIONS
 Emphasizes the theory and practice of human relations in the work setting, including self-management skills, role as employee, and effective participation in work groups. Stresses self-awareness, awareness of others, managing stress and emotions, building healthy relationships, interpersonal communications, intercultural sensitivity, conflict resolution, and professional behavior.

PSYC 201 3 Credits
GENERAL PSYCHOLOGY
 Introduces psychology, discussing biological processes and principles and theories of human behavior. Surveys experimental design, including elementary statistics, tests and measurements. Examines biological, and developmental aspects, including consciousness, senses, and perceptual processes.

PSYC 202 3 Credits
GENERAL PSYCHOLOGY
 Stresses memory, thinking, and developmental stages. Discusses theories of intelligence and learning. Surveys psychological processes of language and thought, motivation, emotion, and primary theories of human growth and development. Prerequisite: PSYC 201, or BIOL 101.

PSYC 203 3 Credits
GENERAL PSYCHOLOGY
 Stresses abnormal psychology and social psychology. Discusses theories of personality adjustment, abnormal psychology, psychological intervention, stress, conflict, and social psychology. Prerequisite: PSYC 201, or BIOL 101.

PSYC 235 3 Credits
INTRO TO HUMAN DEVELOPMENT I
 Discusses theoretical perspectives, and physiological, social, and psychological forces that impact the stages of human development from conception through late childhood. Prerequisite: PSYC 201, or BIOL 101.

PSYC 236 3 Credits
INTRO TO HUMAN DEVELOPMENT II
 Discusses theoretical perspectives, and physiological, social, and psychological forces that impact the stages of human development from adolescence through late adulthood. Discusses special topics pertaining to those stages in life. Prerequisite: PSYC 201, or BIOL 101.

COURSE DESCRIPTIONS

PSYC 237 to SPAN 103

PSYC 237 4 Credits
SEASONS OF LIFE
Focuses on the concept that development is a lifelong process, beginning at conception and continuing into late adulthood. Considers human development as influenced by three “clocks”: the biological clock, the social clock, and the psychological clock. Prerequisite: PSYC 201, or BIOL 101.

READING

READ 011 3 Credits
READING IMPROVEMENT
Includes vocabulary development and comprehension skills basic to effective reading and necessary for the pursuit of a college education. Prerequisite: Suitable placement score.

READ 012 3 Credits
DEVELOPMENTAL READING
Emphasizes study strategies and thinking skills for the purpose of increasing comprehension and retention of college textbooks. Explores library resources. Emphasizes vocabulary building. Includes reading assignments requiring written responses and reflections. Prerequisite: Pass READ 11 or suitable placement score.

RELIGION

R 201 3 Credits
WORLD RELIGIONS
The history, evolution, ideology, philosophy, sacred practices and rituals, spiritual, and cultural expressions of the world’s living religions will be examined. Indigenous and prehistoric religions will be studied along with the five “major” universal religions: Hinduism, Buddhism, Judaism, Christianity, and Islam. Other religions and sects will also be explored. Prerequisite: Pass WR 115 with a “C” or better, or suitable placement score.

SOCIOLOGY

SOC 204 3 Credits
GENERAL SOCIOLOGY
Presents basic theories, concepts, and processes involved in scientific study of society, including culture, socialization, social structure, social interaction, and formal organizations.

SOC 205 3 Credits
GENERAL SOCIOLOGY
Examines deviance. Studies social stratification, issues of social class, gender, racial and ethnic groups, the elderly, and collective behavior.

SOC 206 3 Credits
GENERAL SOCIOLOGY
Applies sociological analysis of social change and trends in the family, religion, education, economics, politics, and medicine.

SOC 210 3 Credits
MARRIAGE/FAMILY/INTIMATE RELATIONS
Presents sociological analyses of topics which may include romantic love, sexual patterns, courtship and dating, intimate relationships, divorce, widowhood, remarriages, family systems in other cultures, family systems in America, current changes, and prospects for the future. Guides students into ways of coping better in their own relationships.

SOCIAL WORK

SOWK 111 3 Credits
INTRO TO SOCIAL WORK
Introduces the profession of social work, surveying the professional knowledge, skills, values, and ethics applicable for generalist social work practices. Reviews the historical, philosophical, educational, and social dimensions of the profession. Considers various fields of social work practice and their unique attributes, including income levels of each. Places special emphasis on rural areas. Recommended Co-requisite: SOWK 280.

