

# Courses of Instruction



# Courses of Instruction

## Course Numbering System

**All courses are distinguished by number and title.**

Lecture, Laboratory and Credit Codes  
Explanatory information appears in parentheses following each course title, for example: BIOL 1010, General Biology I (3L, 3LB, 4CR).

1. The number “3” preceding the letter “L” indicates three 55-minute lecture hours each week.
2. The number “3” preceding the letters “LB” indicates three 55-minute lab hours each week.
3. The number “4” preceding the letters “CR” denotes four semester hours credit for the course.

The following numbers are designated for special variable courses that allow credit for subjects which may not be covered by other courses. Due to the nature of these courses, students transferring to the University of Wyoming or other colleges may need to petition for acceptance of credits. Contact the registrar at the transfer institution if you have a concern.

### Course Numbers for Variable Courses

1395, 1895, 2395, 2895 Capstone Courses  
1460, 1960, 2460, 2960 Field Studies:  
1465, 1965, 2465, 2965 Directed Studies/  
Research Problems  
1470, 1970, 2470, 2970 Internship/  
Practicum  
1475, 1975, 2475, 2975 Independent  
Studies  
1480, 1980, 2480, 2980 Cooperative  
Work Experience  
1485, 1985, 2485, 2985 Seminar:  
1490, 1990, 2490, 2990 Topics:  
1495, 1995, 2495, 2995 Workshop:  
Special courses numbered 1490, 1990, 2490,  
and 2990 and titled “Topics:” are limited to a  
maximum of six (6) hours in any one department.  
No more than six hours will apply toward the  
Associate of Arts or the Associate of Science  
Degree.

Titles of the individual courses will be entered in the transcript, and registrars of transfer institutions should write to the Vice President for Learning for specific course descriptions.

## Course Prerequisites and Waivers

Many EWC courses have prerequisites that must be met before enrollment in those courses, and which can be found at the end of course descriptions. A course prerequisite is typically met by an appropriate COMPASS score or by completion of a prerequisite course. However, in unusual circumstances a student may have demonstrated comparable knowledge or background equivalent to but different from the listed prerequisite. In those unusual cases the full-time faculty member teaching the course may grant permission for the prerequisite waiver. Adjunct faculty may waive course prerequisites only after consultation with the appropriate division chair or Vice President for Learning.

### Accounting-Business (ACCT)

#### 1010 Principles of Accounting I (3L, 3CR):

A basic course for those preparing for a bachelor's degree in business administration or accounting. Fundamental accounting concepts and procedures employed by business entities are examined. Basic areas covered include the accounting cycle, income statement, balance sheet, merchandise, cash, systems and controls, receivables, inventories, plant and intangible assets, and current liabilities. Students who have successfully completed ACCT 1050 or ACCT 1060 cannot earn credit in ACCT 1010 and those who have successfully completed ACCT 1010 cannot earn credit in ACCT 1050 or ACCT 1060.

#### 1020 Principles of Accounting II (3L, 3CR):

A basic course for those preparing for a bachelor's degree in business administration or accounting. This course is a continuation of ACCT 1010 with an emphasis on partnerships, corporations, bonds, foreign currency transactions, the statement of cash flows, financial statement analysis, cost accounting and variances, budgeting, and managerial profit analysis.  
Prerequisites: ACCT 1050 and ACCT 1060, or ACCT 1010 with a grade of “C” or better.

#### 1050 Practical Accounting I (2L, 2CR):

This is a basic course in accounting fundamentals focusing on the accounting cycle and financial statements. Double entry accrual accounting procedures are emphasized for a service business organized as a sole proprietorship. Specific areas covered include recording and posting

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transactions, end-of-the-period procedures, and payroll accounting. No previous knowledge of accounting is necessary. Students who have successfully completed Accounting 1050 or Accounting 1060 cannot earn additional credit in Accounting 1010. Students who have credit in Accounting 1010 cannot earn credit in Accounting 1050 or Accounting 1060.

### **1060 Practical Accounting II (2L, 2CR):**

A continuation of Accounting 1050. This course emphasizes accounting procedures for purchase and sale of merchandise, end-of-period activities for a merchandising business, a voucher system, accounts and notes receivable, inventories and long-term assets. Students who have successfully completed Accounting 1050 or Accounting 1060 cannot earn additional credit in Accounting 1010. Students who have credit in Accounting 1010 cannot earn credit in Accounting 1050 or Accounting 1060.

Prerequisite: ACCT 1050 with a grade of “C” or better.

### **2110 Microcomputer Accounting I (1L, 2LB, 2CR):**

A course which provides a hands-on approach to learning how computerized integrated accounting systems function. Topics include creating a chart of accounts, recording customer and vendor transactions, processing payroll, integrating banking functions, and printing/interpreting reports. In addition, setting up a new company is covered as well as advanced topics such as exporting to Excel software and using the audit trail. No prior knowledge of computers or automated accounting is necessary; however the student must have an understanding of double-entry bookkeeping as it is utilized in a manual accounting system.

Prerequisite: ACCT 1050 or ACCT 1010 with a grade of “C” or better or the achievement of a satisfactory score on an accounting fundamentals pretest.

### **2450 Cost Accounting (3L, 3CR):**

A systems approach examining the functional and activity or strategic-based cost management systems whereby organizations use information to plan, make decisions, and evaluate performance. Specific topics include cost estimation, CVP analysis, budgeting, variance analysis, make or buy, special orders, joint products and variable costing.

Prerequisite: MATH 1400, ACCT 1010, ACCT 1020 with a grade of “C” or better.

## **Agricultural Economics (AGEC)**

### **1010 Agricultural Economics I (3L, 3CR):**

A description and analysis of national income, business cycles, income distribution, governmental economic policies, the banking system, and monetary and fiscal policy. Students cannot earn credit for both AGECEC 1010 and ECON 1010.

### **1200 Economics and Management of Agricultural Equipment (2L, 2CR):**

A study of equipment management as it effects overall agricultural operation. Emphasis will be placed on comparative buying, analysis of comparable mechanical systems, and ownership versus rental and custom operator services.

### **1510 Farm/Ranch Applications & Review of Management (3L, 3CR):**

This course is primarily offered for agricultural operators who would like to improve or update their management skills. The course will cover general principles of financial management and decision making as well as examples and cases where students make applications to their own specific situation. The students will culminate the course with a completed business plan detailing the changes and direction they will follow upon completing the class.

### **1970 Ag Internship (4LB, 2CR):**

This class is designed to provide a work-related experience for students. It will emphasize concepts, skills and attitudes needed for employment in farm, ranch, or agri-business management and production. The student must consult the instructor before enrolling in this course. This course is offered for S/U grade only. This course requires 60 hours of work-time, completion of a resume, job application, learning objectives, mock interview, and letter

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of application. This course should be taken in the second semester of the Farm/Ranch Management program.

Prerequisites: Must have completed 12 hours of courses in the A.A.S. Farm and Ranch program with a grade of "C" or better.

**2010 Farm-Ranch Business Records (3L, 3CR):**

This is a basic course in farm/ranch bookkeeping and accounting.

**2020 Farm-Ranch Business Management (3L, 3CR):**

Economic principles, business methods, and science applied to organization and operation. Measurements of size of business, rates and efficiency of production.

**2150 Agri-Business Finance (3L, 3CR):**

A course dealing with loan applications, options, and determination of loan needs, repayability, and the function and operation of various lending agencies.

Prerequisite: AGEC 2010 with a grade of "C" or better.

**2300 Agricultural Marketing (2L, 2CR):**

A study of marketing and market planning as they deal with sales. Also covered will be the functions, theory, and practices of salesmanship as they relate to wholesale and retail sales.

**2350 Agricultural Commodities in Marketing (2L, 2CR):**

This course deals with the use of the commodities futures markets for risk management in the marketing of livestock and grain. The cash market will also be studied, including transportation, forward contracting types of markets, and price trends.

**2395 AG Capstone Project (1L, 2LB, 2CR):**

This course is required to successfully complete the AAS Farm/Ranch Management Degree and the AS degrees in General Agriculture, Agricultural Economics, Agricultural Business, and Animal Science. Sophomore students intending to graduate with the AAS degree will be completing a business plan. Sophomore students intending to graduate with the AS degree will complete a thesis paper consistent with their degree field.

## Agriculture (AGRI)

**1010 Computers: Agriculture (2L, 2LB, 3CR):**

This course is designed as a beginning course for agricultural students interested in learning about microcomputers and software applications for agriculture. Main applications are word processing, spreadsheet, database, graphics, and Internet applications. The course is designed for students with little or no previous experience in computer science.

**2000 Agriculture Chemicals I (2L, 2CR):**

A study of agricultural chemicals as used in production agriculture. Particular attention will be focused on types and application procedures for insecticides, herbicides, fungicides, and soil sterilants. Safety and proper application will be stressed.

## Agriculture Technology (AGTK)

**1550 Veterinary Elements (3L, 2LB, 4CR):**

Subjects covered in this course include basic animal anatomy and physiological processes, general principles of disease and disease resistance including classification of causes, diseases transmissible from animals to man (zoonosis), poisons and poisonous plants, chemotherapeutic agents and disinfectants, immunization principles and programs, specific infectious diseases and the effects of season, and parasitic diseases and the effects of season, and parasitic diseases. A lab compliments this course so students can get hands on experience.

**1810 Beginning Hydraulics (3L, 3CR):**

Study the use of hydraulic pumps and systems. Special emphasis is given to pumping, controlling, and measuring flows and to system design and analysis. Also emphasized is distinguishing the difference between types of valves, pumps, hoses, and connection arrangement and flow patterns.

**1910 Equipment Maintenance and Repair (2L, 2CR):**

A course stressing the fundamentals of preventive maintenance of farm equipment to reduce failures, save on operating costs, and keeping equipment safe. Establishes good habits in the continuous care of equipment through periodic adjustments and servicing as required.

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## Agroecology (AECL)

### **1000 Agroecology (3L, 2LB, 4CR):**

This course introduces ecological interactions that affect food producing (agricultural) systems. Lectures and laboratory exercises study the various biological components and the science of sustainable agricultural production. Features differences between developed and developing countries. Explores crises and challenges facing agriculture and global society. This course fulfills the General Education requirement for Lab Science.

## American Studies (AMST)

### **2110 Cultural Diversity in America (3L, 3CR):**

This course studies processes by which individuals and groups produce, maintain and express cultural identities in various U.S. issues. Race, gender and ethnicity will be addressed, emphasizing historical roots and social context of contemporary cultural variety.

## Animal Science-Agriculture (ANSC)

### **1010 Livestock Production I (3L, 2LB, 4CR):**

Introduction to basic production and management problems of meat animals. A well-rounded picture of the scope, importance, and operation of livestock farms and ranches is presented. Consideration is given to livestock judging, feedlot operation, and marketing and processing of meat animals.

### **1035 Horse Production (3L, 3CR):**

A basic course covering the evolution and history of the equine species; classes, breeds, and colors; conformation and blemishes; aging by the teeth; nutrition and nutritional diseases; lacerations, fractures, and lameness; infectious diseases; parasitism; and reproduction.

### **1100 Management of Reproduction (3L, 3LB, 4CR):**

Lecture-laboratory course. Introduces methods of manipulating reproduction within livestock management systems. Includes artificial insemination, diagnosis of pregnancy, induction and control of estrus and ovulation, induction of parturition, embryo transfer and control of reproductive diseases. A substantial lab fee is required. Most of the class deals with cattle and some horses.

Prerequisite: BIOL 1010 or VTTK 1610 with a grade of "C" or better, or with instructor approval.

### **1210 Beginning Livestock Judging I (2L, 2CR):**

A basic course covering breeds of livestock, fundamentals of livestock selection, and proper methods of livestock judging. Designed for those with little or no previous livestock judging experience.

### **1220 Techniques of Livestock Judging II (2LB, 1CR):**

Advanced study in the principles of livestock selection with emphasis on judging and giving oral reasons. This course is offered for S/U grade only.

Prerequisite: ANSC 1210 with a grade of "C" or better.

### **1610 Anatomy and Physiology of Domestic Animals (3L, 2LB, 4CR):**

This course covers comparative anatomy and physiology of domestic animals. The first semester covers integument, skeletal, muscle, and circulatory systems. Students cannot earn credit for both ANSC 1610 and VTTK 1610.

Prerequisite: VTTK 1925 or CHEM 1000 with a grade of "C" or better and VTTK 1950 or BIOL 1010 with a grade of "C" or better. Placement score of ENGL 0640 or higher and no reading improvement required.

### **1620 Anatomy and Physiology of Domestic Animals II (3L, 2LB, 4CR):**

This course is a continuation of VTTK 1610. Systems covered include: respiratory, digestive, nervous, endocrine, senses, urinary, and reproductive. Students cannot earn credit for both ANSC 1620 and VTTK 1620.

Prerequisite: VTTK 1610 with a grade of "C" or better.

### **2030 Principles of Livestock Feeding (3L, 2LB, 4CR):**

This course will include the review of basic principles of chemistry; classification of nutrients and feeds; basic digestive anatomy and physiology in monogastric, ruminant, and monogastric herbivorous animals; basic nutritive processes including ingestion, digestion, absorption, circulation, metabolism, and excretion; and specific feeding programs for various classes of cattle, swine, horses, and companion animals.

### **2110 Beef Production and Management (2L, 2LB, 3CR):**

This course emphasizes a profit-oriented approach to beef cattle production and

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management making decisions. Different management systems are discussed. Computer software programs are utilized in labs to show the benefit of a good record system as a management tool. Integrates information learned in other classes such as reproduction, nutrition, and range.

## **2230 Advanced Techniques of Livestock Judging III (2LB, 1CR):**

A concentrated study of livestock selection with major emphasis on team competition and national livestock shows. This course is offered for S/U grade only.

Prerequisite: ANSC 1220 with a grade of "C" or better or with instructor approval.

## **2240 Advanced Techniques of Livestock Judging IV (2LB, 1CR):**

This course is designed for the competitive livestock judging team to further advance their skills in terms of live animal evaluation, oral reasons, and performance data evaluation.

Extreme time and dedication will be involved with travel to competitive contests and practices.

This course is offered for S/U grade only.

Prerequisite: ANSC 2230 with a grade of "C" or better or instructor approval.

## **Anthropology (ANTH)**

### **1100 Introduction to Physical Anthropology (3L, 3CR):**

Survey of basic concepts of archaeology and basic concepts relating to the origin, evolution, and biological nature of the human species.

### **1200 Introduction to Cultural Anthropology (3L, 3CR):**

An introduction to the nature of culture and society with a survey of material culture, economic systems, social and political organization, language, magic and religion, and the arts.

## **Aquaculture (AQTK)**

### **1500 Introduction to Aquaculture (3L, 3CR):**

Students will be introduced to the basic science and economics of aquaculture as it occurs in the United States. This course is intended to familiarize students with a broad range of topics, including basic water chemistry and animal husbandry. Students will work in all areas of tilapia and marine shrimp production. Material will be presented through lecture and group discussion.

### **1520 Aquaculture Systems (3L, 3CR):**

Students will be introduced to the basic components used in aquaculture systems with special emphasis on recirculating systems. Biotic and abiotic factors affecting aquaculture system performance and water treatment components will be covered. Biological considerations such as stocking density, feeding strategies and feed composition will be addressed. Material will be presented through lecture and group discussion. Performance will be based on demonstrated technical proficiency as well as comprehension of lecture material.

### **1550 Fish and Health Management (3L, 3CR):**

This course presents an overview of fish pathology and fish health diagnostics. The material presented is designed for students interested in culturing and managing captive fish populations. Special emphasis will be placed on fish health issues and management strategies. Material will be presented through lecture and group discussion.

### **1600 Fish Hatchery Management (3L, 3CR):**

This course presents an overview of fish hatchery practices to include commercial and privately operated facilities. Emphasis will be on developing animal husbandry and management skills. Material will be presented through lecture and group discussion.

## **Art (ART)**

### **1000 General Art: Studio (1L, 4LB, 3CR):**

Introduces art to give beginners practical appreciation through design activities applied to different media. Covers supplementary aspects by lectures and demonstrations concerning art history, drawing, crafts and others. For non-art majors only.

### **1005 Drawing I (1L, 4LB, 3CR):**

A foundation level drawing course introducing fundamentals of observation, artistic invention, and basic principles of perspective and composition through problems in still life, landscape, and live model. Lectures, drawing sessions, and critiques develop formal, conceptual, and technical understanding of the drawing process.

### **1110 Foundation: Two-Dimensional (1L, 4LB, 3CR):**

First in a sequence of three foundation courses that investigate the fundamentals of design.

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Basic aesthetic/formal concepts and conceptual approaches are covered through a variety of two-dimensional mediums. Structured critiques are employed to provide students the experience of assessing formal, conceptual, and technical aspects of art.

### **1120 Foundation: Three-Dimensional (1L, 4LB, 3CR):**

Second in a sequence of three foundation courses that investigate the fundamentals of design. Basic aesthetic/formal concepts and conceptual approaches are covered through a variety of three-dimensional mediums. Structural form is emphasized in various contextual settings. Structured critiques are employed to provide students the experience of assessing formal, conceptual, and technical aspects of art. Prerequisite: Art 1110 or concurrent enrollment.

### **1130 Foundation: Color Theory (1L, 4LB, 3CR):**

Third in a sequence of three foundation courses that investigate the fundamentals of design. Explores color theories based on the color wheel/light spectrum including hue, value, chroma, and aesthetic color relationships. Optical color, emotional/psychological color, and color symbolism are also covered. Structured critiques are employed to provide students the experience of assessing formal, conceptual, and technical aspects of art. Prerequisite: ART 1110 with a grade of "C" or better, or concurrent enrollment.

### **1179 Photoshop I (2L, 2LB, 3CR):**

An introduction to Adobe Photoshop as a creative medium. We will explore a range of possibilities with various aspects of the program, including layers, filters, tools, and color modifications. Projects will use scanned and captured images such as photographs, sketches, and real textures in a range of possible fine art and commercial applications.

### **1250 Water Based Media I (1L, 4LB, 3CR):**

Studies in watercolor using various techniques enabling the student to control the medium. Students are expected to have previous experience in color theory.

### **1310 Introduction to Sculpture (1L, 4LB, 3CR):**

Introduces fundamentals of sculpture as a process of three-dimensional expression. Students

explore various media, techniques and concepts through a series of assigned and open projects. Emphasis on traditional methods and formal abstract elements of sculpture are encouraged, leading to an understanding of both classic and modern concepts of form.

### **2005 Drawing II (1L, 4LB, 3CR):**

An intermediate level drawing course building upon fundamentals of observation, artistic invention, perspective and composition through problems in still life, landscape, explorations in wet and dry media, and color with pastels. Lectures, drawing sessions, and critiques develop formal, conceptual, expressive and technical understanding. Prerequisite: ART 1005 with a grade of "C" or better or consent of instructor.

### **2010 Art History I (3L, 3CR):**

First semester of a one-year survey. Studies ancient, medieval, renaissance and modern art with special reference to various social, economic and historic factors which motivated and conditioned the aesthetic forms. Includes ancient, medieval and early renaissance periods. ART 2010 and 2020 are required of all art majors and should be taken in sequence.

### **2020 Art History II (3L, 3CR):**

Second semester of a one-year survey. Studies European/American Art from the Renaissance through Contemporary with special emphasis and historical factors which motivated and conditioned the aesthetic forms. Covers Renaissance, Baroque, Rococo, 18th Century, 19th Century, Early Modernism and Contemporary Art. ART 2010 and 2020 are required of all art majors and should be taken in sequence.

### **2074 Art for the Elementary/Middle School Teacher (3L, 3CR):**

Study of Discipline Based Art Education in the elementary/middle school classroom. Includes basic design, media experience, reference materials, art criticism, aesthetics, and history.

### **2145 Digital Photography (2L, 2LB, 3CR):**

Students will learn photographic and computer techniques essential for creating computer based imagery. This course is designed to develop your skills in pixel based photographic design and imagery. It will cover digital camera operation,

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photo editing software, desktop scanners, and printing. Digital images will be edited with appropriate professional digital imaging software. Prerequisite: ART 1179 with a grade of “C” or better.

### **2210 Painting I (1L, 4LB, 3CR):**

Introduces problems in painting, developing skill, techniques, and concepts.

Prerequisite: ART 1005 with a grade of “C” or better, or consent of instructor.

### **2220 Painting II (1L, 4LB, 3CR):**

A development of techniques and concepts introduced in Painting I. An exploration of different historical modes of painting.

Prerequisite: ART 2210 with a grade of “C” or better.

### **2410 Ceramics I (1L, 4LB, 3CR):**

Introduces ideas about ceramic form through various hand building construction techniques. Emphasizes design and conceptual development. Includes glaze application, surface decoration and kiln operation.

### **2420 Ceramics II (1L, 4LB, 3CR):**

Introduces ideas about ceramic form through wheel-throwing techniques. Emphasizes design and conceptual development. Includes glaze testing, glaze application, surface decoration and kiln operation.

Prerequisite: ART 2410 with a grade of “C” or better or consent of instructor.

## **Biology (BIOL)**

### **1000 Principles of Biology (3L, 3LB, 4CR):**

Primarily for the non-major. Considers fundamental principles of ecology, evolution, cell biology and genetics, as well as their relevance to contemporary society. Emphasizes critical thinking and problem-solving abilities. Laboratory is required. (This course is not equivalent to BIOL 1010, and credit cannot be earned for both courses.)

### **1010 General Biology I (3L, 3LB, 4CR):**

Presents major concepts of biology, cell structures and functions, energy relations, genetics, molecular biology, ecology, and evolutionary theory for students majoring in sciences.

Prerequisite: Placement score for MATH 0920 or better, and ENGL 0640 or better, and no

reading improvement required, or appropriate ACT score.

### **1050 Medical Terminology (3L, 3CR):**

This course provides instruction in the structure of medical language, introducing commonly used word roots, prefixes, suffixes, and the terms formed from these word parts. Many additional terms not built from word parts will also be included. The course is recommended for students planning on entering medical fields as well as those in medical fields who wish to upgrade their present knowledge.

### **1390 Introduction to Scientific Research I (3LB, 1Cr):**

This course provides the student with an introduction to concepts utilized in a biological research environment. Students will read scientific literature, perform computer-based literature searches, experimental design and data collection, statistical analyses, and write a scientific paper. In addition, if the quality of the research project is adequate, students may have the opportunity to present their work at a scientific conference.

Prerequisite: Instructor permission.

### **2020 General Biology II (3L, 3LB, 4CR):**

A continuation of Biology 1010. Units are included on ecology, nutrition, reproduction and development, anatomy and physiology, animal behavior, and the life and diversity of plants and animals.

Prerequisite: BIOL 1010 with a grade of “C” or better.

## **Business Administration (BADM)**

### **1000 Introduction to Business (3L, 3CR):**

This course explores the nature of the American free enterprise system and its business organizations. It provides a broad overview of the business environment, management, organization, marketing, finance, and human resources. Other topics covered include international trade, securities markets, and risk management.

### **1005 Business Mathematics I (3L, 3CR):**

A course providing instruction in solving practical business problems utilizing fundamental principles of mathematics. Topics include fractions, decimals, percents, bank records and reconciliation, payroll, the mathematics of buying and selling, depreciation, simple and compound

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interest, annuities, and financial statement analysis.

Prerequisite: MATH 0900 or MATH 1515 with a grade of “C” or better or appropriate score on placement exam.

### **1020 Business Communications (3L, 3CR):**

This course will cover the topic of business communications—written, oral, nonverbal, and listening. Application will be made to business situations. The major focus of this course is on writing business messages and reports. Emphasis will be given to the study of effective writing principles, problem analysis, and the writing process. Prerequisites: ENGL 1010 or TECH 1005 with a grade of “C” or better.

### **1030 Personal Finance (3L, 3CR):**

An introductory course in managing personal finances. Topics covered include financial planning, managing taxes, managing cash, use of credit, risk management and investments. Considerable emphasis is placed on insurance and the basics of investing.

### **1500 Basic Business Principles (1L, 1CR):**

This course provides a simple overview of American business. The overview covers three main areas of business: foundations, functions, and contemporary issues. This course is designed to be taught through the use of current periodicals and other media sources. The course is designed as a lecture-based class with no textbook required.

### **2010 Business Law I (3L, 3CR):**

An introductory course providing a broad overview of business-related legal topics. Students are familiarized with courts and alternative dispute resolution, constitutional law, torts, contracts, intellectual law, criminal law, and cyber law.

### **2395 Business Office Capstone (3L, 3CR):**

This course covers office organization, systems, and functions. The class includes coverage on mail services, human relations, records management, communication systems, reprographics, basic accounting procedures, computer applications and equipment usage, ethics, globalization of business practices, cultural awareness and international business practices. It is designed as a capstone course and allows the student to

experience the wide variety of roles an office professional assumes in an information age.

### **Business Office Technology (BOTK)**

#### **1510 Office Skills and Services (2L, 2LB, 3CR):**

This course is designed to provide the students with the ability to operate electronic calculators, transcription machines, and multi-line telephone systems in a business office setting. Customer service will be emphasized, addressing such topics as preventing and solving problems, listening and communication skills; professional appearance and attitude. Also included is a review of grammar and punctuation. The course will be a combination of lecture and application exercises.

#### **1640 Keyboarding Applications I (1L, 4LB, 3CR):**

The beginning typewriting student will learn touch-typing skills. This course includes instruction in the preparation of centered displays, simple tables, letters, manuscripts, and other standard business documents.

#### **1645 Keyboarding Office Documents (1L, 4LB, 3CR):**

This course designed to give appropriate preparation in document formatting for work in office employment. This course seeks to develop in the student a marketable skill in keyboarding as well as a knowledge of business forms, letters, tabulations, and manuscripts. Emphasis will be placed on detailed proofreading, document formats, and application of knowledge to office problems. Production speed and accuracy are emphasized.

#### **1970 Occupational Internship I (1-3CR)(Max 6):**

This course is designed to provide a work related experience for students. It will emphasize concepts, skills, attitudes, and develop an understanding of the function of citizenship needed for office professionals. The student must consult the coordinator/instructor before enrolling in this course. A maximum of six credit hours may be earned through a combination of BOTK 1970 and BOTK 2970. This course is offered for S/U grade only.

#### **2750 Records & Information Management (3L, 3CR):**

A course covering the background training in the basic filing principles and in the technique of records control with special emphasis given to the principles common in all systems of filing.

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## **2970 Occupational Internship II (1-3CR)(Max 6):**

This course is designed to provide a work related experience for students. It will emphasize concepts, skills, attitudes, and develop an understanding of the function of citizenship needed for office professionals. The student must consult the coordinator/instructor before enrolling in this course. A maximum of six credit hours may be earned through a combination of BOTK 1970 and BOTK 2970. This course is offered for S/U grade only.

## **Chemistry (CHEM)**

### **1000 Introductory Chemistry (3L, 3LB, 4CR):**

A one-semester course dealing with principles of chemistry and some applications to inorganic chemistry. For students in home economics, nursing, and most agriculture curricula. Students who receive credit in this course cannot earn additional credit in Chemistry 1020.

Prerequisite: MATH 0930 with a grade of "C" or better or concurrent enrollment in MATH 0930 or a placement-test recommendation for MATH 1400 or a higher level course.

### **1020 General Chemistry I (3L, 3LB, 4CR):**

A broad general coverage of the principles of chemistry and their application to chemical systems for majors in engineering, the physical sciences, and laboratory technology. Students who receive credit in this course cannot earn additional credit in Chemistry 1000.

Prerequisite: MATH 1400 with a grade of "C" or better or concurrent enrollment in MATH 1400 or a placement-test recommendation for MATH 1405 or a higher level course.

### **1030 General Chemistry II (3L, 3LB, 4CR):**

A continuation of Chemistry 1020.

Prerequisite: CHEM 1020 with a grade of "C" or better.

### **2300 Introductory Organic Chemistry (4L, 4CR):**

A one-semester non-lab course in organic chemistry and beginning biochemistry. Students cannot earn credit for both Chemistry 2300 and Chemistry 2320.

Prerequisite: CHEM 1000 or CHEM 1020 with a grade of "C" or better.

### **2320 Organic Chemistry I (3L, 3LB, 4CR):**

First semester for a two semester sequence.

Emphasis is placed on the structural differences of organic compounds and the mechanistic concepts of organic reactions. Students cannot earn credit for both Chemistry 2320 and Chemistry 2300.

Prerequisites: CHEM 1030 with a grade of "C" or better.

### **2340 Organic Chemistry II (3L, 3LB, 4CR):**

The second semester of a two-semester sequence. Emphasis is placed on the structural differences of organic compounds and the mechanistic concepts of organic reactions.

Prerequisites: CHEM 2320 with a grade of "C" or better.

## **Communication and Mass Media (CO/M)**

### **1010 Public Speaking (3L, 3CR):**

An introduction to the principles of public speaking, with emphasis on practical skills in communicating to audiences, classes, and groups. Course includes training in manuscript preparation and composition.

### **1030 Interpersonal Communication (3L, 3CR):**

Introduction to oral communication in interpersonal group and audience situations. Brief survey of communication rhetoric, principles, and techniques.

### **1040 Introduction to Human Communication (3L, 3CR):**

This course focuses on the role of communication in current affairs, business, and personal relations. Practical application of theory to communication problems in everyday life.

### **2060 Forensics (2LB, 1CR)(Max 4):**

Develops basic skills in contest and public service speaking by refining the speaking and thinking competence of students. Requires attendance at two competitive tournaments per semester in debate and/or individual events. May be repeated three times for credit.

### **2100 Reporting & Newswriting I (2L, 2LB, 3CR):**

This course begins with an overview of journalistic practice but concentrates on reporter techniques: the study and practice of the basic kinds of newswriting—such as interviews, features, speech and meeting reports, sports—

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with attention to the problems of gathering and evaluating the news for responsible, effective reporting. Students will be called upon to pursue news assignments outside of class.

### **2395 Social Science Capstone Experience (OCR):**

The Social Science Capstone Experience is directed toward the application of broad principles in the social sciences with specific attention given to the student's discipline of study. The course seeks to enhance and enrich the student's academic background, and involve the student in activities/experiences that demonstrate an ability to continue study in the social sciences.

Prerequisite: Sophomore standing, major in relevant social science semester of graduation.

### **Computer Applications (CMAP)**

#### **1500 Computer Keyboarding (1/2L, 1LB, 1CR):**

Students will develop basic touch keyboarding skills through computer instruction. Designed for non-office systems majors. This course is offered for S/U grade only.

#### **1505 Information Processing Orientation (1/2L, 1LB, 1CR):**

An introductory course in computer literacy, featuring a "hands-on" approach using microcomputers. Elementary concepts of computer organization, hardware, software, and peripheral devices will be introduced. Standard operations will be explained and routine care of equipment will be covered. This course is designed to be a "first course" in computer science. No previous exposure to computers is assumed.

#### **1610 Windows (1/2L, 1LB, 1CR):**

This course is intended to familiarize the student with basic concepts and skills necessary for using Microsoft Windows to become a productive user of computing technology. Windows is a consistent and integrated graphical user interface that is an efficient and popular way of interacting with IBM compatible computers.

#### **1685 Using Computers In: (1/2-1CR):**

A course in which students acquire knowledge about current computer concepts, terminology, and software. Word processing, spreadsheet, database, graphics, or other appropriate computer software will focus on a specified curriculum,

which may vary with each offering. This course is offered for S/U or letter grade.

#### **1715 Word Processing: Microsoft Word (1L, 2LB, 2CR):**

This course is designed to introduce basic, intermediate, and advanced word processing features using the Microsoft Word word processing program with PC-compatible microcomputers. Working hands-on with this software will insure transfer of learning from textbook and applications to business, personal, and home-based business using word processing.

#### **1765 Spreadsheet Applications II: Microsoft Excel (1L, 2LB, 2CR):**

A course designed to learn the operation of Microsoft Excel. Using practical business problems, students will learn the fundamentals of spreadsheet operations, database functions, and creating and enhancing all types of charts (graphs) using spreadsheet data. Other areas covered include macro commands, advanced analysis tools, creating templates and graphic objects, Internet and Web integration. Emphasis is placed on the use of MS-Excel in the workplace.

#### **1800 Database Applications I: Access (1L, 2LB, 2CR):**

This course provides instruction in a relational database management system. Areas covered include file organization, storage, retrieval, queries, file management, catalogs, linking files, and programming. Access is a windows-based database that lets you enter, update, and work with data in an easy-to-use format.

#### **1850 Desktop Publishing I: (2L, 2LB, 3CR):**

This course is designed to provide an understanding and practical application of computer desktop publishing emphasizing hands-on learning. Topics include but are not limited to single and multi-page publications, editing text, colors, and graphic design objects to create flyers, newsletters, brochures, and logos. Additional topics cover business forms.

#### **1886 Outlook (1/2L, 1LB, 1CR):**

This course is designed to provide an understanding of Microsoft's Outlook and is geared toward learning basic e-mail skills. The student will learn how to work with and manage the e-mail, calendar, appointment scheduling, meeting scheduling, contacts and to-do lists that

# Courses of Instruction

are available in Outlook. It will cover every topic listed by the Microsoft Office Specialist Program, giving the student the opportunity to get Outlook certified at the Expert level.

Prerequisite: CMAP 1610 with a grade of “C” or better.

## **1900 Integrated Applications I: Microsoft Office (1L, 2LB, 2CR):**

This course is designed to give students introductory skills in using the components of the Microsoft Office Suite, which include: Word, Excel, Access, Powerpoint, and the integration of the above components.

## **1915 MS Office-Advanced Concepts and Techniques (1L, 2LB, 2CR):**

This course is designed for the student already familiar with the fundamentals of Microsoft Office-MS Word, MS Excel, MS Access, and MS PowerPoint. The course will extend basic knowledge of MS Office by the use of practical problems for personal computer applications. Students completing this course will have a firm knowledge of MS Office and will be able to solve a variety of personal computer-related problems. The two-course sequence of MS Office prepares students to pass the Proficient level of Microsoft Office Specialist Exam.

Prerequisite: CMAP 1900 with a grade of “C” or better.

## **2510 Multimedia Presentation (1L, 2LB, 2CR):**

This course introduces the technical foundation and general principles that compose multimedia and making effective presentations. Students will be introduced to the requirements of making effective presentations and with special regard to effective multimedia productions. Different production techniques for making effective presentations will be covered. Students will trace project development from design to implementation and delivery.

## **2630 Presentation Graphics: PowerPoint (1/2L, 1LB, 1CR):**

This course provides students with the skills needed to create and edit presentations. Coverage includes basics as well as adding enhancements, changing formats, creating different graph types, and linking to other programs. PowerPoint is a windows-based business presentations software package.

## **Computer Science (COSC)**

### **1200 Computer Information Systems (2L, 2LB, 3CR):**

An introduction to computers and information processing, computer systems, hardware, computer software, information processing systems, and management information systems. Spreadsheet, data base, and word processing software are used extensively by the student in applying program capabilities to practical business problems. Students who earn credit in COSC 1200 cannot earn credit in CMAP 1900.

## **Construction Technology (CNTK)**

### **1510 Safety and Tools in Construction (2L, 2LB, 3CR):**

This course is designed to familiarize students with OSHA safety rules and regulations related to residential construction. Topics include safety laws, proper identification of hand and power tools, safe use of hand and power tools, and maintenance of hand and power tools.

### **1520 Residential Blueprint Reading (2L, 2LB, 3CR):**

This course is a study of basic principles of interpreting blueprints and plans along with reading of specifications basic to the building trades.

Prerequisite: CNTK 1510 with a grade of “C” or better, or concurrent enrollment in CNTK 1510.

### **1630 Basic Cabinetmaking (1L, 2LB, 2CR):**

For anyone wishing to learn basic cabinet making skills. Cabinet design, construction techniques, finishing procedures, and safe tool and machine operation are included in classroom and laboratory instruction. Students will construct an appropriate cabinet of their choice.

### **1762 Mechanical Systems: Plumbing (1L, 2LB, 2CR):**

This course is designed to provide students with the knowledge and skills necessary to identify, select, and estimate plumbing materials and to install a plumbing system in a residential house. The installation meets current industry standards, and manufacturers’ specifications.

### **1860 Woodworking Fundamentals I (2L, 4LB, 4CR):**

A course for those wanting to learn or further their woodworking skills. An emphasis will be placed on SAFETY, problem solving, material selection, and practical approaches to

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woodworking. In the laboratory students will receive an introduction to the safe and correct use of hand tools and stationary power tools and equipment, to build a project of the student's choice.

### **1865 Woodworking Fundamentals II (2L, 4LB, 4CR):**

This course provides an enhanced knowledge of techniques and materials used in the design and construction of wood furnishings. Emphasis on problem solving, multi-joining technology and custom finishing.

Prerequisite: CNTK 1860 with a grade of "C" or better or instructor approval.

### **Cosmetology (CSMO)**

#### **1000 Intro to Nail Technology (3CR):**

This course will explore the structure, growth and diseases of the skin and nail, ingredient technology, its usage and safety.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required, or instructor approval.

Enrollment in Cosmetology or Nail Technician program.

45 hours lecture.

#### **1005 Nail Technology Lab (5CR):**

This course provides a complete guide to basic nail technology as it applies to the hands and feet.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required, or instructor approval. Enrollment in Cosmetology or Nail Technician program.

213 hours lab.

#### **1010 Intro to Skin Technology (3CR):**

This course is an introduction to skin structure, disorders, analysis, product technology and massage principles.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required, or instructor approval. Enrollment in Cosmetology or Skin Technician program.

45 hours lecture.

#### **1015 Skin Technology Lab (1CR):**

This is an opportunity for the cosmetology and/or skin tech student to work through the applications taught in CSMO 1010.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required, or instructor approval. Enrollment in Cosmetology or Skin Technician program.

45 hours lab.

#### **1020 Intro to Hair Technology (3CR):**

This course covers the sciences of hair and its practices.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required. Completion of CSMO 1025 with a grade of "C" or better. Enrollment in Cosmetology or Hair Technician program.

45 hours lab.

#### **1025 Hair Fundamentals (4CR):**

This course covers the basic structure of hair, hair care practices, and an introduction to basic hair design principles.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required. Enrollment in Cosmetology or Hair Technician program.

213 hours lab.

#### **1030 Intro to Hair Technology II (2CR):**

This course is part II of the science of hair and its practices.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required. Completion of CSMO 1025 with a grade of "C" or better.

Enrollment in Cosmetology or Hair Technician program.

45 hours lab.

#### **1035 Hair Fundamentals II (2CR):**

This course will cover the applications of hair styling principles.

Prerequisite: Placement score for MATH 0920 or better and ENGL 0640 or better and no reading improvement required, or completion of CSMO 1025 with a grade of "C" or better.

Enrollment in Cosmetology or Hair Technician program.

48 hours lab.

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### **1175 Nail Technician Assessment (1CR):**

This comprehensive exam is a three day procedure. It assesses the Nail Tech student's skill level for exiting the program and to make application to take the National Nail Technician exam.

Prerequisite: Enrollment in Nail Tech program.  
35 hours lab.

### **1210 Esthetics Concepts I (2CR):**

This course fulfills the requirements of infection control, general nutrition, and electricity within the skin care area.

Prerequisite: Enrollment in Cosmetology or Skin Technician program.  
45 hours lab.

### **1220 Esthetics Concepts II (3CR):**

This course begins to explore the areas of advanced clinical skin care, spa body treatments and color theory.