SOWK 220 3 Credits
SOCIAL WELFARE SYSTEM & POLICY
Addresses the historical impact and current delivery of social services to people of poverty, people of color, elderly, women, homosexuals, and persons with mental and or physical disabilities, recognizing the fundamental duty of the social work profession to promote social equity and justice. Traces the historical evolution of the American social service delivery system, and examines development of policies as they relate to societal values. Prerequisite: SOWK 111 or instructor approval.

SPEECH

SP 111 3 Credits
FUNDAMENTALS OF SPEECH
Instructs students to prepare and deliver a series of speech projects, including at least one video-taped speech. Provides critiques by the speaker, class members, and instructor. Prerequisites: Pass WR 95 with a C or better, or suitable placement score.

SP 112 3 Credits
PERSUASIVE SPEECH
Provides students an understanding of the persuasive communication process in order to make more persuasive presentations and better understand persuasive mechanisms in the issues they encounter. Prerequisites: Pass WR 95 with a C or better, or suitable placement score.

SP 219 3 Credits
SMALL GROUP DISCUSSION
Stresses skill building and theory in decision making, goal setting, presentation planning, and knowledge of group process. Assists students in using effective small group techniques in a variety of settings. Prerequisites: Pass WR 95 with a C or better, or suitable placement score.

SPANISH

SPAN 101 4 Credits
1ST YEAR SPANISH I
Introduces the language and culture of Spanish speaking countries. Develops all four language components: speaking, listening, reading and writing. Emphasis on communicative proficiency.

SPAN 102 4 Credits
1ST YEAR SPANISH II
Introduces the language and culture of Spanish speaking countries. Develops all four language components: speaking, listening, reading and writing. Emphasis on communicative proficiency. Prerequisite: SPAN 101 or Instructor permission.

SPAN 103 4 Credits
1ST YEAR SPANISH III
Introduces the language and culture of Spanish speaking countries. Develops all four language components: speaking, listening, reading and writing. Emphasis on communicative proficiency. Prerequisite: SPAN 102 or Instructor permission.

COURSE DESCRIPTIONS

SPAN 201 to SFS 262

SPAN 201 4 Credits
 2ND YEAR SPANISH I
 Continues the review and expansion of vocabulary, grammar, conversation and composition. Introduction to cultural and literacy readings. Prerequisite: two years high school Spanish, SPAN 103 or Instructor permission.

SPAN 202 4 Credits
 2ND YEAR SPANISH II
 Continues the review and expansion of vocabulary, grammar, conversation and composition. Introduction to cultural and literacy readings. Prerequisite: SPAN 201.

SPAN 203 4 Credits
 2ND YEAR SPANISH III
 Continues the review and expansion of vocabulary, grammar, conversation and composition. Introduction to cultural and literacy readings. Prerequisite: SPAN 202.

STRUCTURAL FIRE SCIENCE

SFS 101 P/T 4 Credits
 INTRODUCTION TO FIRE PROTECTION
 History and philosophy of services. Includes responsibility in the community, roles and responsibilities of paramedics and firefighters, an overview of the ICS System, and the organization and function of emergency services agencies and allied organizations education and certification. Awareness and identification of hazardous materials, emergency services apparatus fire behavior, detection and protection system and survey of professional career opportunities and requirements and resume development.

SFS 151 P/T 3 Credits
 FIRE INCIDENT RELATED EXPERIENCE I
 Fire incident related standards that fulfill the requirements of OSHA and the Department of Public Safety Standards and Training for Entry-Level Firefighter.

SFS 152 P/T 3 Credits
 FIRE INCIDENT RELATED EXPERIENCE II
 Large-diameter hose uses, attack hose procedures, ICS and passport information, firefighter responsibilities, and ISI SCBA procedures. Includes SCBA use under extreme working loads, refilling SCBA bottles, use of cascade systems, live-fire attack practices, salvage operations, overhaul practices, fire cause investigation, district familiarization, map book use, radio procedures, driving laws and practices, power tool operation and maintenance, ventilation principles, and vertical ventilation. Includes a practicum for Driver certification and driving portions of Pumper Operator. Prerequisite: SFS 151.

SFS 153 P/T 3 Credits
 FIRE INCIDENT RELATED EXPERIENCE III
 Practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for IFSAC Firefighter I. Includes a practicum for "Driver" and "Pumper Operator" certification. Students completing the course will take written and task performance tests for "Driver" certification. Prerequisite: SFS 152.

SFS 158 P/T 3 Credits
 FIRE PUMPS AND WATER SUPPLY
 Theory of pump operation and scope of water supply. Types and features of various pumps, practical operation of fire pumps and accessories. Includes drafting, preplanning of hydrant and tanker operations, hydraulic calculations, water supply requirements source options, and delivery systems. This course is designed to meet the competencies as set forth by DPSST for Firefighter II and Pumper Operator. Prerequisites: SFS 152 and

MATH 70, or instructor consent.
 SFS 166 P/T 1 Credit
 FIREFIGHTERS LAW
 Covers the legal responsibilities and rights of firefighters in driving, inspection, emergency operations, communication, and fire prevention. Includes firefighter's rights as a civil service employee.