Prerequisite: Enrollment in Skin Technician program and completion of CSMO 1210 with a grade of "C" or better.  
140 contact hours.

### **1275 Esthetics Assessment (1CR):**

This is a comprehensive examination intended to evaluate the students' level of competency in the area of esthetics.

Prerequisite: Enrollment in the Skin Technician program.  
35 hours lab.

### **1375 Hair Technician Assessment (1CR):**

A comprehensive assessment intended to evaluate the students' level or competency in the area of hair technology.

Prerequisite: Enrollment in Hair Technician program.  
35 hours lab.

### **1400 Cosmetology Lab I (3R):**

This course fulfills 3 of the 9 lab credit hours required for the cosmetology student who will explore chemical properties and safety of services and practices on hair.

Prerequisite: CSMO 1020, CSMO 1025, CSMO 1030, and CSMO 1035 with a grade of "C" or better. Cosmetology majors must have completed a minimum of 8 credit hours of the general education requirements or instructor approval.  
90 hours lab.

### **1405 Cosmetology Lab II (3CR):**

This course fulfills 3 of the 9 credit hours required for the cosmetology student who will explore the physical properties and safety of services and practices on hair.

Prerequisite: CSMO 1020, CSMO 1025, CSMO 1030, and CSMO 1035 with a grade of "C" or better. Cosmetology majors must have completed a minimum of 8 credit hours of the general education requirements or instructor approval.  
90 hours lab.

### **1420 Cosmetology Lab V (3CR or 6CR):**

This course fulfills up to 6 of the 9 lab credit hours required for the cosmetology student who will explore the final stages of training for cosmetology services and also includes preparation for the final assessment in Cosmetology.

Prerequisite: CSMO 1400 and CSMO 1405 with a grade of "C" or better.  
45 or 90 hours lecture.

### **1425 Techniques in Cosmetology (3CR):**

This course fulfills 3 of the 9 lab credit hours required for the cosmetology student and is required for the Hair Technician student. It will explore new and innovative techniques as they relate to the areas of cosmetology.

Prerequisite: Enrollment in Cosmetology or Hair Technician program. The Cosmetology student must have completed up to 8 of the required general education courses or instructor approval.  
100 hours lab.

### **1500 Clinical Applications I (3CR):**

This is a required course for the Hair Technician student and focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in the Hair Technician program.  
168 hours lab.

### **1505 Clinical Applications II (3CR):**

This is one of the required clinical applications for a Cosmetology or Hair Technician student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in Cosmetology or Hair Technician program.  
168 hours lab.

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### **1510 Clinical Applications III (6CR):**

This is one of the required clinical applications for a Cosmetology student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in the Cosmetology program.

216 hours lab.

### **1515 Clinical Applications IV (6CR):**

This is one of the required clinical applications for a Cosmetology, Nail, or Skin Technician student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Completion of CSMO 1000 and CSMO 1005 with a grade of "C" or better.

Enrollment in the Cosmetology, Nail Technician, or Skin Technician program.

216 hours lab.

### **1520 Clinical Applications V (6CR):**

This is one of the required clinical applications for a Cosmetology student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in the Cosmetology program.

216 hours lab.

### **1525 Clinical Applications VI (1-6CR):**

This is one of the required clinical applications for a Cosmetology student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in the Cosmetology program.

30-216 hours lab.

### **1535 Clinical Applications VIII (1-6CR):**

This is a required course for the Skin and Hair Technician student and is an optional class for the Cosmetology student. It focuses on the hands-on application techniques in all areas of cosmetology to the public.

Prerequisite: Enrollment in the Cosmetology, Skin, or Hair Technician program.

30-300 hours lab.

### **1550 General Cosmetology Science (3) (Fa, Sp)**

This course will explore the cosmetology sciences. This is a broad exploration into infection control, anatomy and physiology, electricity and basic cosmetology chemistry.

Prerequisite: Placement score for MATH 0920 or

better and ENGL 0640 or better and no reading improvement required, or instructor approval.  
45 hours lecture.

### **1555 General Cosmetology Science II (3CR):**

This course is an extended study for the Skin Technician student. Studies in basic ingredient technology, basic chemistry as it applies to the area, anatomy and physiology as applicable, and esthetic application.

Prerequisite: Enrollment in Skin Technician program; no reading improvement required.

45 hours lecture.

### **1575 Cosmetology Assessment (1CR):**

A comprehensive assessment intended to evaluate the students' level of competency in the area of cosmetology.

Prerequisite: Enrollment in Cosmetology program.

35 hours lab.

## **Criminal Justice (CRMJ)**

### **1510 Law Enforcement Procedures (3L, 3CR):**

This course covers basic law enforcement operations including patrol procedures, traffic enforcement, police report writing, field interviews, problem solving, first responses to emergencies, and police ethics and discretion.

Prerequisite: CRMJ 2120 or concurrent enrollment.

### **1520 Law Enforcement Operations (3L, 3CR):**

This course covers community policing practices, using an interdisciplinary problem solving approach to solving, police-community relations, crime prevention programs, and interagency operations.

Prerequisite: CRMJ 2120 or concurrent enrollment.

### **1950 General Instructor Development (2L, 2CR):**

This comprehensive and up-to-date program will help you develop your individual training skills. Key training points in this step-by-step approach will help you create quality training programs for your agency. Included in this course will be hands-on exercises that will allow you to write your own instructional goals, construct a lesson plan, develop a teaching method, and conduct a presentation for your class. Your final presentation will be video taped for your confidential review.

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This course is offered for S/U grade only.  
Prerequisite: P.O.S.T. certification.

### **2120 Introduction to Criminal Justice (3L, 3CR):**

This course introduces the student to the study of criminal justice. It covers the philosophy and history of law enforcement, the judicial system, and corrections. Major issues facing these disciplines are also covered.

### **2125 Forensic Psychology (3L, 3CR):**

This course introduces the criminal justice/social science major to the uses of psychology in the field. Topics covered include basic criminal profiling, suspect interviewing, psychological theories of crime/delinquency, victimology, legal applications of psychology in conducting assessments, and correctional psychology.  
Prerequisite: PSYC 1000 (General Psychology) and CRMJ 2120 (Introduction to Criminal Justice) or permission of Instructor.

### **2210 Criminal Law I (3L, 3CR):**

The course deals with the broad spectrum of criminal law and the procedures of criminal justice. Substantive criminal law, criminal procedures and roles of evidence that are of importance to the law enforcement officer are studied. The course builds a sound base for a more advanced study of criminal law. Also included may be other relevant subject matter the instructor feels is necessary.  
Prerequisite: CRMJ 2120 with a grade of "C" or better.

### **2250 Criminal Justice Administration (3L, 3CR):**

An introduction to the theories of organization and administration in law enforcement and corrections. Topics covered include police and corrections history, comparisons of various organizational systems, and the study of police/correctional operations.

### **2280 Criminal Procedures (3L, 3CR):**

This course deals with procedural problems that occur in processing an individual through the criminal justice system with special emphasis on search and seizure.  
Prerequisite: CRMJ 2120 with a grade of "C" or better.

### **2350 Introduction to Corrections II/I (3L, 3CR):**

A general course describing the history and evolution of the corrections process. Covers all aspects of institutional and community based corrections.

### **2370 Institutional Corrections (3L, 3CR):**

This course covers the history and current status of institutional correctional facilities including prisons, jails, and intermediate units. Programs, procedures, institutional culture and administration are covered.  
Prerequisite: CRMJ 2120 (Introduction to Criminal Justice) and CRMJ 2350 (Introduction to Corrections) or permission of instructor.

### **2400 Criminology (3L, 3CR):**

An introduction to the study of the nature and causes of criminal behavior. Biological, psychological, and sociological theories are examined. Types of criminal behavior, historical perspectives, crime statistics, and current trends are also covered. Students cannot earn credit for both CRMJ 2400 and SOC 2400.  
Prerequisite: SOC 1000 with a grade of "C" or better.

### **2420 Juvenile Justice (3L, 3CR):**

This course is designed as an introduction to the field of juvenile justice. It will cover all the aspects of the juvenile justice system, from early history reform schools to the progressive development centers of today, along with alternatives to incarceration. This course will follow the evolution of the courts and the laws pertaining to the juvenile.  
Prerequisites: CRMJ 2120 with a grade of "C" or better.

### **2550 Criminal Investigation I (3L, 3CR):**

A course relating to the fundamentals of investigation. Included are crime scene search, sketching and recording, collection and preservation of physical evidence, scientific aids, sources of information, interviewing and interrogation, modus operandi, and case preparation.

### **2560 Criminal Investigation II (3L, 3CR):**

The study of various crimes and investigative techniques from the initial report through the final disposition of the case.  
Prerequisite: CRMJ 2550 with a grade of "C" or better.

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### **2570 Criminalistics (Forensics) (2L, 2LB, 3CR):**

Introduces the student to the collection, preservation and analysis of biological, chemical, physical and other forensic evidence from the crime scene. Also includes work with trace evidence including hair, fibers, etc. Instruction will encompass crime scene management and evidence collection as well as laboratory analysis procedures.

Prerequisite: BIOL 1000 or BIOL 1010, CRMJ 2120 and CRMJ 2550 with a grade of “C” or better.

### **2590 Drugs & Criminal Justice (3L, 3CR):**

This course covers the physiology and chemistry of abused substances. Also addressed are the history and evolution of drug regulations including the current status of the Controlled Substance Act. Detection, identification, and drug enforcement are also covered.

Prerequisite: CRMJ 2120 (Introduction to Criminal Justice) or permission of instructor.

### **2690 Supervised Lab Experience (1L, 4LB, 3CR):**

This course exposes the criminal justice major to the various work settings in the field. The student will rotate between placements with law enforcement, detention, corrections, and communications. The schedules will be variable and depend upon availability at each site. Approximately 8-10 hours per week at the assigned site will be required, as will weekly meetings with the instructor.

Prerequisite: Criminal Justice major, sophomore standing, approval of criminal justice agencies.

### **2781 Use of Force I (2L, 2LB, 3CR):**

Introduces the criminal justice major to the use of force. Non-lethal force and the escalation of force is covered, as are legal and ethical concerns. Instruction is provided in the use and care of police sidearms including the service revolver and semiautomatic pistol.

Prerequisite: Criminal Justice major.

### **2791 Use of Force II (2L, 2LB, 3CR):**

This is the second course in the use of force sequence. It includes continued use of the police sidearm with the goal of increasing proficiency. It also introduces the student to the use of the police rifle, shotgun, and special weapons and tactics such as the use of tear gas and explosive devices.

Prerequisite: CRMJ 2120 (Introduction to

Criminal Justice) and CRMJ 2781 (Use of Force I) with a grade of “C” or better.

### **2895 Criminal Justice Capstone Project (1L, 1CR):**

This course is designed as a review for the Criminal Justice major. Syllabi from all CJ classes will be reviewed and all objectives will be discussed and tied together showing the interaction and interconnectiveness of the Criminal Justice System. This course is offered for S/U grade only.

Prerequisite: Sophomore status as Criminal Justice major set to graduate at the end of same semester.

Additional criminal justice courses will be offered at the Wyoming Law Enforcement Academy. Course descriptions are available from the office of the Vice President for Learning.

## **Crop Science-Agriculture (CROP)**

### **1150 Pesticide Safety and Application (3L, 3CR):**

In this course, basic chemical principles are reviewed and applied to an in-depth study of herbicides, insecticides, and fertilizers. Students become familiar with selection methods and rates. They also learn about laws governing purchase and use of insecticides and fertilizers. Particular attention is given to environmental concerns. The integrated pest management approach to total pest control is stressed.

### **2200 Forage Crop Science (3L, 3CR):**

A general course dealing with forage and commercial crops including methods of seeding, cultivation, harvest, selection, grading, and variety improvement. History and importance of legumes, grasses, and cash crops when used as forages.

Prerequisites: AECL 1000, BIOL 1000, or BIOL 1010 with a grade of “C” or better.

## **Culinary Arts (CULA)**

### **1100 Basic Culinary Skills (3L, 3CR):**

This course gives the student an introductory overview of the fundamentals that are required to be a professional culinarian. Topics such as knife skills, stocks, sauces, and soups as well as recipe conversion, costing and product identification are all covered in this course. These are the basic building blocks that are required for future culinary success.

# Courses of Instruction

## **1510 Sanitation (1L, 1CR):**

Applied Food Service Sanitation covers the latest developments, procedures, current government standards and emerging issues in Food Services Sanitation. Students will get a head start in understanding Hazardous Analysis Critical Control Point (HACCP), a cutting-edge system that is the hospitality industry's system-of-choice.

## **Economics (ECON)**

### **1010 Macroeconomics (3L, 3CR):**

A description and analysis of national income, business cycles, income distribution, governmental economic policies, the banking system, and monetary and fiscal policy. Students cannot earn credit for both ECON 1010 and AGECE 1010.

### **1020 Microeconomics (3L, 3CR):**

A description and analysis of price determination, resource allocation, market structures, international economics, and current economic issues.

## **Education (EDUC)**

### **1500 Multicultural Awareness (3L, 3CR):**

An introduction to the impact of family relationships and cultural diversity in American society for educators and child care providers. Family patterns and the diverse characteristics of ethnicity, race, exceptionality, class, and religion will be examined.

### **1501 Effective Substitute Teaching (3CR):**

The objectives of this course are to understand professional ethics and responsibilities; expand awareness of classroom management techniques; increase knowledge of effective teaching behaviors; and develop a teaching resource file. Not applicable toward EWC graduation requirements. May be applied toward electives. This course is offered for S/U grade only. Prerequisite: Concurrent enrollment in EDUC 2005 or background check on file with participating school district. 3 credits = 25 hours lecture, 30 hours classroom observation including 10 hours completed at each level: elementary, junior high/middle, and high school.

### **1515 Effective Literary Strategies (1-2CR):**

The Wyoming Writing Institute—Effective Reading/Writing Strategies is offered in the field to teachers, para-professionals, and other staff associated with a school district as requested by the district. All pertinent staff members take the course as a part of a staff development plan requiring training of all staff. This training focuses on standards-based literary structures—writers' workshop, literary circles, and guided reading—with the focus of growing students to attain success in reading, writing, listening, and speaking.

### **2005 Pre-Screen for Practicum in Teaching (0CR):**

This course completes the process necessary for the background check required prior to participating in any K-12 field experience.

### **2100 Practicum in Teaching (2-3CR)(Max 6):**

Students will participate in an extensive practicum experience for prospective educators in an accredited school under the supervision of a certified teacher.

Prerequisite: EDFD 2020 with a grade of "C" or better, or 400 hours employed in an educational setting and successful completion of EDUC 2005. Students who have not successfully completed EDUC 2005 will need to be concurrently enrolled and will not begin their practicum until their EWC background check is complete.

### **2105 Tutorial Instruction (2-3CR)(Max 4):**

This course is designed to provide the student with practical experience and theoretical underpinnings of tutoring in specific academic disciplines in which the student has demonstrated both interest and effectiveness. A tutor must be selected based upon GPA and an interview with the Learning Skills Lab Coordinator. A tutor must complete a series of self-directed modules to receive 1 credit. These self-directed modules must be completed in the first semester of enrollment. In addition, the student must work 4 hours a week for 2 credits or 6 hours a week for 3 credits. Maximum of 3 credits per semester and 4 lifetime credits.

### **2220 Multi-Cultural Education (1L, 1CR):**

This is an introductory class designed to give the student an overview of some of the many aspects of multicultural education. The course focuses on a multitude of multicultural activities which can be incorporated across the curriculum. These

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activities involve student research, observation, and participation. They will assist educators in laying a foundation for their students for national and internal citizenship in the 21st Century.

### **2225 Introduction to Teaching English as a Second or Foreign Language (3L, 3CR):**

An introduction to the concepts and principles of teaching English as a second or foreign language. Concepts include such topics as developing an understanding of second language acquisition theories, the role of culture upon language acquisition, and how languages are learned. Principles include English as a Foreign Language (EFL) and English as a Second Language (ESL) teaching strategies for the content areas of reading, writing, listening and speaking.

### **2230 Second Language Acquisition (3L, 3CR):**

This course is designed to provide the ESL/EFL teacher in training candidate with an understanding of the concepts, terms, and the practical applications of second language acquisition. Topics covered in this course will include linguistics and its subfields, literacy, the building blocks of language (phonetics and grammar), language variation, individual differences in second language acquisition, a comparison of first to second language acquisition, and language teaching in a cultural context.

Prerequisite: EDUC 2225: Introduction to Teaching English as a Second/Foreign Language with a grade of “C” or better.

### **2235 Teaching ESL/EFL Reading and Writing (3L, 3CR):**

This course provides a practical framework for the instruction of reading and writing skills to non-native speakers of English. Course content is organized around four strands – teaching meaning-focused input, meaning-focused output, language-focused learning, and fluency development in conjunction with social and cultural expectations.

Prerequisite: EDUC 2230: Second Language Acquisition with a grade of “C” or better.

### **2240 Teaching ESL/EFL Listening and Speaking (3L, 3CR):**

This course will provide the opportunity for students to explore the concepts involved in teaching listening and speaking to non-native speaking students. The focus of this course will be a hands-on approach to the instruction of

these skill sets featuring applied principles, a large number of useful teaching techniques, and guidelines for testing and monitoring. Course content will include: listening and speaking theories applicable to the instruction of these skill subsets, listening processes, types and models of listening, information transfer, language focused learning through dictation, pronunciation, negotiation in speaking, types of speaking, the instruction of teaching skills for teaching speaking, fluency and the ways to develop it, testing listening and speaking.

Prerequisite: EDUC 2230 Second Language Acquisition with a grade of “C” or better.

### **2800 Capstone: Education (1L, 1CR):**

The Education Capstone Experience is directed toward the application of broad principles in the discipline of Education with special attention given to the national standards in the areas of Elementary, Secondary, and Early Childhood Education. This course seeks to enhance and enrich the student’s academic background by synthesizing programmatic learning and experiences so that students have the ability to continue a course of study in education. For terminal degree seeking students in Early Childhood Education, this course will meet the NAEYC Early Childhood Program Standards for portfolio creation.

### **Education-Early Childhood (EDEC)**

#### **1020 Introduction to Early Childhood Education (3L, 3CR):**

This course is designed to introduce students to the study of early childhood education—preschool through the primary grades. The student will study the types, objectives and philosophies of various early childhood programs. The course addresses a wide range of issues related to young children and their education through lectures, discussion and observation.

#### **1100 Observation and Guidance of Young Children (2L, 2CR):**

This course provides effective methods of observation and guidance to meet children’s needs individually and in groups with an emphasis on promoting a positive and constructive climate in the early childhood setting. Topics include assessment, recording behaviors, planning environments, materials and equipment, scheduling, discipline and parent-teacher communication.

# Courses of Instruction

Prerequisite: Successful completion of EDEC 1020 with a grade of “C” or better or concurrent enrollment in EDEC 1020.

## **1105 Observation and Guidance of Young Children Lab (2LB, 1CR):**

This course provides supervised experience in the observation and guidance of young children at an early childhood center.

Prerequisite: EDEC 1100 (or concurrent enrollment). Enrollment in EDUC 2005 or documented DFS pre-screen or criminal background check within previous 24 months. 2 hours lab.

## **1200 Administration in Early Childhood Programs (3L, 3CR):**

This course is designed to develop skills in both business and human relations components of administering child care for young children. Content includes procedures in establishing early childhood centers, administering paperwork, fiscal management, selection, development and motivation of staff, parent and community involvement strategies, and program regulations and evaluation.

Prerequisite: Successful completion of or concurrent enrollment in EDEC 1020-Introduction to Early Childhood Education.

## **1300 Curriculum Planning and Development for Young Children (2L, 2CR):**

This course will focus on the development of skills in planning, implementing and evaluating developmentally appropriate experiences to encourage intellectual, physical, social, emotional, and creative growth in young children. The focus will be on the concept of optimum development of the whole child.

Prerequisite: EDEC 1020, FCSC 2121 with grades of “C” or better. 2 hours lecture.

## **1305 Curriculum Planning and Development for Young Children Lab (2LB, 1CR):**

This course will provide the opportunity for students to engage in supervised experiences in planning, implementing, and evaluating curricular activities in an early childhood program.

Prerequisite: Successful completion of or concurrent enrollment in EDEC 1300. Enrollment in EDUC 2005 or documented DFS pre-screen or criminal background check within previous 24 months.

## **1480 CDA-Child Development Associate Seminar (3L, 3CR):**

This course is designed to prepare candidates for the assessment process for the Child Development Associate credential. This course is intended to assist the student in preparing the Professional Resource File, The Parent Opinion Questionnaire and prepare for the national examination and Verification visit.

Prerequisite: Students must be 18 years of age, hold a high school diploma or GED, have 480 hours of experience working with children within the past five years and have 120 clock hours of formal child care education within the past five years. This course is offered for a S/U grade only.

## **2000 Engaging Families in Early Childhood Settings (3L, 3CR):**

This course will focus on the philosophical, psychological, and sociocultural aspects of working with families in early childhood settings. 3 hours lecture.

## **Education-Elementary (EDEL)**

### **1410 Elementary School Math Seminar I (1L, 1CR):**

This course is designed to discuss strategies and instructional activities used in Numbers and Operations for Elementary School Teachers and to be a linkage between what the prospective teachers study and what they will teach. It provides the opportunity to discuss appropriate activities, strategies and programs in teaching areas related to problem solving and to the use of whole numbers, rational numbers, and real numbers.

Prerequisite: Concurrent enrollment in MATH 1100.

### **1430 Life Science in the Elementary School (1L, 1CR):**

Covers selection of basic life science concepts, materials and curricula appropriate for elementary school. This course parallels the content of Biology 1000 or 1010 and previous or concurrent enrollment is ideal, but not required.

### **1440 Physical Science in the Elementary School (1L, 1CR):**

Covers selection of basic physical science concepts, materials and curricula appropriate for elementary school. This course parallels the content in PHYS 1090 and previous or

# Courses of Instruction

concurrent enrollment in a physics or chemistry course is ideal but not required.

## **1450 Earth Science in the Elementary School (1L, 1CR):**

This course covers the selection of basic earth science concepts to the teaching of elementary students. The course includes topics in geography, meteorology, geology, and astronomy.

## **2410 Elementary School Math Seminar II (1L, 1CR):**

This course is designed to discuss strategies and instructional activities used in Geometry and Measurement for Elementary School Teachers and to be a linkage between what the prospective teachers study and what they will teach. It provides the opportunity to discuss appropriate activities, strategies and programs in teaching areas related to probability, statistics, and geometric concepts.

Prerequisite: Concurrent enrollment in MATH 2120.

## **Education-Educational Foundations (EDFD)**

### **2020 Foundations of Education (3L, 3CR):**

A basic course for those preparing for a teaching career. This experience supplies a critical examination of educational thought and practice in the United States viewed as a phase of social progress. The study will include classroom observations as well.

Prerequisite: Concurrent enrollment in EDUC 2005 required.

### **2100 Educational Psychology (3L, 3CR):**

Students will demonstrate knowledge and understanding of psychological concepts, principles, and research relevant to teaching and learning with an emphasis on the school setting. Prerequisite: EDFD 2020 and PSYC 1000 with a grade of "C" or better.

### **2450 Lifespan Human Development (3L, 3CR):**

This course provides an overview of human growth and development from conception until the end of life. The course material combines theory, research and practical applications from developmental psychology. Lecture topics include prenatal and birth factors; genetic influences on development; physical, cognitive, social emotional, and cultural variables which influence development in infancy, childhood,

adolescence, early-, middle-, and late adulthood. Prerequisite: PSYC 1000 with a grade of "C" or better.

### **2451 Life Span: Adulthood (1L, 1CR):**

This course provides a psychosocial overview of human development during the adult years. Issues of physical, psychological, social and emotional development will be explored.

Prerequisite: PSYC 2300 with a grade of "C" or better or concurrent enrollment.

## **Education-Exceptional Children (EDEX)**

### **2484 Introduction to Special Education (3L, 3CR):**

This course is designed to meet the needs of education majors for a required course in special education.

Prerequisite: Successful completion of EDFD 2020 with a grade of "C" or better AND successful completion of or concurrent enrollment in EDUC 2100 Practicum in Teaching.

## **Electrical Apprenticeship (ELAP)**

### **1515 Electrical Apprenticeship I (2L, 2LB, 3CR):**

This course is designed to provide an electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. This course is designed to develop the basic uses of mathematics for electricity, electrical code, and electrical motors and transformers. The course meets the Wyoming statutory requirement for electricity related classroom training.

This course is offered for S/U grade only.

### **1525 Electrical Apprenticeship II (2L, 2LB, 3CR):**

This course is designed to provide an electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. This course is designed to develop the basic uses of mathematics for electricity, electrical code, and electrical motors and transformers. This course meets the Wyoming statutory requirement for electricity related classroom training.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1515 or instructor approval.

### **1535 Electrical Apprenticeship III (2L, 2LB, 3CR):**

This course is designed to provide the second year electrical apprentice with the necessary skills

# Courses of Instruction

and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to safety, AC electricity, inductance, capacitance, transformers, motors and application of the National Electrical Code.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1525 or instructor approval.

### **1545 Electrical Apprenticeship IV (2L, 2LB, 3CR):**

This course is designed to provide the second year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to safety, AC electricity, inductance, capacitance, transformers, motors and application of the National Electrical Code.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1535 or instructor approval.

### **1555 Electrical Apprenticeship V (2L, 2LB, 3CR):**

This course is designed to provide the third year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to safety, blueprint reading, construction procedures, grounding and ground fault calculations, and service calculations based on the National Electrical Code.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1545 or instructor approval.

### **1565 Electrical Apprenticeship VI (2L, 2LB, 3CR):**

This course is designed to provide the third year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to safety, blueprint reading, construction procedures, grounding and ground fault calculations, and service calculations based on the National Electrical Code.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1555 or instructor approval.

### **1575 Electrical Apprenticeship VII (2L, 2LB, 3CR):**

This course is designed to provide the fourth year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to safety, motor controls, power distribution, solid state controls and

programmable controllers based on the National Electrical Code.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1565 or instructor approval.

### **1585 Electrical Apprenticeship VIII (2L, 2LB, 3CR):**

This course is designed to provide the fourth year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include but not limited to advanced motor controls, branch and feeder circuits, service entrance and grounding calculations based on the National Electrical Code and review for the State exam.

This course is offered for S/U grade only.

Prerequisite: Successful completion of ELAP 1575 or instructor approval.

## **Electrical Technology (ELTR)**

### **1515 Electrical Concepts (2L, 2CR):**

This course introduces students to AC and DC electricity. This will include the principles of voltage, current, resistance and power. Students will use electrical meters for measuring and reinforcing Ohm's law.

## **Engineering Technology (ENTK)**

### **1510 Drafting I (1/2L, 1LB, 1CR):**

This course is an introduction to the fundamental techniques of drafting with the use of drafting instruments and freehand sketching of pictorial and multiview drawings, including the skills of dimensioning and lettering.

### **2501 Intro to Computer Aided Drafting I (1/2L, 1LB, 1CR):**

This course is an introduction to Computer Aided Drafting (CAD). The content of this course is designed to provide the student with a basic understanding of CAD program features and explore drafting and design essentials in a 2-dimensional format. Coursework is valuable for anyone needing to prepare, interpret, or use virtually any type of drawings, plans, schematics, or other technical graphic communication documents.

Prerequisite: Previous experience with computers is recommended.

### **2506 Intro to Computer Aided Drafting II (1/2L, 1LB, 1CR):**

This course is a continuation of Computer Aided Drafting I. The content of this course is

## Courses of Instruction

designed to provide the student with an advanced understanding of CAD program features and further explore drafting and design essentials in a 2-dimensional format. Coursework is valuable for anyone needing to prepare, interpret, or use virtually any type of drawings, plans, schematics, or other technical graphic communication documents.

Prerequisite: ENTK 2500 with a grade of “C” or better.

### **2510 Computer Aided Drafting III (1/2L, 1LB, 1CR):**

This course is a continuation of CAD I and CAD II. The content of this course is designed to provide the student with a comprehensive understanding of CAD program features and drafting and design techniques in a 2-dimensional format. Focus will be on the creation of presentation quality drawings and prints. Students will be introduced to a 3-dimensional design using wire-frame and solid modeling techniques. Coursework is valuable for students transferring CAD credits to a four-year institution, or for anyone needing to prepare, interpret, or use virtually any type of drawings, plans, schematics, or other technical graphic communication documents.

Prerequisite: ENTK 2500 and ENTK 2505 with a grade of “C” or better.

## **English (ENGL)**

### **0100 English as a Second Language (3CR):**

This course is designed to develop the basic writing skills of the high-beginning level ESL learner through daily assignments, the development of the paragraph and essay, and the study of grammatical structures relevant to various writing genres. Learners will examine and practice writing three rhetorical forms: chronological process, spatial description and listing using specific descriptive details, reasons and examples.

Prerequisite: IBTTOEFL: 61 or Computer-based TOEFL: 173 or Paper-based TOEFL: 500  
3 hours lecture.

### **0620 Foundations of Grammar (3L, 3CR):**

Study of English grammar with emphasis on word formation. Grading in this course will be based on student progress. A final grade of “C” or better does not necessarily indicate readiness for the next course in the sequence.

Prerequisite: Appropriate score on the placement examination.

### **0630 Grammar and Writing Improvement (3L, 3CR):**

The study of English grammar with emphasis on sentence formation.

Prerequisite: Appropriate score on the placement examination.

### **0640 Writing Skills (3L, 3CR):**

Instruction, reading, and writing practice in the organization of short compositions. Review of sentence elements and of usage as necessary. This course may be used as a preparatory course for students who plan to enroll in English 1010.

Prerequisite: Appropriate score on the placement examination or ENGL 0630 with a grade of “C” or better.

### **1010 English I: Composition (3L, 3CR):**

Instruction, reading, and writing practice in the fundamentals of composition, including essay assignments such as expository, argumentative, persuasive, comparison and contrast, analysis, and research papers.

Prerequisite: ENGL 0640 with a grade of “C” or better or appropriate score on placement exam.

### **1020 English II (3L, 3CR):**

An introductory study of literature in its varied forms, such as poetry, drama, short fiction, novels, and literary nonfiction, and several composition assignments requiring students to write about literary works.

Prerequisite: ENGL 1010 with a grade of “C” or better.

### **1210 English Composition for International Students (3L, 3CR):**

This is a composition course for non-native speakers of English. It includes instruction in the fundamentals of composition, including writing assignments in definition, summary, classification, narration, description, exposition, argumentation, and comparison and contrast. There will be frequent reading and writing assignments. A student may not receive credit for both English 1010 and English 1210.

Prerequisite: English 0640 with a grade of “C” or better or appropriate score on placement exam.

### **2050 Creative Writing—Introduction to Fiction (3L, 3CR):**

This course deals with an analysis of the forms of fiction and the practice of creative writing at an introductory level.

Prerequisite: ENGL 1020 with a grade of “C” or better.

## Courses of Instruction

### **2140 World Literature (3L, 3CR):**

This course focuses on the major literary works representative of the significant periods in the history of Western civilization. Through reading, study and discussion, students explore literature from Homer through the medieval period of Chaucer.

Prerequisite: ENGL 1020 with a grade of “C” or better.

### **2210 English Literature I (3L, 3CR):**

A survey of major British authors and literary movements. The first semester covers British literature from the Old English period through Neo-Classic period.

Prerequisite: ENGL 1020 with a grade of “C” or better.

### **2220 English Literature II (3L, 3CR):**

A continuation of English 2210. The second semester covers writers and literary movements from the Romantic period to the present.

Prerequisite: ENGL 1020 with a grade of “C” or better.

### **2310 American Literature I (3L, 3CR):**

A survey of major American authors and literary movements. The first semester covers American literature from the early 1600’s through the mid-19th Century.

Prerequisite: ENGL 1020 with a grade of “C” or better.

### **2320 American Literature II (3L, 3CR):**

A continuation of English 2310. The second semester covers literature from the mid-19th Century to the present.

Prerequisite: ENGL 1020 with a grade of “C” or better.

### **2350 American Fiction Writers (3L, 3CR):**

This course covers a sampling of short stories, novellas, and novels by significant American writers. The reading consists of complete works, with a balance of shorter and longer works as well as a balance of nineteenth- and twentieth-century writers. Writing assignments will consist of essays discussing primary works.

Prerequisite: ENGL 1010 with a grade of “C” or better.

### **2370 Western American Literature (3L, 3CR):**

A survey of works by major writers of Western fiction and nonfiction, including short stories,

novels, and autobiographies. Includes works with both historical and modern settings.

Prerequisite: ENGL 1010 with a grade of “C” or better.

### **2440 Literary Genres: Short Story (3L, 3CR):**

Examination of the short story as a literary genre. Includes reading of short stories by writers of international rank, emphasizing but not necessarily limited to British, American, and Canadian writers. Includes writing essays of analysis.

Prerequisite: ENGL 1010 with a grade of “C” or better.

### **2480 Literary Genres: Drama (3L, 3CR):**

Reading of plays to acquaint students with problems and possibilities of drama as a genre.

Prerequisite: ENGL 1020 with a grade of “C” or better.

## **Entrepreneurship (ENTR)**

### **1500 Successful Entrepreneurship (2L, 2CR):**

An introductory course focusing on identification of the business skills, personal traits and characteristics necessary to succeed as an entrepreneur. Students analyze and determine how to obtain the skills needed to own, operate and manage a small business successfully.

Through guided self-analysis, students assess their own alignment with the passion, creativity and innovation that typifies entrepreneurial success. In addition, students explore the role of small business in both the U.S. and global economy, examine a variety of industries, businesses, entrepreneurial ventures and create a personal business preference profile.

Prerequisite: HMDV 0510 with a grade of “C” or better or appropriate score on placement exam.

### **1520 Creating a Business Plan (2L, 2CR):**

Students evaluate a business opportunity, collect and organize research data into a marketing plan and prepare a financial plan for their small business idea. In addition, students gain skills to be able to continue developing their business plan as they learn new information and gain ability to make a “go” or “no-go” determination.

2 hours lecture.

# Courses of Instruction

## **2500 Small Business Operations Management (2L, 2CR):**

Students develop skills for introducing new products and services, quality management, process design, job design, technology management and related business design decisions. Students also develop operations decision making skills for inventory, materials, scheduling and planning specific to the needs of a small business as it progresses through the business life cycle.

## **2520 Legal Issues for Entrepreneurs (2L, 2CR):**

A course focusing on the legal start-up, growth, management and exit strategies of small business. Students identify and analyze the legal and tax implications of the forms of business ownership. In addition, students examine the process of forming the various types of corporations. Student investigate human resource laws, contracts, reporting requirements, bankruptcy, collections and small claims court topics. Students also determine how to protect their business innovations with copyright, trademark, patents and intellectual property law.

## **2550 Principles of Marketing (3L, 3CR):**

An overview of marketing including the strategies for product, distribution, promotion, and pricing decisions; the relationship of these decisions to the external environment; global perspectives for tactical and strategic planning related to marketing; and ethics in marketing considerations. Students cannot earn credit for both ENTR 2540 and MKT 2100.

## **Equine Studies (EQST)**

### **1570 Horseshoeing I (1/2L, 1LB, 1CR):**

This course will include a study of the hoof in general, shaping shoes, trimming, and placement.

### **1580 Horseshoeing II (1/2L, 1LB, 1CR):**

This course deals with the detection of hoof problems, determination of causes for such problems, and the proper method of treatment to correct these problems. Students will be required to shoe a minimum of one horse without assistance before completion.

Prerequisite: EQST 1570 with a grade of "C" or better.

### **1725 Rodeo Rough Stock I (1L, 2LB, 2CR):**

This is the first course in a series of rodeo rough stock events classes. Students will learn the rules of the different rough stock events, safety procedures for each of the events, proper equipment for each of the events, and the correct use for each piece of equipment. Lab sessions will deal with practical application of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. A student may enroll in only one rodeo event class or one rough stock class per semester.

### **1730 Rodeo Rough Stock II (1L, 2LB, 2CR):**

This is the second course in a series of rodeo rough stock events classes. Students will learn about physical fitness for the rough stock competitor, development of a positive competitive attitude, communication skills as a rodeo competitor, humane treatment of bucking horses and bulls, application of support devices for the competitor, entering rodeos, and selection of proper attire. Lab sessions will deal with practical application of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. A student may enroll in only one rodeo event class or one rough stock class per semester.

### **1740 Rodeo Timed Events I (1L, 2LB, 2CR):**

This is the first course in a series of rodeo timed events classes. Students will learn the rules of the different timed events, safety procedures for each of the events, proper tack for the events, and rules and regulations regarding brand inspections and health certificates. Lab sessions will deal with practical applications of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. Students may enroll in only one rodeo event class or one rough stock class per semester.

### **1750 Rodeo Timed Events II (1L, 2LB, 2CR):**

This is the second course in a series of rodeo timed events classes. Students will learn about physical fitness for the time event competitor, correct application of equine bandages, development of a positive competitive attitude, communication skills as a rodeo competitor, humane treatment of timed event stock, entering rodeos, and selection of proper attire. Lab sessions will deal with practical applications of

## Courses of Instruction

material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. Students may enroll in only one rodeo event class or one rough stock class per semester.

### **2740 Rodeo Rough Stock III (1L, 2LB, 2CR):**

This is the third course in a series of rodeo rough stock events classes. Students will learn about selection of bucking horses and bulls, nutrition, immunization and parasite control for rough stock, safety in loading and hauling broncs and bulls, health certificate and brand inspection regulations pertinent to bucking stock, and financial transactions involved with rodeo. Lab sessions will deal with practical application of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. A student may enroll in only one rodeo event class or one rough stock class per semester.

### **2750 Rodeo Rough Stock IV (1L, 2LB, 2CR):**

This is the fourth course in a series of rodeo rough stock events classes. Students will learn techniques for judging each of the different rough stock events as well as public relations involving the rodeo competitor. Lab sessions will deal with practical application of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. A student may enroll in only one rodeo event class or one rough stock class per semester.

### **2760 Rodeo Timed Events III (1L, 2LB, 2CR):**

This is the third course in a series of rodeo timed events classes. Students will learn about selection of stock, nutrition, immunization and parasite control for the performance horse and the cattle, hauling horses, and financial transactions involved with rodeo. Lab sessions will deal with practical applications of material that is presented in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. Students may enroll in only one rodeo event class or one rough stock class per semester.

### **2770 Rodeo Timed Events IV (1L, 2LB, 2CR):**

This is the fourth course in a series of rodeo timed events classes. Students will learn techniques for judging each of the different timed events as well as public relations involving the rodeo competitor. Lab sessions will deal with practical applications of material that is presented

in the lecture. A \$30 fee will be charged for this course. Verification of a NIRA card will be required. Students may enroll in only one rodeo event class or one rough stock class per semester.

## **Family and Consumer Science (FCSC)**

### **1010 Perspectives in Family and Consumer Science (2L, 2CR):**

This course is designed to explore the history, core concepts, professional experience and career options in the field of Family and Consumer Science. Students will gain experience in online education as well as assessment and goal setting to achieve expectations for professional competencies in the field. Students will begin to develop a professional portfolio as part of this course.

### **1140 Nutrition (3L, 3CR):**

This class will provide the students with a basic background in the six classes of nutrients and the role of each nutrient in food selection, weight loss, and weight maintenance. Basic diet planning principles will be discussed and students will analyze diets in accordance with such principles and propose dietary changes to improve nutritional status. Nutritional status and needs throughout the life span will be presented. Students will become better consumers as they are introduced to reading and interpreting food labels, understanding labeling regulations, and evaluating nutritional claims made by food products and fad diets.