SFS 169 P/T 3 Credits
 FIRE DEPARTMENT LEADERSHIP
 Role of fire service leaders in managing the daily operation of a fire company. Covers leadership concepts such as types of supervisors, including attitude, cooperation, individual differences, motivation, and communications as part of the management cycle.

SFS 171 (P/T) 3 Credits
 FIRE PROTECTION SYSTEM AND EXTINGUISHERS
 Types, uses, and care of portable fire extinguishers. Includes sprinklers and special extinguishing systems, standpipe systems, systems designed to detect and report fires, and fire pumps.

SFS 172 (P/T) 3 Credits
 INTERNATIONAL FIRE CODES
 Interprets the International Building Code, International Fire Code, State Fire Marshal Fire Safety Regulations, and related Oregon and Idaho revised statutes N.F.P.A., and other codes relating to fire prevention and life safety.

SFS 217 P/T 1 Credit
 FIRE DEPARTMENT BUDGETS
 Outlines the budgeting process as required by Oregon and Idaho laws to include types of budgets, the process of preparing a budget, and classifying expenditures.

SFS 256 (P/T) 4 Credits
 FIRE SERVICE RESCUE PRACTICES
 Technical information on various fire department rescue situations. Covers tools and equipment, ropes and knots, trench rescue, shoring, warehouse searches, outdoor searches, rescue in situations involving elevation differences, package patients, water and ice rescues, and vehicle extraction. Prerequisite: SFS 152.

SFS 259 (P/T) 3 Credits
 MAJOR EMERGENCY STRATEGY & TACTICS
 Major emergencies and principles relating to incident priorities, resource management, and tactical operations to make judgements about strategic management.

SFS 260 (P/T) 3 Credits
 FUNDAMENTALS OF FIRE PREVENTION
 History and philosophy of fire protection through review of life and property loss statistics, case studies of fire protections agencies, current and future fire protection problems, and fire prevention laws and regulations. Develops an awareness of, and a positive attitude toward, fire prevention as a method of accomplishing the fire department mission.

SFS 261 (P/T) 3 Credits
 FIRE INCIDENT RELATED EXP IV
 Introduces additional skills and provides a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for NFPA. Prerequisite: SFS 153.

SFS 262 (P/T) 3 Credits
 FIRE INCIDENT RELATED EXP V
 Introduces new skills and provides a practicum for NFPA Firefighter II, Driver, and Pumper Operator certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. Prerequisite: SFS 261.

COURSE DESCRIPTIONS

SFS 263 TO VMW 122

SFS 263 (P/T) 3 Credits
FIRE INCIDENT RELATED EXP VI
Includes skills and provides a practicum for NFPA Firefighter II, Driver, and Pumper Operation certifications. Prepares students for entering the job market and assists them in becoming more successful in competitive fire service entry processes. Introduces contemporary issues regarding the furnishing of emergency services. Students completing the course will take written and task performance tests for NFPA Firefighter II. Prerequisite: SFS 262.

SFS 266 (P/T) 3 Credits
BUILDING CONSTRUCTION FOR FIREFIGHTERS
Fire problems inherent in structural elements of buildings. Includes inspection of various building types as a basis for applying effective extinguishment practices with adequate safeguards for personnel.

SFS 284 (P/T) 1 Credit
PUBLIC INFO FOR THE FIRE SERVICE
Provides students with the ability to identify public and proprietary information to form media releases and develop and maintain positive relations with media representatives. Prerequisite: WR 121.

THEATRE

TA 100 3 Credits
INTRO TO THEATRE
Introduces theatre as an art form, as entertainment, and as a cultural phenomenon.

TA 111 3 Credits
FUND OF TECHNICAL THEATRE I
Introduces the fundamentals of technical theatre, emphasizing the overall progress from start to finish of designing and running a show. Provides practical experience on department productions.

TA 112 3 Credits
FUND OF TECHNICAL THEATRE II
Introduces the fundamentals of technical theatre, emphasizing lighting design. Provides practical experience on department productions.

TA 113 3 Credits
FUND OF TECHNICAL THEATRE III
Introduces the fundamentals of technical theatre, emphasizing costume design and properties. Provides practical experience on department productions.

TA 141 3 Credits
ACTING I
Teaches basic to intermediate techniques of acting, including expression, movement, and character development.