Prerequisite: Placement score for English 1010 or better and Compass score indicating no reading improvement class is required or appropriate ACT scores for English and reading.

### **1141 Principles of Nutrition (3L, 3CR):**

A study of the science of food as it relates to the attainment and the maintenance of health and/or contributes to specific pathologies. Course emphasis will include: principles of nutrition; scientific basis of nutrition; nutrients, their functions, requirements, and interactions; nutritional fads and fallacies; energy consumption; energy expenditure; and metabolism. Special topics will include national and world nutrition and laboratory situations.

# Courses of Instruction

## **2121 Child Development (2L, 3LB, 4CR):**

A course in the study of the various societal and cultural influences on the growth and development of children during the early childhood period. Emphasis will be placed on the period from conception to age eleven. Students will observe infants, toddlers, preschoolers, and primary grade children for a total of 30 hours during the semester in order to related theory to the actual behavior of children.

Prerequisite: Concurrent enrollment in EDUC 2005 or documented DFS Pre-Screen or criminal background check within previous 24 months and PSYC 1000 or consent of instructor.

## **2131 Family Relationships (3L, 3CR):**

This course will help the student develop understanding about patterns of interactions at different stages of the family life cycle and transactions between families and other social system.

## **French-Language (FREN)**

### **1010 1st Year French I (4L, 1LB, 4CR):**

Fundamentals of grammar, composition, reading, and conversation.

### **1020 1st Year French II (4L, 1LB, 4CR):**

Continuation of French 1010.

Prerequisite: FREN 1010 with a grade of "C" or better.

## **Geography (GEOG)**

### **1000 World Regional Geography (3L, 3CR):**

Covers the distributions, traits, and processes of the Earth's peoples and landscapes through the perspective of regional geography, which is the study of the spatial relationships of natural environments and human societies.

### **1020 Human Geography (3L, 3CR):**

Analysis of spatial patterns of and interaction between the world's great cultural systems. Topics include settlement patterns, behavior patterns, agricultural land use and resource utilization.

## **Geology (GEOL)**

### **1070 The Earth: Its Physical Environment (3L, 1LB, 4CR):**

Discusses selected topics from geology, astronomy, and meteorology illustrating fundamental concepts, processes, products and the interrelationships among them. Emphasizes nature of science and relationship between selected topics and society.

### **1100 Physical Geology (3L, 2LB, 4CR):**

The study of the earth's physical make-up including rocks and minerals, streams, glaciers, geologic structures, earthquakes and plate tectonics. Laboratory sessions will cover rocks, minerals and topographic maps.

### **1470 Environmental Geology (3L, 3LB, 4CR):**

This course is an application of geologic principles to topical problems in environmental and resource geology. Topics include analysis of environmental issues such as earthquake disaster preparedness, landslides, land use, floods and human occupation, ground water withdrawal and contamination issues, volcanic and coastal hazards, and the response of landscapes and people to resource development (minerals/air/water/energy). Laboratories will be used to analyze and debate data relevant to environmental problems from a geological perspective. Prerequisite: Placement score for ENGL 0640 or better and no reading improvement required, or appropriate reading ACT score.

## **German-Language (GERM)**

### **1010 1st year German I (4L, 1LB, 4CR):**

Explores fundamentals of grammar, composition, conversation, and reading.

### **1020 1st year German II (4L, 1LB, 4CR):**

This course examines fundamentals of grammar, composition, conversation, and reading. Prerequisite: GERM 1010 with a grade of "C" or better.

# Courses of Instruction

## Health Education-Physical & Health Education (HLED)

### **1006 Personal Health (3L, 3CR):**

A study of health problems as they relate to the development of personal health values leading to an understanding of the responsibility of oneself, the family, community, and the world.

### **1140 Nutrition (3L, 3CR):**

This class will provide the students with a basic background in the six classes of nutrients and the role of each nutrient in food selection, weight loss, and weight maintenance. Basic diet planning principles will be discussed and students will analyze diets in accordance with such principles and propose dietary changes to improve nutritional status. Nutritional status and needs throughout the life span. Students will become better consumers as they are introduced to reading and interpreting labels, understanding labeling regulations, and evaluating nutritional claims made by food products and fad diets. Prerequisite: No reading improvement required.

### **1221 Standard First Aid & Safety (2L, 2CR):**

A study of accident prevention, assessment procedures and immediate first aid care for victims of accidents or sudden illness. The student has the option of receiving certification by the American Red Cross for Adult, Child, Infant CPR (\$5.00) and First Aid (\$5.00).

### **1280 Drug Use and Abuse (2L, 2CR):**

A general study of licit and illicit drugs and their metabolic and central nervous system alterations with special emphasis on the consequent impact on an individual, family, subculture, and world society, both in the past and the present.

## Health Technology (HLTK)

Criminal background checks are required for certain courses in this area. The background check with cover sexual offender information, general criminal history, and adult and child neglect information. Student financial aid may be used to cover the cost.

### **1220 Growth & Development (3L, 3CR):**

This course introduces the theories, processes and enhancement of the development of infants, young children, adolescents, and adults. Through

research, discussion, and field observation/participation, the student will study life span growth and development.

### **1510 Nurse Assistant (3L, 2LB, 4CR):**

This course is designed to provide concepts and skills of caring for residents of long-term care facilities under the supervision of licensed nursing personnel. The successful student will be eligible for certification and to function in the field of long term care. It also prepares the student to take the competency exam to become certified in the State of Wyoming. The CNA certificate may be transferred out of state. This course is offered for S/U grade only.

### **1511 Certified Nursing Assistant II (1CR)**

This course is designed to provide additional education for a CNA who has completed fifteen hundred (1500) documented working hours in a healthcare setting. The classes will be offered to meet the needs of the community and are designed to provide additional concepts and skills needed for the care of clients in long term care facilities and for the care of persons with chronic, stable conditions. The student will successfully complete the 40 hour course with a minimum score of 80% to become a CNA II in the state of Wyoming. This course is offered for S/U grade only.

Prerequisite: Wyoming Certified Nursing Assistant Certification(HLTK 1510), fifteen hundred (1500) documented work hours.

### **1525 Medication Assistant - Certified (4CR):**

This course is designed to prepare the student to assume the role and responsibilities of a medication aide after successfully completing the 40 hr CNA II course. The courses will be offered to meet the needs of the community and provide additional concepts and skills needed for the care of clients in long term care under the direction of a licensed nurse. The student will successfully complete the 100 hr course with a minimum score of 80% or better and will meet the requirements needed to take the competency exam give by the Board of Nursing to become certified in the State of Wyoming. This certification will permit the student to enter the healthcare settings with basic nursing care skills needed to become a Medication Aide-Certified. Prerequisite: Registered as a CNA with the Wyoming Board of Nursing  
100 Contact Hours

# Courses of Instruction

## **1560 Introduction to Health Careers (1L, 1CR):**

This course is designed to introduce the student to the U.S. Health Care Delivery System as well as the health related professions involved in patient care. In addition, other health related professions will be explored. Through classroom content and field observations, the student will investigate the various health/health-related careers.

## **1650 Advanced First Aid and Basic Emergency Care (2L, 4LB, 3CR):**

Provide training in fundamentals of emergency care. Follows State of Wyoming Guidelines to provide students with core knowledge, skills and attitudes to function in the capacity of a first responder.

## **1690 Emergency Medical Technology (2L, 4LB, 4CR):**

This course is a basic EMT class. The structure is dealing with emergency care. This course is offered for S/U grade only.

Prerequisite: High school diploma or High School Equivalency.

## **1695 Emergency Medical Technology II (2L, 2LB, 3CR):**

This course is a basic EMT class. The topics include advanced patient assessment, respiratory system, general pharmacology, and medical emergencies and medications.

Prerequisite: HLTK 1690, EMT I with a grade of "C" or better.

## **2005 Pre-Screen for Health Tech (OCR):**

This course completes the process necessary for the background check required prior to participating in HLTK 1510.

## **Heavy Equipment Operator (HEQP)**

### **1500 Heavy Equipment Operator (2L, 3LB, 5CR):**

The Heavy Equipment Operator course will be a five week (200 hours) course using the National Center for Construction Education and Research (NCCER) curriculum and use PROV national assessments for students. Successful students will receive a level one certification with opportunities to obtain a higher level certification. The NCCER level one certification is a nationally recognized certification by the heavy equipment industry. Students will learn about and operate different pieces of heavy equipment. The course will cover Core

requirements, preventative maintenance, and safe operations of the equipment. Equipment used for this course include Scraper, Dozer, Backhoe/Trackhoe, Loader and Excavator. This course is offered for S/U grade only.

## **History (HIST)**

### **1110 Western Civilization I (3L, 3CR):**

An introductory course in the study of Western civilization with attention given to the political, social, and economic developments from the beginning of civilization to 1650.

### **1120 Western Civilization II (3L, 3CR):**

A continuation of History 1110. From 1650 to the present.

### **1211 U.S. to 1865 (3L, 3CR):**

A general survey course which reviews the United States' history from the colonial period to 1865. Emphasis is placed on the important events and personalities that shaped our nation's heritage. This course meets the requirements of the Wyoming statutes providing instruction in the provisions and principles of the United States and Wyoming constitutions.

Prerequisite: Placement score of ENGL 0640 or better and no reading improvement required, or appropriate ACT score.

### **1221 U.S. from 1865 (3L, 3CR):**

A general survey course which reviews the United States' history from 1865 to the present. Emphasis is placed on the important events and personalities that shaped our nation's heritage. This course meets the requirements of the Wyoming statutes providing instruction in the provisions and principles of the United States and Wyoming constitutions.

Prerequisite: Placement score of ENGL 0640 or better and no reading improvement required, or appropriate ACT score.

### **1250 History of Wyoming (3L, 3CR):**

A study of Wyoming history from the late 18th Century to the present.

### **1290 History of US West (3L, 3CR):**

An introductory course designed to acquaint students with the history of the Trans-Mississippi West. Emphasis is placed on the 19th Century.

# Courses of Instruction

## **1320 World Civilization to 1450 (3L, 3CR):**

A history of the world's peoples and civilizations from human prehistory to 1450, with an emphasis on the diversity and interconnectedness of human life in the past, including political, religious cultural, economic and social movements.

Prerequisite: Placement score of ENGL 0640 or better and no reading improvement required, or appropriate ACT score.

## **1330 World Civilizations from 1450 (3L, 3CR):**

A history of the world's peoples and civilizations from 1450 to present, with an emphasis on the diversity and interconnectedness of human life in the past, including political, religious cultural, economic and social movements.

Prerequisite: Placement score of ENGL 0640 or better and no reading improvement required, or appropriate ACT score.

## **2055 Introduction to Asian Civilization (3L, 3CR):**

A survey course which emphasizes the cultural, economic, political, and social development of East Asia or monsoon Asia with special attention paid to India, China, Japan and Korea since the arrival of Europeans in East Asia. The impact of Western technology upon political ideas, cultural-religious values, and economics will be stressed.

## **2290 North American Indians (3L, 3CR):**

This course studies American Indian history through 500 years and across the continent. Considers Indian political, social and economic continuity and change. Focuses on how Indian peoples experienced and responded to times of dramatic change.

## **Human Development (HMDV)**

### **0510 Fundamentals of Reading I (2L, 2LB, 3CR):**

This course is designed to develop reading comprehension and reading vocabulary, as well as general reading strategies. Students will spend 4 hours per week in the classroom. Special emphasis will be placed on reading content-related materials and developing a working vocabulary for general subject reading. Prerequisite: Appropriate score on the placement examination.

### **0520 Fundamentals of Reading II (2L, 2LB, 3CR):**

This course is designed to develop reading comprehension and reading vocabulary, as well as general reading strategies. Students will spend 3 hours per week in the classroom and 1 hour per week in a reading lab. Special emphasis will be placed on reading content-related materials and developing a working vocabulary for general subject reading.

Prerequisite: Appropriate score on the placement examination.

### **1000 College Studies (1L, 1CR):**

This course is designed as a general orientation and a transition to college for all new students and all transfer students who have less than thirty semester hours. This course will enable the student to explore and understand the whole college environment, to identify and utilize campus resources (programs and other courses) that will enhance his/her academic experience. The course will assist the student to begin to develop short and long term academic and career goals. The course will assist the student to identify community resources which will also enhance his/her academic experience.

### **1025 Orientation to Distance Learning (1L, 1CR):**

This course provides an overview of the elements required for successful distance learning. Technological skills and learning strategies necessary for effective interaction with distance courses will be the focus of this interactive orientation. This course is highly recommended for anyone who enrolls in a distance education course. Distance learners may substitute for HMDV 1000 for EWC degree requirements. This course is offered for S/U or letter grade.

# Courses of Instruction

## **1050 Study Strategies (2L, 2CR):**

This course is designed to teach skills and attitudes which enable students to achieve their academic goals. Areas addressed will include note-taking, preparation for and taking tests, memory and concentration, effective listening, writing skills, time management, goal setting, and other related skills.

## **1250 Students by Design (1L, 2LB, 2CR):**

This course is designed as a specific orientation and a transition to college life for new students and transfer students who have less than thirty semester hours. This course will combine EWC-specific information with tools to enable the student to explore and understand the impact of economic class on individuals and communities. Investigating society's rules and resources provides a way to understand individuals, institutions, and society. Problem identification, analysis, and a structured process for change offer pathways to solutions for personal and community issues. Students will examine and begin to address the realities of political and economic systems and analyze their situations to achieve change in their own lives. This course may substitute for HMDV 1000 for EWC degree requirement.

## **1500 Human Development: Empowerment (3L, 3CR):**

This course defines the personal qualities and characteristics that contribute to student success as it teaches the attitudes and study skills that contribute to academic achievement. Students become more aware, discover self-motivation, accept personal responsibility, and master self-management techniques through in-class exercises, take-home assignments, and journal writing. The course provides instruction in listening, reading, writing, note-taking, and test-taking skills so that students acquire the disciplines that distinguish life-long learners. This course may be substituted for both HMDV 1000 and HMDV 1050 for EWC degree and elective requirements.

## **1510 Success in the Workplace (1L, 1CR):**

A class designed to emphasize those concepts, skills, and attitudes needed by an individual to have a successful work-related experience. Topics include resumes, workplace ethics, customer relations, and other employment skills.

## **1550 Lifestyle Management (2L, 2CR):**

This class covers basic lifestyle topics to help students become more successful in life and in school. It includes topics in nutrition, exercise, goal setting, resume building, interviewing skills, mental and emotional health topics and working with community resources.

## **2001 Sophomore Project: Interdisciplinary Writing (3L, 3CR):**

This course is designed to be an interdisciplinary approach to research and essay writing, providing students with a variety of research skills and methods. It will stress the APA/MLA documentation style. Emphasis will be placed on critical thinking, analysis, and research. Passing the course with a grade of "C" or better satisfies the Outcomes Assessment activity for Interdisciplinary Studies majors.

Prerequisite: English 1010 with a grade of "C" or better.

## **Information Management (IMGT)**

### **2400 Introduction to Information Management (3L, 3CR):**

Concerned with the role of information systems in managing organizations to make them more competitive and efficient. Specific topics include organizational and technical foundations of information systems and building and managing systems.

Prerequisite: Sophomore standing.

## **Instructional Technology-Education (ITEC)**

### **2360 Teaching With Technology (1 or 3CR):**

This course provides an introduction to effective utilization and integration of information technology with classroom instruction. Topics will include: hardware, software, integrated applications, grade books, Internet, world wide web, e-mail, educational media and evaluation, and educational issues regarding information technology.

Contact hours vary depending on credit hours.

## **International Studies (INST)**

### **2350 Introduction to Global Studies (3L, 3CR):**

Turns an interdisciplinary eye on the contemporary world of consuming and global connections. Takes a broad overview of various approaches to the study of globalization while exploring the links between consumption, civil society, social justice, and ecological integrity.

# Courses of Instruction

## Internet (INET)

### **1580 Web Page Authoring (1L, 2LB, 2CR):**

This course is intended for the beginning Web page designer. It will familiarize students with HTML (Hypertext Markup Language), XHTML (Extensible Hypertext Markup Language) and CSS (Cascading Style Sheets). Using these tools, students will learn to design their own simple web pages for personal or business use.

### **1590 Web Page Design (2L, 2LB, 3CR):**

This is an introductory course on web page design using design techniques in Dreamweaver. Upon completion of this course, participants will have the necessary skills to design and publish basic custom web sites for viewing on the World Wide Web. Dreamweaver is a web design program used to create multimedia-rich web pages through interactive web pages containing text, images, animation, sounds, and video.

### **1610 Dynamic Web Graphics: Flash Web Design (2L, 2LB, 3CR):**

Dynamic Web graphics allows the Web designer to create animations and Web interfaces. Web pages are used by most businesses today, and skills acquired in this course will help the designer enhance the published Web page.

## Journalism (JOUR)

### **1010 Publications Production I (2LB, 1CR) (Max 4):**

Practical experience dealing with campus or campus-related affairs and events. Students may work in writing, editing, advertising, photographic, and/or production areas, including on-line publication. Sustained professional-level performance is required.

## Library Science-Education (LIBS)

### **2280 Literature for Children (3L, 3CR):**

Wide reading and discussion of the literature for children is emphasized in this course. Books that have won recognition as distinguished contributions to American and multicultural literature for children are examined. The selection of books for school, home, and public library is considered. In addition to becoming acquainted with a wide sampling of children's literature, students also establish criteria for evaluation and classroom use.

Prerequisite: ENGL 1010 with a grade of "C" or better.

## Machine Tool Technology (MCHT)

### **1500 General Machine Shop (1L, 2LB, 2CR):**

This is a course in the theory and practice of hand tools and shop equipment. You will learn the concepts of flatness, squareness, and parallelism. Emphasis is given to good work habits and attitudes needed to perform layout, drilling tapping, filing, grinding, metal cutting, drill sharpening, and letter stamping. Safety and accuracy will be the focus.

### **1610 Machine Tool Technology I (1L, 2LB, 2CR):**

A course providing instruction in turning fundamentals including safety, tooling, feeds, speeds, threading, boring, work holding, and machine maintenance on belt drive and geared head manual lathes. The student will also learn how to calibrate and read a micrometer and a dial caliper.

### **1620 Machine Tool Technology II (1L, 4LB, 3CR):**

This course provides the student with the technical understanding and skill required to do more advanced turning, threading, and boring on the lathe. This is followed by learning to set up and use the vertical mill to cut key seats. Prerequisite: MCHT 1610 with a grade of "C" or better.

# Courses of Instruction

## Management-Business (MGT)

### **1000 Introduction to Supervision (3L, 3CR):**

This course seeks to develop an understanding and appreciation of the basic concepts of supervision, to include planning, organizing, human resources management, directing, and controlling. Topics covered also include motivation, delegation, leadership, communications, team-building, total quality management, and discipline. The course should assist one to acquire the skills necessary for effective first-level management.

## Marketing (MKT)

### **1000 Sales (3L, 3CR):**

Students will acquire skills and knowledge necessary to achieve success in the sales profession. Students will develop knowledge and an understanding of how to prepare for a selling career, how to better understand their customers, selling techniques and procedures, and how to increase their sales effectiveness.

### **2100 Principles of Marketing (3L, 3CR):**

An overview of marketing including the strategies for product, distribution, promotion, and pricing decisions; the relationship of these decisions to the external environment; global perspectives for tactical and strategic planning related to marketing; and ethics in marketing considerations.

Prerequisite: Sophomore standing.

## Mathematics (MATH)

### **0900 Pre-algebra Arithmetic (3L, 3CR):**

This course is designed for those who are weak in basic skills, those who require a review of the fundamentals, and those who desire a chance to develop their self-confidence in mathematics.

This course is a comprehensive study of arithmetic including such topics as operations on whole numbers, primes, fractions, decimals, ratio and proportion, and percents, as well as the use of formulas and introductory algebra skills including the use of a scientific calculator.

Prerequisite: Appropriate score on mathematics placement exam.

### **0906 Math Lab I (3LB, 1CR):**

If the student is having difficulty in Mathematics 0900, or if the student wishes to have lab work time on a regular basis with tutorial assistance,

he/she may take the math lab. The lab would be on a to be arranged basis. The student will be able to register for the lab any time before midterm. This course is offered for S/U grade only.

Prerequisite: Concurrent enrollment in MATH 0900.

### **0915 Math 0920 Lab (3LB, 1CR):**

If a student is having difficulty in Mathematics 0920, or if the student wishes to have lab work time on a regular basis with tutorial assistance, he/she may take the math lab. The lab will be on a to be arranged basis. The student will be able to register for the lab any time before midterm. This course is offered for S/U grade only.

Prerequisite: Concurrent enrollment in MATH 0920.

### **0920 Elementary Algebra (4L, 4CR):**

This is a one-semester beginning course in algebra. Basic concepts of algebra will be studied, including real numbers, linear, quadratic, and rational equations, with emphasis placed on solving "word" or "story" problems.

Prerequisite: A grade of "C" or better in BADM 1005, MATH 0900, or MATH 1515 or appropriate score on math placement exam within one year prior to registering for the course.

### **0930 Intermediate Algebra (4L, 4CR):**

Basic techniques and skills of algebra with applications. Topics include solving linear equations and inequalities, quadratic equations, rational expressions, factoring, exponents, graphing of linear equations and conic sections, and an introduction to functions and logarithms. Prerequisite: MATH 0920 with a grade of "C" or better, or appropriate score on mathematics placement exam within one year prior to registering for the course.

### **1000 Problem Solving (3L, 3CR):**

This course is specifically designed to satisfy basic mathematics requirements at many colleges for students not planning to enroll in Mathematics 1400 or a calculus course. The course treats modern topics chosen for their applicability and accessibility; it provides students with the mathematical and logical skills needed to formulate, analyze, and interpret quantitative arguments in a variety of settings. Statistics is introduced and the use of a calculator is stressed

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in the course.

Prerequisite: MATH 0920 with a grade of “C” or better, or appropriate score on mathematics placement exam within one year prior to registering for the course or an ACT math score of 21.

### **1100 Numbers & Operations for Elementary School Teachers (3L, 3CR):**

This course is for prospective elementary school teachers. The purpose of this course is to prepare students to be competent in teaching the major concepts and practical skills related to the real number system with the four arithmetic operations. Students enrolling in this course must also enroll concurrently in EDEL 1410, Elementary School Math Seminar I.

Prerequisite: MATH 0930 with a grade of “C” or better, or level 2 on the Math Placement Exam or an ACT math score of 21.

### **1400 Pre-Calculus Algebra (4L, 4CR):**

Algebraic equations and inequalities are studied as well as the following functions: polynomial, rational, exponential, and logarithmic. Emphasis is placed on graphing relations and functions.

Prerequisite: MATH 0930 with a grade of “C” or better, or appropriate score on mathematics placement exam within one year prior to registering for the course.

### **1405 Pre-Calculus Trigonometry (3L, 3CR):**

Topics include circular and trigonometric functions and their inverses, identities and equations, complex numbers, and vectors, and applications of these.

Prerequisite: MATH 1400 with a grade of “C” or better, or concurrent enrollment in MATH 1400 or an ACT math score of 25.

### **1450 Algebra and Trigonometry (5L, 5CR):**

This course will cover the topics of Math 1400 and Math 1405 in a single course. Students who have received credit in either of the above courses may not receive credit for Math 1450. Topics to be covered include algebraic equations and inequalities; algebraic functions (polynomial, rational, exponential and logarithmic) with an emphasis on graphing these and other relations; complex numbers; circular and trigonometric functions and their inverses; trigonometric identities and equations; and applications of all of the above.

Prerequisite: MATH 0930 with a grade of “C”

or better, or appropriate score on mathematics placement exam within one year prior to registering for the course or an ACT math score of 23.

### **1515 Applied Technical Mathematics (3L, 3CR):**

A mathematics course for students in the technical fields with applications which stress problem solving techniques, measurement systems (both English and Metric), ratio and proportions, percentages, scale drawings, basic geometry and the use of geometric formulas, the interpreting of graphs and tables, and basic trig functions. This course may not be used to meet the math requirements for AA or AS programs. Prerequisite: MATH 0900 with a grade of “C” or better, or an appropriate score on the placement exam within one year prior to registering for the course.

### **2120 Geometry & Measurement for Elementary School Teachers (3L, 3CR):**

This course is a continuation of MATH 1100. The purpose of this course is to prepare students to be competent in teaching the major concepts and practical skills related to data analysis, probability, geometry and measurement. Students enrolling in this course must also enroll concurrently in EDEL 2410: Elementary School Math Seminar II. Prerequisite: MATH 1100 with a grade of “C” or better.

### **2200 Calculus I (5L, 5CR):**

This course is designed for students in engineering, physics, chemistry, statistics, agriculture, mathematics, and others whose majors require a calculus sequence with emphasis on physical science applications. Mathematical topics included are: plane analytic geometry, differentiation, applications of the derivative, integration, and applications of integration. Students who have earned credit in Mathematics 2350 cannot earn additional credit in Mathematics 2200.

Prerequisites: MATH 1400 and MATH 1405 with grades of “C” or better, or appropriate score on mathematics placement exam within one year prior to registering for the course or an ACT math score of 27.

### **2205 Calculus II (5L, 5CR):**

This is a continuation of Mathematics 2200. Topics covered are trigonometric, logarithmic, and exponential functions, techniques of

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integration, indeterminate forms, and polar coordinates.

Prerequisite: MATH 2200 with a grade of “C” or better.

## **2210 Calculus III (5L, 5CR):**

A continuation of Mathematics 2205 including infinite series, partial differentiation, and multiple integrals. Strong emphasis on vectors in analytic geometry and calculus, with physical applications.

Prerequisite: MATH 2205 with a grade of “C” or better.

## **2250 Elementary Linear Algebra (3L, 3CR):**

Topics include linear equations and matrices, vector spaces, linear transformations, determinants, orthogonality, and eigenvalues and eigenvectors.

Prerequisite: MATH 2205 with a grade of “C” or better.

## **2350 Business Calculus (4L, 4CR):**

Review of functions, their graphs and their algebra; derivatives and their applications; techniques of differentiation; the calculus for the exponential and logarithmic functions with applications to business; integration and applications; differential equations and applications. Students who have earned credit in Mathematics 2200 cannot earn additional credit in Mathematics 2350.

Prerequisite: MATH 1400 with a grade of “C” or better, or appropriate score on mathematics placement exam within one year prior to registering for the course or an ACT math score of 26.

## **2355 Mathematical Applications for Business (4L, 4CR):**

Continues business and economic applications of mathematics from Math 2350. Topics include finance, linear algebra and matrices, linear programming, least squares, probability and statistics. A mandatory computer lab using spreadsheet software will meet one day per week.

Prerequisites: MATH 2200 OR 2350 with a grade of “C” or better; or MATH 1400 with a grade of “C” or better.

## **Mining Technology (MINE)**

### **1870 MSHA Underground New Miner (2CR):**

This course provides 32 of the mandatory 40 hours of Mine Safety and Health Administration for the underground mine instruction. The remaining eight (8) hours of the onsite training is the student’s responsibility and must be completed at an actual mine site. This course is offered for a grade of S/U only.

### **1875 MSHA Underground Annual Refresher (1/2CR):**

This refresher course is offered annually to any individual who has prior certification of completion of an Underground New Miner training program. This course provides eight (8) hours of mandatory MSHA (Mine Safety and Health Administration) training for underground mine workers. This course is offered for a grade of S/U only.

Prerequisite: Non-expired 5000-23, past proof of 5000-23, or signed agreement with employer as experienced miner.

## **Molecular Biology (MOLB)**

### **2220 Pathogenic Microbiology (3L, 3LB, 4CR):**

This course is a lecture and laboratory course which covers bacteria, parasites, viruses and fungi which cause human disease. Laboratory sessions emphasize the techniques used in the identification of disease-causing organisms. Students in biology, allied health, and preprofessional programs would benefit from this course.

Prerequisite: BIOL 1000 or BIOL 1010 with a grade of “C” or better, or approval of instructor.

## **Music (MUSC)**

### **1000 Introduction to Music (3L, 3CR):**

A basic appreciation course in which the student is introduced to the fundamental areas of music study and traditions.

### **1010 Music Fundamentals (2L, 2CR):**

For the non-music major, Music Fundamentals emphasizes the basic skills of reading, writing, and playing music. By the end of the course, each student will be able to play basic melodies, chords, and rhythms on such instruments as the recorder, drums, bells, and piano. Additional instruments may be added. This course does not equal MUSC 1030.

# Courses of Instruction

## **1030 Written Theory I (3L, 3CR):**

The study of the fundamentals of music and of written harmony.

Prerequisite: Concurrent enrollment in MUSC 1035.

## **1035 Aural Theory I (2LB, 1CR):**

Ear training, sight singing, and keyboard harmony.

Prerequisite: Concurrent enrollment in MUSC 1030.

## **1040 Written Theory II (3L, 3CR):**

Continuation of Music 1030.

Prerequisites: MUSC 1030 with a grade of "C" or better and concurrent enrollment in MUSC 1045.

## **1045 Aural Theory II (2LB, 1CR):**

Continuation of Music 1035.

Prerequisite: MUSC 1035 with a grade of "C" or better and concurrent enrollment in MUSC 1040.

## **1071 Applied Music-Instrument I (4LB, 2CR)(Max 8):**

Individual lessons on woodwind, brass, or percussion instruments. One lesson weekly per semester. For beginners, no previous training required.

## **1073 Applied Music Piano (4LB, 2CR)(Max 4):**

Individual lessons in piano for beginners, no previous training required. Twelve lessons per semester. Each lesson is approximately one hour. A computer lab accompanies each lesson. Instruction will concentrate on improving piano skills in technique, basic improvisation and harmonization.

## **1074 Applied Music Voice (4LB, 2CR)(Max 4):**

Individual lessons in voice. One lesson weekly per semester. For beginners, no previous training required.

## **1150 Guitar I (4LB, 2CR)(Max 8):**

Individual lessons in guitar. One lesson weekly per semester. For beginners, no previous training required.

## **1280 Accompanying (2LB, 1CR)(Max 4):**

Supervised practice in the art of accompaniment with discussion of traditional usages as applicable to the various schools and periods of vocal and instrumental solo literature and group literature.

## **1378 College Band (2LB, 1CR)(Max 4):**

Band is open to all college students having previous experience with brass, woodwind, or percussion instruments. A wide variety of styles and musical abilities will be represented. 1 two-hour class period.

## **1400 Collegiate Chorale (2LB, 1CR)(Max 4):**

## **1404 Master Chorus (2LB, 1CR):**

Master Chorus is open to all college students having little to no experience in voice. Although the music is challenging, emphasis is placed on learning and creating a choral repertoire for the group. Music ranges from classical to modern large choral works.

## **1415 Introduction to Music Technology (1L, 2LB, 2CR):**

A beginning course in Music Technology. This course will cover setting up a music workstation, choosing software and equipment. It will also cover the basics of several popular music software programs. In addition to the weekly lecture, students will be able to spend time with a computer music workstation.

## **2015 Introduction to the Music of the World's Peoples (3L, 3CR):**

This course introduces students to the music and cultures of the world's peoples. Students will study, hear, and research music from a wide variety of geographical areas of the world.

## **2018 Music for Elementary Classroom Teachers (3L, 3CR):**

A course designed for prospective, pre-service, or certified elementary teachers, or for those classroom teachers seeking recertification. Students acquire knowledge about materials, instruction, and methods pertaining to the integration of music in the elementary classroom. Hands-on demonstration and class participation are emphasized.

## **2030 Written Theory III (3L, 3CR):**

A continuation of Music 1030 and Music 1040 with added work in harmonic analysis and with some consideration of contrapuntal techniques. Prerequisites: MUSC 1040, MUSC 1045 with a grade of "C" or better, and concurrent enrollment in MUSC 2035.

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### **2035 Aural Theory III (2LB, 1CR):**

A continuation of Music 1035 and Music 1045.  
Prerequisites: MUSC 1040, MUSC 1045 with a grade of “C” or better, and concurrent enrollment in MUSC 2030.

### **2040 Written Theory IV (3L, 3CR):**

Continuation of Music 2030.  
Prerequisites: MUSC 2030, MUSC 2035 with a grade of “C” or better, and concurrent enrollment in MUSC 2045.

### **2045 Aural Theory IV (2LB, 1CR):**

A continuation of Music 2035.  
Prerequisites: MUSC 2030, MUSC 2035, and concurrent enrollment in MUSC 2040.

### **2050 Music History Survey I (3L, 3CR):**

A historical survey of the history and literature of Western Music: Ancient Greece through the Baroque period (c.1750). The course examines the cultural context in which the music of a period was created, how music influenced that culture (or how culture influenced the music), and biographical studies of important musicians. May be taken out of sequence (See Music History Survey II).

### **2055 Music History Survey II (3L, 3CR):**

Continuation of Music 2050. A historical survey of the history and literature of Western Music: The Classical period (c.1750) through the present. The course examines the cultural context in which the music of a period was created, how music influenced that culture (or how culture influenced the music), and biographical studies of important musicians.

### **2071 Applied Music—Instrument (2 or 4CR)(Max 8):**

Individual lessons in advanced woodwind, brass, or percussion instrument, with a concentration on breath control, range, resonance, the study of appropriate literature for the student’s instrument and ability. For those students with previous training in woodwind, brass, or percussion. Two credits will equal one (1) one-half hour lesson per week, 4 credits equal one (1) one hour lesson per week. Students are required to practice two hours per week, per credit and complete a practice log of practice sessions.  
Prerequisite: MUSC 1071 with a grade of “C” or better.

### **2073 Applied Music Piano (2 or 4CR)(Max 8):**

Individual lessons in piano for intermediate to advanced students or those students with previous training in piano. Students will continue to improve piano skills in technique, sight-reading, harmonization, and improvisation. Two credits will equal one (1) one-half hour lesson per week, four credits equal one (1) one hour lesson per week. Students are required to practice 2 hours per week, per credit and complete a practice log of practice sessions.

Prerequisite: Applied Music-Piano MUSC 1073 with a grade of “C” or better.

### **2074 Applied Music Voice (2 or 4CR)(Max 8):**

Individual instruction in advanced vocal technique with concentration on breath control, range, resonance, placement of the voice, diction, and the study of appropriate literature for each student’s voice and ability. For those students with previous training in voice. Two credits will equal one (1) one-half hour lesson per week, four credits equal one (1) one hour lesson per week. Students are required to practice 2 hours per week, per credit and complete a practice log of practice sessions.

Prerequisite: Applied Music-Voice MUSC 1074 with a grade of “C” or better.

### **2150 Guitar II (4LB, 2CR)(Max 8):**

Individual lessons in guitar.  
Prerequisite: MUSC 1150 with a grade of “C” or better.

### **2455 Convocation (0CR):**

Monthly recital hour for student, faculty and guest performances. Required for all music majors and those non-music majors in second year Applied Music courses. This course is offered for S/U grade only. Meets monthly.  
Prerequisite: Concurrent enrollment in an Applied Music course.

# Courses of Instruction

## Nursing Studies (NRST)

### **1640 Basic Intravenous Therapy Course (2CR):**

This Basic Intravenous Therapy for Licensed Practical Nurses Course is directed toward establishing acceptable standards so the student is able to delineate the beginning skills and knowledge needed to administer and manage IV therapy. Basic Guidelines include: background information, legal aspects of IV systems, fluid and electrolyte balance, procedures for venipunctures, prevention and assessment of complications, principles of pharmacology as related to IV therapy, and demonstration and practice of required skills.

Prerequisite: Enrollment in HLTK 2005 or documented DFS pre-screen or criminal background check within previous 24 months.

### **1645 Advanced Intravenous Therapy Course (2CR):**

This Advanced Intravenous Therapy for Licensed Practical Nurses Course is directed toward establishing acceptable standards so the student will be able to safely and competently follow functions and duties, in addition to those identified above, including discontinuing peripheral intravenous therapy for pediatric patients ages 5-12, obtain a blood specimen, medication administration, and management of central lines under the direct supervision of a registered professional nurse, physician, or dentist. This course is offered for S/U grade only.

Prerequisite: Current LPN License and successful completion of NRST 1640 with a grade of "C" or better.

## Philosophy (PHIL)

### **1000 Introduction to Philosophy (3L, 3CR):**

This course will introduce the student to the meaning and method of philosophy. Critical examination of life occurs through contact with some of the major philosophers in Western culture. Drawing upon key sources in Western thought, the student will be challenged to begin his/her own critical look at life.

Prerequisite: ENGL 1010 with a grade of "C" or better.

### **2300 Ethics in Practice (3L, 3CR):**

An examination of contemporary ethical conflicts to provide students with a grounding in the language, concepts and traditions of ethics and with the tools necessary to analyze moral

dilemmas in a variety of areas.

Prerequisite: English 1010 with a grade of "C" or better.

## PE Activity-Physical & Health Education (PEAC)

All students, except those medically exempted, desiring to receive an Associate of Arts Degree or an Associate of Science Degree from Eastern Wyoming College are required to take two different physical education activity courses which must be taken in separate semesters. Students must select a minimum of one physical education activity course from Area II. Medical exemptions will be allowed only on the receipt of a signed form from the certifying doctor. Note: For those students transferring to the University of Wyoming or Chadron State College, general education credit may not be given for more than one physical education activity class per semester.

### Area I-Fitness

#### **1020 Fitness and Conditioning (2LB, 1CR):**

Students will evaluate their physical condition relative to cardiovascular endurance, strength, and flexibility. An individualized training program will be developed to improve and/or maintain these aspects of fitness based upon the student's desire.

Concurrent enrollment in PEAC 1032, 1033, 1034, 1035, 1036, 1271, 1273, 1291 is not allowed.

#### **1032 Aerobic Conditioning I/Fitness Center (2LB, 1CR):**

This course is designed for individuals interested in improving total fitness through an aerobic based conditioning program. Orientation for the course will include screening, individual fitness assessments, and individualized exercise prescriptions based upon the student's goals. Weight training equipment, bicycle ergometers, treadmills, a rowing machine, elliptical trainers, and other aerobic equipment will be used to improve cardiorespiratory fitness.

Prerequisite: **Students enrolling for a grade must attend an orientation. Students enrolling for an audit, must sign the course waiver upon registration, but need not attend an orientation.**

Concurrent enrollment in PEAC 1020, 1033, 1034, 1035, 1036, 1271, 1273, 1291, 1305 and 2000 is not allowed. These classes are allowed

## Courses of Instruction

access to the Fitness Center as part of the class. Minimum 2 lab hours per week.

### **1033 Aerobic Conditioning II/Fitness Center (2LB, 1CR):**

A continuation of Physical Education 1032, this course allows students the opportunity to attain a high level of total fitness. The course will include, but is not limited to: individual fitness evaluation, computerized analysis of test results, a prescribed exercise program, and an opportunity to attend fitness related seminars. Weight machines, bicycle ergometers, treadmills, ellipticals, a rowing machine, a stairmaster, a step mill, and other aerobic activities will be used to elicit improvements in total fitness. Students will be re-evaluated upon completion of 25 workouts in the Fitness Center.