TA 142 3 Credits
ACTING II
Continues exploring the concepts of acting through monologue and scene work, with an emphasis on classical theatre.

TA 143 3 Credits
ACTING III
Explores the process of choosing and preparing two contrasting monologues for an audition.

TA 149 2 Credits
DANCE FOR THEATRE
Introduces students to various styles of basic dance for theatrical purposes. The styles taught in this course will include basic movement, ballet,

jazz, tap, some period pieces (a.k.a. 1920s and 40s dance), and more. Students will be taught basic steps and also choreographies.

TA 253 1 Credit
THEATRE REHEARSAL/PERFORMANCE
Offers participation in a theatre production. Focuses on acting skills and includes non-acting skills.

VITICULTURE MANAGEMENT AND WINE MAKING

VMW 101 (P/T) 3 Credits
GENERAL VITICULTURE
Introduces grape growing, both wine and table grapes. Covers botany, fruiting, rootstock cultivars; anatomy and physiology; history and distribution of grapes; vine classification; and world growing areas. Also covers climate, latitude, soils and common diseases and pests.

VMW 102 (P/T) 3 Credits
WINE INDUSTRY EXPLORATION
Examines various segments of the wine industry and how they function as a whole. Reviews legal entities for doing business. Explores different business models in the Oregon and Idaho industry.

VMW 110 (P/T) 4 Credits
FALL VINEYARD PRACTICES
Surveys fall vineyard management practices which include harvest, harvest contracts, and ripening parameters. Compares different ripening characteristics for a variety of clones and rootstocks. Covers fall canopy management, disease problems, and weather effects on ripening. Co-requisite: VMW 101.

VMW 111 (P/T) 4 Credits
WINTER VINEYARD PRACTICES
Surveys winter vineyard management practices. Covers training, pruning, propagation, bench grafting, and simple trellis design. Prerequisite: VMW 101.

VMW 112 (P/T) 4 Credits
SPRING VINEYARD PRACTICES
Surveys spring vineyard management practices. Focuses on preparing a vineyard site for planting, spring canopy management, and other site issues such as irrigation. Covers practical pest and disease control methods. Prerequisite: VMW 101 or instructor consent.

VMW 113 (P/T) 4 Credits
SUMMER VINEYARD PRACTICES
Surveys summer vineyard management practices. Covers vineyard management after planting until harvest. Covers training of young vines, disease and weed identification and control, canopy and vineyard floor management, and nutritional applications. Prerequisite: VMW 101 or instructor consent.

VMW 115 (P/T) 3 Credits
RECORD KEEPING / TTB COMPLIANCE
Covers the basics of label compliance, tax calculation, record keeping, chemicals used, and taste room compliance. Examines different software programs to do these tasks.

VMW 122 (P/T) 3 Credits
INTRO TO WINE MAKING
Surveys the history of wine, wine grape varieties, and world wine regions. Covers the annual cycle of vine growth and berry ripening; wine grape processing practices; and fermentation of wines. Examines winemaking practices used for white, red, sparkling, and dessert wines. Introduces the application of sensory science to wine quality evaluation. Reviews wine and health issues.

COURSE DESCRIPTIONS

VMW 170 to WR 227

VMW 170 (P/T) 3 Credits
INTRO TO WINE MARKETING
 Explores wine marketing in the Pacific Northwest, as well as world wide. Introduces concepts and topics useful to winery and vineyard owners, marketing personnel, retail and wholesale marketers, and wine buyers.

WELDING

WELD 102 (P/T) 4 Credits
PIPE WELDING
 Provides basic skill development in pipe welding, including fitting and preparing the pipe joint for welding, welding pipe in different positions, repairing pipe that has been welded if there is a defect in the weld process, reading x-ray, setting up and welding pipe for certifications in the 6G position. Prerequisite: WELD 103, or instructor approval.

WELD 103 (P/T) 4 Credits
ELECTRIC ARC WELDING
 Covers basic metallurgy; the importance of stringer beads, and other fundamentals of mild steel all position stick electrode welding. Includes welding operations in flat, horizontal, vertical and overhead positions. Uses a variety of types and thickness of metals.

WELD 104 (P/T) 4 Credits
MIG/FAW WELDING
 Provides basic skill development in TIG and MIG welding. Covers the use of equipment, variables, safety, data for welding metals, and welding procedures. Includes establishing the arc and making weld beads, basic joints on weld steel: stainless and aluminum, and fundamentals of plasma arc cutting.

WELD 150 (P/T) 4 Credits
BASIC WELDING I
 Develops basic operative skills in oxyacetylene welding, brazing, cutting, and shielded metal arc welding. Covers safety consciousness in an industrial environment.