Prerequisite: **Students enrolling for a grade must: 1) complete PEAC 1032 with a grade of "C" or better within the past calendar year; or 2) complete a re-evaluation if the student has satisfactorily completed PEAC 1032 outside of one calendar year. Student electing to audit the course must sign the course waiver upon registration and are not required to meet the prerequisites.**

Concurrent enrollment in PEAC 1020, 1032, 1034, 1035, 1036, 1271, 1273, 1291, 1305, 2000 is not allowed. These classes are allowed access to the Fitness Center as part of the class. Minimum of 2 lab hours per week.

### **1034 Aerobic Conditioning III/Fitness Center (2LB, 1CR):**

An advanced course in aerobic conditioning designed for individuals interested in attaining a higher level of total body fitness. The course will include individual fitness assessments, computerized analysis of test results, a prescribed exercise program, and the opportunity to participate in a series of fitness related seminars. Bicycle ergometers, mini-tramps, aerobicycles, treadmills, a computerized rowing machine, ellipticals, step mill, stairmaster and other aerobic conditioning activities will be coupled with weight machines to give each student a maximal workout.

Prerequisite: **Students enrolling for a grade must: 1) complete PEAC 1033 with a grade of "C" or better within the past calendar year; or 2) complete a re-evaluation if the student has satisfactorily completed PEAC 1033 outside of one calendar year.**

**Students electing to audit the course must sign the course waiver upon registration and are not required to meet the prerequisites.** Concurrent enrollment in PEAC 1020, 1032, 1033, 1035, 1036, 1271, 1273, 1291, 1305, 2000 is not allowed. These classes are allowed access to the Fitness Center as a part of the class. Minimum of 2 lab hours per week.

### **1035 Aerobic Conditioning IV/Fitness Center (2LB, 1CR):**

And advanced course in aerobic conditioning designed for individuals interested in attaining a higher level of total body fitness. The course will include individual fitness assessments, computerized analysis of test results, a prescribed exercise program, and the opportunity to participate in a series of fitness related seminars. Bicycle ergometers, mini-tramps, aerobicycles, treadmills, a computerized rowing machine, ellipticals, step mill, stairmaster and other aerobic conditioning activities will be coupled with weight machines to give each student a maximal workout.

Prerequisite: **Students enrolling for a grade must: 1) complete PEAC 1034 with a grade of "C" or better within the past calendar year; or 2) complete a re-evaluation if the student has satisfactorily completed PEAC 1034 outside of one calendar year.**

**Students electing to audit the course must sign the course waiver upon registration and are not required to meet the prerequisites.** Concurrent enrollment in PEAC 1020, 1032, 1033, 1034, 1036, 1271, 1273, 1291, 1305, 2000 is not allowed. These classes are allowed access to the Fitness Center as a part of the class. Minimum of 2 lab hours per week.

### **2000 Wellness: Physical Education Concepts/ Fitness Course (1L, 1LB, 1CR):**

A course designed to illustrate the relationship between lifestyle (nutrition, exercise, fitness, etc.) and personal wellness. Emphasis is placed on the role of exercise in wellness. Course will include lecture and laboratory experiences. Concurrent enrollment in 1020, 1032, 1033, 1034, 1035, 1036, 1271, 1273, 1291 is not allowed.

# Courses of Instruction

## Area II-General Physical Activity

### **1008 Lifetime Sports (2LB, 1CR):**

Students receive a brief introduction to individual and dual sports. Approximately two weeks (4 class periods) will be spent on each of the following: archery, badminton, bowling, golf, horseshoes, racquetball, table tennis, and tennis.

### **1012 Beginning Swimming (2LB, 1CR):**

A course designed for the beginning swimmer. Skills will be taught and measured according to the American Red Cross level for the beginning swimmer.

### **1040 Trap Shooting I (1/2L, 1/2LB, 1CR):**

PEAC 1040 is a course designed for students interested in the safe handling of firearms and beginning shotgun shooting skills and techniques. The course will include instruction concerning Wyoming Hunter Safety rules/regulations, with the discussion of the concept of 'fair chase' and the ethical hunter being emphasized. Approximately 1/2 class time will be spent in the classroom/lecture with the other 1/2 being spent on site at the Goshen County Sportsman Club Rifle Range. Students will pass a 50 point exam with 90% efficiency prior to being allowed to handle a weapon. All times spent at the shooting range will be supervised by a certified Hunter Safety Instructor. Students may provide his/her own shotgun or one will be provided for him/her.

### **1044 Trap, Skeet, and Sporting Clays (1/4L, 3/4LB, 1CR):**

PEAC 1044 is a course designed for the advanced shotgun shooter. The course will include instruction concerning gun safety, hunting regulations, and ethical considerations of the shooter. Instruction will be provided in the skills required to shoot trap, skeet, and sporting clays. Selection of proper equipment, reloading shells, and rules and regulations for ATA will be discussed. Approximately 1/4 class time will be spent in the classroom/lecture with the other 3/4 being spent on site at the Goshen County Sportsman Club Rifle Range. All times spent at the shooting range will be supervised by a certified Hunter Safety Instructor. Students may provide his/her own shotgun or one will be provided for him/her.

Prerequisite: Trap Shooting I or Hunter's Safety Education Certification.

### **1050 Beginning Tennis (2LB, 1CR):**

A course designed to acquaint the student with the equipment, rules, etiquette, scoring, and skills of tennis. Instruction will cover grips, ground strokes, service, volley, and overhead strokes. Singles and doubles strategies will be discussed.

### **1252 Beginning Badminton (2LB, 1CR):**

A course designed to teach the student the following badminton skills: grips, footwork, serve, forehand strokes, backhand strokes, and overhead strokes. Singles and doubles strategies will also be discussed.

### **1253 Beginning Bowling (2LB, 1CR):**

A course designed to acquaint the student with equipment selection, rules and courtesies of bowling as well as the skills and scoring of bowling. Instruction will cover approach, timing, release (delivery), and aiming.

### **1255 Beginning Golf (2LB, 1CR):**

A course designed to acquaint the student with the selection and care of equipment, rules and etiquette of the game, and game skills. Instruction will cover swing, grip, putting, chipping, and driving.

### **1257 Beginning Racquetball (2LB, 1CR):**

A course designed to acquaint the student with rules, etiquette, safety measures, and skills of racquetball. Instruction will cover grip, forehand stroke, backhand stroke, overhand stroke, underhand stroke, and various serves. Singles and doubles strategies will be discussed.

### **1271 Weight Loss Conditioning (1L, 2LB, 1CR):**

Exercise and dietary modifications will be combined in the weight loss course. One classroom session will be held per week and will include information on nutrition, diet analysis, and eating behavior modification, as they relate to weight control and weight loss. Individual weight loss goals will be established for each student. In addition, an individualized exercise program utilizing the Eastern Wyoming Fitness Center will be developed for each student. Students are expected to follow the exercise program in the Fitness Center by working out a minimum of 2 days per week and/or a maximum of 6 days per week.

Concurrent enrollment in PEAC 1020, 1032, 1033, 1034, 1035, 1036, 1273, 1291 is not allowed.

# Courses of Instruction

## **1273 Heavy Resistance Conditioning (2LB, 1CR) (Max 2):**

A basic strength training program designed for students interested in developing muscular strength and size. An individualized weight program will be developed for each student in accordance with his/her goal. Students will meet in the Fitness Center, and under the supervision and direction of an instructor, proceed through their individualized programs.

Concurrent enrollment in PEAC 1020, 1032, 1033, 1034, 1035, 1036, 1271, 1273, 1291 is not allowed.

## **1281 Beginning Casting and Angling (2LB, 1CR):**

A course designed to develop basic casting techniques for spin, bait, and fly fishing. Selection, care and repair of equipment will be discussed. Field trip experience will be required.

## **1305 Heavy Resistance Conditioning II (2LB, 1CR) (Max 2):**

An advanced course in basic strength training designed for students interested in developing muscular strength and size. An individualized weight program will be developed for each student in accordance with his/her goal. Students will meet in the Fitness Center, and under the supervision and direction of an instructor, proceed through their individualized programs.

## **2011 Intermediate Swimming (1CR):**

A course designed for the intermediate swimmer. Skills will be taught and measured according to the American Red Cross level for the intermediate swimmer.

## **Area III-Physical Activity**

Courses in Area III, listed below, do not apply toward the physical education activity requirement for any degree or certificate program.

## **1036 Fitness & Aerobic Conditioning (2LB, 1CR)(Max, Unlimited):**

This course provides students the opportunity to pursue individual fitness goals. Emphasis is placed on fitness as a lifelong pursuit with wellness being the ultimate goal. This course will not apply toward any degree or certificate program offered through Eastern Wyoming College. This course is offered for S/U grade only.

Prerequisites: Students enrolling for a grade must: 1) complete PEAC 1035 with a grade of "C" or better within the past calendar year; or 2) complete a re-evaluation if the student has satisfactorily completed PEAC 1035 outside of one calendar year. Students electing to audit the course must sign the course waiver upon registration and are not required to meet the prerequisites.

Concurrent enrollment in PEAC 1020, 1032, 1033, 1034, 1035, 1271, 1273, 1291, 1305, 2000 is not allowed. These classes are allowed access to the Fitness Center as a part of the class. Minimum of 2 lab hours per week.

## **1291 Individual Adapted Physical Education (2LB, 1CR):**

This course is designed to assist students and community members in rehabilitation of either surgeries or physical weaknesses. In order to enroll in this class, the student must be referred by his/her doctor and the doctor must prescribe the exercise program the student will perform. Students thus enrolled will be allowed access to the Fitness Center and must sign an "Assumption of Risk" form prior to his/her first workout. This course is offered for S/U grade only.

Prerequisites: Must have doctor's authorization/prescription of program, and sign release (assumption of risk) form.

Concurrent enrollment in PEAC 1020, 1032, 1033, 1034, 1035, 1036, 1271, 1273 is not allowed.

## **Physical Education-Athletics (PEAT)**

Courses listed below do not apply toward the physical education activity requirement for any degree or certificate program.

## **2025 Rodeo Activities (1/2L, 1LB, 1CR)(Max 2):**

### **2051 Varsity Golf (1/2L, 1LB, 1CR):**

This course may be taken only one time for a grade.

### **2061 Varsity Golf (1/2L, 1LB, 1CR):**

This course is a continuation of PEAT 2051. Prerequisites: PEAT 2051

### **2062 Varsity Basketball (1/2L, 1LB, 1CR):**

This course may be taken only one time for a grade.

# Courses of Instruction

**2072 Varsity Basketball (1/2L, 1LB, 1CR):**

This course is a continuation of PEAT 2062.  
Prerequisites: PEAT 2062

**2064 Varsity Volleyball (1/2L, 1LB, 1CR):**

This course may be taken only one time for a grade.

**2074 Varsity Volleyball (1/2L, 1LB, 1CR):**

This course is a continuation of PEAT 2064.  
Prerequisites: PEAT 2064.

## Physical Education Professional-Physical & Health Education (PEPR)

**1005 Introduction to Physical Education (2L, 2CR):**

An introductory course designed to introduce and orient future teachers of health, physical education, and recreation to the purposes, objectives, obligations, concepts, and opportunities within these fields.

**1052 Prevention of Athletic Injuries/Illness (3L, 3CR):**

Teaches prospective athletic trainer basic concepts of prevention of injury and illness by use of conditioning, taping, padding, physicals, nutrition and other means.

**1061 Majors Basketball (1L, 1LB, 1CR):**

Designed for physical education majors and minors, or those wishing a course in coaching basketball methodology. Course focuses on advanced skill development with emphasis on teaching progressions in basketball.

**1062 Majors Volleyball (1L, 1LB, 1CR):**

Designed for physical education majors and minors. For those wishing coaching volleyball methodology. Course focuses on advanced skill development with emphasis on teaching progressions in volleyball.

**2012 Physical Education for Elementary Schools (3L, 3CR):**

This course prepares the instructor to plan and instruct a physical education program that will benefit the children of different age and grade levels. Emphasis is placed on learning skill development and human movement of the elementary school child. Class includes a minimum of sixteen hours of field experience under the supervision of an elementary physical education specialist. Students enrolling in this

course must also enroll concurrently in EDUC 2005 or have a documented DFS Pre-screen or criminal background check within previous 24 months.

**2017 Water Safety Instructor (1/2L, 1LB, 1CR):**

Procedures and standards as required by the American Red Cross in performance and teaching techniques of swimming. Learn to conduct the community water safety class and seven levels of learning to swim.

Prerequisite: Red Cross Instructor Candidate Training.

**2395 Physical Education Capstone Experience (1L, 2LB, 2CR):**

This course is designed as a capstone class in the area of physical education. As a capstone class, it is designed to be taken in the final semester that a transfer physical education major is in residence at Eastern Wyoming College. The intent of the class is to determine whether or not a graduating student can perform skills and has knowledge competencies of acceptable levels in physical education to merit advancement to junior status at a transfer institution. In each case, a student seeking an A.A. degree in physical education will work with the faculty member assigned to this class to complete skill competency testing, knowledge based competency testing, physical fitness testing, and theory testing. This course is offered for S/U grading only.

Prerequisite: Physical Education, Health and Recreation Major.

## Physics (PHYS)

**1110 General Physics I (3L, 3LB, 4CR):**

A course in elementary college physics designed for premedical, pre dental, pharmacy students, and others not having a calculus background. Students who have earned credit in Physics 1050 cannot earn additional credit in either Physics 1110 or Physics 1120.

Prerequisites: MATH 1400 and MATH 1405 or equivalent with a grade of "C" or better.

**1120 General Physics II (3L, 3LB, 4CR):**

A continuation of Physics 1110. Students who have earned credit in Physics 1050 cannot earn additional credit in either Physics 1110 or Physics 1120.

Prerequisite: PHYS 1110 with a grade of "C" or better.

# Courses of Instruction

## Political Science (POLS)

### **1000 American & Wyoming Government (3L, 3CR):**

Fundamental introductory course which meets the requirements of the Wyoming statutes providing instruction in the provisions and principles of the constitutions of the United States and Wyoming. Students cannot earn credit for both Political Science 1000 and Political Science 1050.

Prerequisite: Placement score of ENGL 0640 or better and no reading improvement required, or appropriate ACT score.

### **1050 Basics in United States and Wyoming Government (2L, 2CR):**

An introductory course emphasizing the basic structure and practices of United States and Wyoming government. The course is designed to serve the community college student seeking a two-year terminal degree and satisfies the state requirement. Students cannot earn credit for both Political Science 1050 and Political Science 1000.

### **1070 Election Campaign Politics (1-2CR)(Max 2):**

A course directed to an analysis of the election campaign in the election year. While emphasis will be directed to local and state campaigns, attention will also be devoted to the national campaign. Students will become acquainted with candidates, issues and political behavior associated with election campaigns.

Students taking the class for one hour will be required to meet basic course requirements while students taking class for two hours will be assigned a candidate to assist in the campaign.

### **1075 Current Issues in Political Science (1L, 1CR) (Max 2):**

A course designed to promote an interest and awareness of current issues in our political system and offer a forum for the expression and exchange of political opinion.

### **1100 Wyoming Government (1L, 1CR):**

This course provides an introduction to the Constitution and governmental process of Wyoming. Intended for students who have earned credit for American Government at an out-of-state college or by Advance Placement but have not fulfilled the Wyoming Constitution requirement of University Studies. This course is offered for S/U grade only.

### **1200 Non-Western Political Cultures (3L, 3CR):**

This course will provide the student an opportunity to appreciate the basic aspects of non-western political cultures and philosophies that shape political institutions and practices in Africa, Asia, and the Middle East.

### **2000 Current Issues in American Government (3L, 3CR):**

The purpose of this course is to introduce the student to public analysis and the process of decision making. Attention will be devoted to current issues and topics in American government.

Prerequisite: POLS 1000 with a grade of "C" or better or approval of instructor.

### **2310 Introduction to International Relations (3L, 3CR):**

This course analyzes the nature of international relations, emphasizing various methods of explaining and interpreting international behavior of nation-states. This course illustrates contemporary problems of world politics.

### **2470 Internship I (6CR):**

This course will permit a student to become an intern to a Wyoming legislator during a general or budget session of the Wyoming legislature. The student will assist the legislator on a full-time basis and meet with other interns in a state-wide program under the direction of a state coordinator. 40 hours per week during session. Prerequisite: POLS 1000 with a grade of "C" or better.

# Courses of Instruction

## Psychology (PSYC)

### **1000 General Psychology (3L, 3CR):**

A general survey of psychology through lecture, discussion, and assigned readings. Major topics will include a brief history of the science of psychology, the scientific method as applied to psychology, and the physiological and psychological bases of behavior. Subtopics will include sensation and perception, motivation, emotion, learning, individuality and personality, mental health, and the life span development of the individual.

### **2000 Research Psychological Methods (3L, 2LB, 4CR):**

An introduction to some of the methods of investigating psychological questions. Students are exposed to the various research strategies ranging from observational to experimental designs. Topics include identifying research questions, designing topic proposals, conducting basic research, gathering data, performing statistical analyses, interpreting results, critiquing published research, writing in scientific style, and developing familiarity with the APA format. Prerequisite: Completion of PSYC 1000 and ENGL 1010 with grades of "C" or better.

### **2080 Biological Psychology (3L, 3CR):**

Introduces biological bases of behavior. Includes ethology and comparative behavior, psychobiological development, physiological and sensory mechanisms of behavior, and evolution and behavioral genetics. Presents basic structural and functional properties of the nervous system. Prerequisite: PSYC 1000 General Psychology and BIOL 1000 Principles of Biology or BIOL 1010 General Biology I with grades of "C" or better.

### **2125 Forensic Psychology (3L, 3CR):**

This course introduces the criminal justice/social science major to the uses of psychology in the field. Topics covered include basic criminal profiling, suspect interviewing, psychological theories of crime/delinquency, victimology, legal applications of psychology in conducting assessments, and correctional psychology. Prerequisite: PSYC 1000 General Psychology and CRMJ 2120 Introduction to Criminal Justice or permission of Instructor.

### **2210 Drugs and Behavior (3L, 3CR):**

A survey of the effects of various drugs on behavior. This course focuses on the behavioral, social, historical, and medical aspects of each major class of psychoactive drugs. Prerequisite: A grade of "C" or better in PSYC 1000.

### **2300 Developmental Psychology (3L, 3CR):**

The development and behavior of children from conception through adolescence is stressed. Emphasis is placed on the major roles played by maturation and learning in the growth of a child. Prerequisite: A grade of "C" or better in PSYC 1000.

### **2330 Psychology of Adjustment (3L, 3CR):**

A study of the individual's adjustments to the problems of everyday life. Emphasis is given to the discovery of self and the identification of integrative and non-integrative adjustments as they affect self-fulfillment. Prerequisite: A grade of "C" or better in PSYC 1000.

### **2340 Abnormal Psychology (3L, 3CR):**

A survey of major mental and behavioral disorders which explores the identification of types of disorders, their etiology, and potential treatment methods. Prerequisite: A grade of "C" or better in PSYC 1000.

### **2380 Social Psychology (3L, 3CR):**

An exploration of social behavior through the viewpoint of psychological theories and research. Topics include, but are not limited to, the science and methods for exploring social behavior, social cognition, culture and socialization, the "self," interpersonal perception and attraction, conformity, leadership, aggression, and persuasion and propaganda. Prerequisite: A grade of "C" or better in PSYC 1000.

# Courses of Instruction

## Range Ecology and Watershed Management (REWM)

### **2000 Principles of Range Management (3L, 3CR):**

An introductory course that presents systems of grazing, livestock management on the range, measurement of grazing capacity and forage use, and range improvements including revegetation, weed control, and fertilization.

Prerequisite: BIOL 1010 or BIOL 1000 with a grade of “C” or better or instructor approval.

### **2500. Rangeland Plant Identification. (1L, 2LB, 2CR):**

Sight identification and distribution of western U.S. rangeland plants.

Prerequisite: BIOL 1010 or BIOL 1000 with a grade of “C” or better.