WELD 160 (P/T) 4 Credits
BASIC WELDING II
 Presents the proper technique and manipulation of oxyacetylene welding and electric arc welding for hard facing, aluminum brazing, soldering, and brazing copper pipe.

WELD 170 (P/T) 4 Credits
ADVANCED WELDING PROCESSES
 Covers the knowledge and skills necessary for set-up, adjustment, and operation of the welding processes for tungsten inert gas weld, and AMI Model 207 microprocessor for fusion welding of tube and pipe.

WELD 190 (P/T) 4 Credits
TEST PROCEDURES
 Explores what occurs in metal when welded, how metal is affected by welding, how to use these effects to the best advantage, how to recognize characteristics of major alloying elements, and how to use basic destructive and non-destructive weld testing methods. Results in welding certification upon successful completion of certification tests. Prerequisites: WELD 103 or 104, or instructor approval.

WELD 296 (P/T) 4 Credits
WELDING FABRICATIONS PRACTICES
 Provides knowledge and related skills of welding fabrication practices. Introduces procedures used in designing basic welded structures, calculating strength of materials, efficient fabrication procedures, and estimating fabrication costs.

WRITING

WR 090 3 Credits
FUNDAMENTALS OF COMPOSITION
 Develops basic writing skills such as sentence structure, grammar, and punctuation used in paragraph structure. Prerequisite: Pass WR 40 or suitable placement score.

WR 095 3 Credits
ENGLISH COMPOSITION
 Emphasizes basic grammar, punctuation, sentence structure, and paragraph development necessary for effective college-level writing. Prerequisites: Pass WR 90 with a "C" or better, or suitable placement score.

WR 101 (P/T) 3 Credits
WORKPLACE COMMUNICATIONS I
 Assists students to develop effective communication skills in the work place by preparing and presenting documents such as resumes, letters, memos, short reports, instructions, and proposals. Designed for students in professional/technical programs. Not designed to transfer. Prerequisite: Pass WR 095 with a "C" or better, or suitable placement score.

WR 115 3 Credits
INTRO TO COLLEGE WRITING
 Develops the students' critical thinking skills and emphasizes basic competence in grammar, mechanics, sentence structure, with particular attention to unified writing, and coherent essays. Prerequisites: Pass WR 95 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

WR 121 3 Credits
ENGLISH COMPOSITION
 Reviews grammar, punctuation, paragraph unity, organization, support, transition, and topic sentences. Stresses writing five paragraph personal essays with close attention to word choice, sentence structure, pre-writing, and revision. Prerequisites: Pass WR 115 with a "C" or better, or suitable placement score and pass READ 12, or suitable placement score.

WR 122 3 Credits
ENGLISH COMPOSITION
 Continues the goals of WR 121 and examines the logical means of developing ideas in argumentative essays. Examines logic and style. Considers rhetorical modes such as process analysis, comparison/contrast course/effect analysis, and argument and persuasion. Prerequisites: Pass WR 121 with a "C" or better.

WR 123 3 Credits
ENGLISH COMPOSITION
 Helps students improve writing skills and prepare for the large amount of writing required in college and career. Emphasizes critical thinking, critical reading, argument, and research. Prerequisites: Pass WR 122 with a "C" or better.

WR 227 3 Credits
TECHNICAL REPORT WRITING
 Applies principles of composition in writing technical and business reports. Covers information gathering, organization techniques, and graphic presentation. Includes oral and written presentation techniques, and emphasizes the use of technology. Prerequisites: Pass WR 122 with a "C" or better.

COURSE DESCRIPTIONS

WR 241 to WR 243

WR 241 3 Credits
INTRO TO IMAGINATIVE WRITING
Explores reading and writing some of the major varieties of imaginative, or “creative”, writing. Focus: reading and writing short fiction. Prerequisites: Pass WR 115 with a “C” or better, or suitable placement score and pass READ 12, or suitable placement score.

WR 242 3 Credits
INTRO TO IMAGINATIVE WRITING
Explores the reading and writing of three of the major varieties of imaginative, or “creative”, writing. Focus: reading and writing creative nonfiction. Prerequisites: Pass WR 115 with a “C” or better, or suitable placement score and pass READ 12, or suitable placement score.

WR 243 3 Credits
INTRO TO IMAGINATIVE WRITING
Explores the reading and writing of three of the major varieties of imaginative, or “creative”, writing. Focus: reading and writing poetry. Prerequisites: Pass WR 115 with a “C” or better, or suitable placement score and pass READ 12, or suitable placement score.