## Religion (RELI)

### **1000 Introduction to Religion (3L, 3CR):**

An introduction to world religions. A multi-disciplinary approach is utilized to investigate the similarities and differences that exist between a variety of religions.

Prerequisite: ENGL 1010 with a grade of “C” or better.

## Renewable Resources (RNEW)

### **2100 Forest Management (3L, 3CR):**

A discussion of the objectives and the general principles of forestry, including identification of trees, forest production, methods of cutting and measuring forest, forest conservation, range management, wildlife management, and forest recreation.

Prerequisite: BIOL 1000 or 1010 with a grade of “C” or better.

## Safety Education (SAFE)

### **1510 OSHA General Industry Safety (1L, 1CR):**

This course is designed to familiarize students with OSHA rules and regulations pertaining to general industry. Students will be introduced to policies, procedures, and standards that relate to all aspects of general industry safety, and awareness on the job site.

### **1535 OSHA Construction Safety Refresher (1/2L, 1/2CR):**

This course is designed for anyone in the construction industry. The course reorients how one can prevent oneself and others from being injured in their work environments. A variety of topics come from the Occupational, Safety, and Health Act of 1970. This course is offered for S/U grade only.

### **1536 OSHA Industry Safety Refresher (1/2L, 1/2CR):**

This course is designed for industrial workers and supervisors with safety and health responsibilities. Students will be introduced to OSHA policies, procedures and standards as well as general industry safety and health principles covered in OSHA Act Part 1910. This course is offered for S/U grade only.

### **1705 OSHA Construction Safety (2L, 2CR):**

This course is designed to raise awareness within construction and industry working environments. The course illustrates how one can prevent oneself and others from being injured in their work environments. A variety of topics come from the Occupational, Safety, and Health Act of 1970. This course is offered for S/U grade only.

# Courses of Instruction

## Social Science (SOSC)

### **2395 Social Science Capstone Experience (1L, 1CR):**

The Social Science Capstone Experience is directed toward the application of broad principles in the social sciences with specific attention given to the student's discipline of study. The course seeks to enhance and enrich the student's academic background, and involve the student in activities/experiences that demonstrate an ability to continue to study in the social science. This course is offered for S/U grade only.

Prerequisite: Sophomore standing, major in social science, semester of graduation.

## Social Work (SOWK)

### **2000 Introduction to Social Work (3L, 3CR):**

A foundation course designed to explore the institution and profession of social work and the field of Social Welfare.

## Sociology (SOC)

### **1000 Sociological Principles (3L, 3CR):**

An introductory course providing both a survey of the discipline and a foundation for other sociology courses. Major areas of interest being explored range from small groups and families to bureaucracies and social movements. Significant concepts and theories are introduced along with the tools of social research. Though much attention is given to contemporary American society, comparative and historical material is included.

### **1100 Social Problems (3L, 3CR):**

This course explores various approaches to defining and identifying social problems and applies basic sociological concepts and methods to the analysis of selected social problems and issues. Emphasis is placed on the contemporary society of the United States. Cross-cultural and historical comparisons are presented where relevant.

### **2200 Sociology of Human Sexuality (3L, 3CR):**

An investigation of human sexuality as a social and cultural phenomenon. Theoretical issues of human sexuality are related to empirical evidence in discussing social attitudes and actual behavior with American society.

Prerequisite: PSYC 1000 or SOC 1000 with a grade of "C" or better.

### **2350 Race and Ethnic Relations (3L, 3CR):**

Examines relations among minority and dominant groups with an emphasis on the society and culture of the United States. Relevant cross-cultural analysis will also be included.

Prerequisite: SOC 1000 or ANTH 1200 with a grade of "C" or better.

### **2400 Criminology (3L, 3CR):**

An introduction to the study of the nature and causes of criminal behavior. Biological, psychological, and sociological theories are examined. Types of criminal behavior, historical perspectives, crime statistics, and current trends are also covered. Students cannot earn credit for both SOC 2400 and CRMJ 2400.

Prerequisite: SOC 1000 with a grade of "C" or better.

## Soil Science-Agriculture (SOIL)

### **2200 Applied Soils (2L, 2LB, 3CR):**

An applied study of the composition and general properties of soils. Emphasis is given to the practical management of those properties and a study of those factors which must be considered in the proper management of those soils.

### **2300 Soil Science and Fertilizer Technology (2L, 2CR):**

A study of soil fertility and plant nutrition in crop production. Soil-plant relations, diagnostic techniques and methods of evaluating soil fertility are emphasized.

Prerequisite: CHEM 1010 with a grade of "C" or better.

## Spanish-Language (SPAN)

### **1010 1st Year Spanish I (4L, 1LB, 4CR):**

Fundamentals of grammar, composition, reading, and conversation.

### **1020 1st Year Spanish II (4L, 1LB, 4CR):**

A continuation of Spanish 1010.

Prerequisite: SPAN 1010 with a grade of "C" or better.

### **2030 2nd Year Spanish I (4L, 1LB, 4CR):**

Progressive reading of Spanish prose with additional review in verbs, idioms, and conversation.

Prerequisites: SPAN 1010 and SPAN 1020 each with a grade of "C" or better.

# Courses of Instruction

## Speech Pathology & Audiology (SPPA)

### **1050 Beginning Sign Language (2-3CR):**

This introductory course teaches the use of sign language to familiarize students with communication for the teaching of hearing impaired children. This course is offered for S/U grade only.

## Statistics (STAT)

### **2050 Fundamentals of Statistics (4L, 4CR):**

A presentation of the central ideas and applications of statistical inference. Topics include the collection and tabulation of data, statistical description of frequency distributions, elements of probability, applications of statistical distributions, confidence interval estimation, tests of hypotheses, analysis of variance for the one-way classification, and simple linear regression and correlation. Credit cannot be earned for both STAT 2050 and STAT 2070.

Prerequisite: MATH 1000 or MATH 1400 or equivalent with a grade of "C" or better.

### **2070 Introductory Statistics for the Social Sciences (4L, 4CR):**

This course presents central ideas of descriptive statistics and statistical inference, as applied to questions in social sciences. Includes graphs, averages, sampling, estimation, hypothesis-testing and relationships between variables. Introduces associated computer skills. Credit cannot be earned for both STAT 2050 and STAT 2070.

Prerequisite: MATH 1000 Problem Solving with a grade of "C" or better.

## Technology (TECH)

### **1005 Applied Technical Writing (3L, 3CR):**

This course focuses on developing the skills needed to write clearly and concisely on the job. Topics include: technical definitions, summary preparation, technical reports, memos, and business letters. The course also includes oral presentations, job search preparation, and word processing and e-mail correspondence in business. This course is intended for students in technical programs.

Prerequisite: Compass Placement Test Score of 31 or higher.

### **1750 Professional Development & Leadership (1/2L, 1/2 LB, 1/2CR)(Max 2):**

In today's demanding marketplace, students need to be prepared to sell themselves and their skills. This course is an employability skill-building program designed to help students develop an extra edge and help employers gain valuable workers. By reinforcing school-to-work competencies of students, it is designed to develop the student in four areas: as an individual, as a team member, as a leader and as an employee.

### **1980 Cooperative Work Experience (1-8CR):**

An enhancement to the student's curriculum that can become a valuable part of the student's college education. It provides students the opportunity to apply their classroom learning in the work environment. A minimum of 100 hours of on-the-job training represents one semester hour.

## Theatre & Dance (THEA)

### **1000 Introduction to Theatre (3L, 3CR):**

A brief history of world theatre and the study of modern American theatre, movies, and television.

### **2050 Theatre Practice (1-3CR)(Max 5):**

A practical course in the application of scenic construction, set design, lighting design, make-up, costuming, publicity or performance. Students will work in the theatre shop, on crews, or in performance. This course is offered for S/U grade only.

A minimum of 30 lab hours per credit hour.

## Truck Driving Training (TTD)

### **1500 Novice CDL Training (5CR):**

This course prepares the student to take the state required CDL test. It is designed primarily for the energy service industry. On and off highway terrains are utilized as well as late model tractors and loaded trailers, tankers, and high center point of gravity loads may be used in training. Simulation may also be used to replicate dangerous, expensive, or hard-to-duplicate scenarios. Upon completion of this course, students must make arrangements to take the DOT test to be issued their commercial driver's license.

Prerequisite: Students attending this course must have completed written exams for the Department of Motor Vehicles and obtained a Commercial Driving Permit for class A or

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class B vehicles with an Air Brake endorsement. Students must present a valid Federal Department of Transportation (DOT) medical examination certificate and valid Social Security card on the first day of class. This course is offered for S/U grade only.

80 hours lecture, 20 hours drive time.

### **Veterinary Technology (VTTK)**

Criminal background checks are required prior to entry into this program. The background check with cover sexual offender information, general criminal history, and adult and child neglect information. Student financial aid may be used to cover the cost.

Enrollment in Veterinary Technology courses is restricted to Veterinary Technology majors (unless approval is granted by the Division Chair for Sciences.)

#### **1001 Animal Care I (1LB, 0CR):**

Students in the Veterinary Technology program are required to work a minimum of 1 hour per week caring for program and shelter animals and a minimum of 1/2 hour per month attending meetings on the Veterinary Technology program while they are enrolled in this course. The course is designed to enrich the material students are learning in the classroom as well as to promote high quality animal care. This course is offered for S/U grade only.

#### **1002 Animal Care II (1LB, 0CR):**

This course is a continuation of Animal Care I. This course is offered for S/U grade only. Prerequisite: VTTK 1001 Animal Care I.

#### **1500 Orientation to Veterinary Technology (2L, 2LB, 3CR):**

This course is an introductory course in veterinary technology. Lectures will include metric conversions, clinical sanitation, the profession of veterinary technology, veterinary technology ethics, communications in the veterinary hospital, patient history and physical examinations and breed identifications of cattle, horses, sheep, pigs and goats. Laboratory sessions will cover restraint and physical examination of domestic species and veterinary instrument identification. Students will be assigned dates to be responsible for the care of dogs, cats and large animals kept by the Veterinary Technology Department. Prerequisite: Placement score for

ENGL 0640 or higher and MATH 0900 or higher and no reading improvement required or consent of instructor. A substantial fee is required for this course in order to offset the cost of pre-exposure rabies vaccination for students.

#### **1510 Clinical Techniques I (1L, 2LB, 3CR):**

This course is intended for students seeking a veterinary aide certificate. Lectures will include general office procedures, client communication in the veterinary hospital, inventory management, basic medical record keeping, clinical sanitation, basic understanding of common diseases and medical conditions seen in animals.

Prerequisite: Placement score for TECH 1005/ENGL 0640 or higher, MATH 0900 or higher and no reading improvement required.

#### **1520 Clinical Techniques II (1L, 4LB, 4CR):**

This course is designed for those students interested in learning elementary veterinary techniques associated with pharmaceutical calculations, pharmacology, urinalysis, hematology, parasitology and diagnostic imaging. This course is required for the Veterinary Aide Certificate Program.

Prerequisite: Placement score for TECH 1005/ENGL 0640 or higher/MATH 0900 or higher and no reading improvement required.

#### **1550 Practical Surgical & Medical Experience I (2L, 2LB, 3CR):**

Instruction and experience are provided in practical aspects of veterinary surgical and medical nursing. All diagnosing and surgery will be performed by a staff veterinarian. Both large and small animals are used for laboratory sessions. Prerequisite: VTTK 1600 and VTTK 1630 with a grade of "C" or better, VTTK 2500 with a grade of "C" or better or concurrent enrollment in VTTK 2500.

#### **1600 Clinical Procedures (2L, 3LB, 3CR):**

This course continues with the professional activities of a Veterinary Technician. Lectures will cover veterinary medical records, patient histories, OSHA and safety in the veterinary hospital, general animal nursing, euthanasia of animals, grief counseling of clients, first aid care of animals and breed identification of cats and dogs. Laboratory sessions include practical application of clinical techniques commonly done by veterinary technicians in the treatment of animals. Students will be assigned dates to be responsible for the care of dogs, cats and

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large animals kept by the Veterinary Technology Department. Prerequisite: VTTK 1500 with a grade of “C” or better.

### **1610 Anatomy and Physiology of Domestic**

#### **Animals (3L, 2LB, 4CR):**

This course covers comparative anatomy and physiology of domestic animals. The first semester covers integument, skeletal, muscle, and circulatory systems. Students cannot earn credit for both VTTK 1610 and ANSC 1610.

Prerequisite: VTTK 1925 or CHEM 1000 with a grade of “C” or better and VTTK 1950 or BIOL 1010 with a grade of “C” or better. Placement score of ENGL 0640 or higher and no reading improvement required.

### **1620 Anatomy and Physiology of Domestic**

#### **Animals II (3L, 2LB, 4CR):**

This course is a continuation of VTTK 1610. Systems covered include: respiratory, digestive, nervous, endocrine, senses, urinary, and reproductive. Students cannot earn credit for both VTTK 1620 and ANSC 1620.

Prerequisite: VTTK 1610 or ANSC 1610 with a grade of “C” or better.

### **1625 Laboratory Analysis (1/2L, 1LB, 1CR):**

Urinalysis is a lecture/laboratory course which provides instruction in the evaluation of physical and chemical properties of urine, as well as in the microscopic examination of urine sediment. Also included in this course is the instruction in the measurement of the chemical constituents of various body fluids, particularly serum and plasma. The relationship of the test results with organ function in health and disease are stressed. Prerequisite: Successful completion of VTTK 1620 with a grade of “C” or better.

### **1630 Veterinary Hematology (2L, 2LB, 3CR):**

This course provides instruction in the principles of obtaining and examining blood samples from different species of animals commonly seen in veterinary practice today. The laboratory sessions include a practical approach to staining and evaluating the blood of animals in both healthy and disease conditions. Emphasis is placed on the recognition of the types and development stages of erythrocytes and leukocytes. Blood coagulation mechanisms, the immune system, preparation and handling of cytology samples and training in the use of automated cell counters are also included.

### **1700 Medical Terminology (2L, 2CR):**

This course will introduce students to terminology that they will use in succeeding veterinary technology courses, report writing, professional practice, and professional reading. Emphasis will be placed on word usage, word meanings, and word pronunciations.

Prerequisite: Placement score for ENGL 0640 or higher and no reading improvement required.

### **1750 Veterinary Pharmacology (3L, 2LB, 4CR):**

This class introduces the basic principles of the uses of therapeutic agents in veterinary medicine and the classification of therapeutic agents in common use. Specific subject matter includes definitions and terminology; routes of administration and dosage forms; history of pharmacology; measurements used in pharmacology; actions and effects of drugs; assimilation and elimination of drugs in animals; regulation of the manufacture, sale, and use of drugs; factors that modify drug action; and study of classes and examples of specific drugs. Laboratory exercises allow the student to actually practice filling prescriptions, writing prescription labels, making entries into medical records and into both written and computerized drug logs. Compounding of medications is demonstrated and students are required to formulate percent solutions and mixed solutions (medical cocktails) under direct veterinary supervision.

Prerequisite: Placement score for ENGL 0640 or higher and MATH 0900 or higher and no reading improvement required and VTTK 1925 with a grade of “C” or better.

### **1751 Pharmaceutical Calculations (3L, 3CR):**

A course designed to introduce students to basic mathematical calculations used in the field of pharmacology. Major topics to be covered include: guidelines for writing prescriptions, abbreviations used in prescription writing, drug dose calculations using both the ratio and the factor label method, metric conversions, and medication dispensing.

Prerequisite: MATH 0900 with a grade of “C” or better or appropriate score on placement exam or MATH ACT of 21 or better.

### **1755 Veterinary Parasitology (2L, 1LB, 2CR):**

This course will introduce students to the macro-parasites that commonly infect veterinary species. Students will learn how to collect samples, perform diagnostic tests on these

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samples, identify parasites, and will gain hands-on experience in these areas. In addition, material covering prevention, treatment, life cycles, and clinical disease will be presented.

Prerequisite: BIOL 1000, or BIOL 1010, or CHEM 1000, or CHEM 1020, or AECL 1000 or VTTK 1925, or VTTK 1950 with a grade of “C” or better.

## **1925 Introductory Chemistry for Life Sciences (2L, 2CR):**

This is an eight week course in which students learn the basic facts, concepts, and terminology of Chemistry. An effort is made to relate content to students’ daily lives and provide a foundation for the study of biology and other science courses. Topics include matter and its physical states, atomic structure, the periodic table, simple nomenclature, chemical reactions and rates, equilibriums, solution chemistry and concentrations, chemical bonding, gas laws, and acids, and buffers.

Prerequisite: MATH 0900 with a grade of “C” or better or concurrent enrollment in MATH 0900 or a placement test recommendation for MATH 0920 or a higher level course; no reading improvement required.

## **1950 Introductory Cellular Biology (2L, 2CR):**

This course is a half-semester, lecture-only course designed specifically for veterinary technology students to provide a basic understanding of cellular biology that will aid them in future vet tech classes. It is designed to follow the half-semester chemistry course (Introductory Chemistry for Life Sciences) for veterinary technology students. Topics to be discussed include biomolecules (proteins, carbohydrates, lipids, and nucleic acids), basic cell structure and function, energy and enzymes, cellular respiration, DNA structure and function, cellular division through both mitosis and meiosis, protein synthesis through transcription and translation, and basic genetics/patterns of inheritance.

Prerequisite: No reading improvement required.

## **2001 Animal Care III (1LB, 0CR):**

This course is a continuation of Animal Care II.

This course is offered for S/U grade only.

Prerequisite: VTTK 1002 Animal Care II.

## **2002 Animal Care IV (1LB, 0CR):**

This course is a continuation of Animal Care III.

This course is offered for S/U grade only.

Prerequisite: VTTK 2001 Animal Care III.

## **2500 Veterinary Anesthesia and Analgesia (2L, 2LB, 3CR):**

This course covers fundamental skills and knowledge necessary to administer anesthesia and provide pain relief to common domestic species. The laboratory portions are small groups of approximately 6 students and consist of hands on experience to safely manage small and large animals in all stages of anesthesia.

Prerequisite: VTTK 1600 and VTTK 1750 and VTTK 1751 and VTTK 2510 with a grade of “C” or better.

## **2505 Diagnostic Imaging (1L, 2LB, 2CR):**

This course provides instruction to safely produce diagnostic radiographic and ultrasound images. Topics will also include basic principles of advanced imaging. Laboratories introduce students to techniques to position and prepare dogs, cats and horses for radiographic and ultrasound studies.

Prerequisite: VTTK 1600, VTTK 1750, VTTK 1751 and VTTK 2510 with a grade of “C” or better.

## **2510 Clinical Experience I (1CR):**

First-year students spend a minimum of 40 hours at a veterinary clinic of their choice, approved by the instructor. The emphasis of this course will be on observation of the normal workings of a veterinary practice. Course requirements can be fulfilled at any time or times that do not conflict with regular semester courses, such as winter interim session, spring break, summer, or weekends during the regular semester. This course must be completed before the beginning of the third semester in veterinary technology. The instructor must have information identifying the site for the completion of VTTK 2510 five working days prior to the start date for Clinical Experience I.

Prerequisite: VTTK 1500 with a grade of “C” or better or concurrent enrollment in VTTK 1500.

## **2520 Clinical Experience II (1CR):**

This course is a continuation of Clinical Experience I, but emphasizes hands-on experience by the student. A minimum of 40 hours must be spent at a veterinary clinic of the student’s choice, approved by the instructor.

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Course requirements can be fulfilled at any time or times that do not conflict with regular semester courses, such as summer, winter interim session, spring break, or weekends during the regular semester. This course can be taken at the same clinic as Clinical Experience I. The requirements cannot be completed concurrently with Clinical Experience I, and must be completed before Clinical Experience III. The instructor must have information identifying the site for the completion of VTTK 2520 five working days prior to the start date for Clinical Experience II.

Prerequisite: VTTK 1500, VTTK 1550, VTTK 1600, VTTK 1625, VTTK 1630, VTTK 1755, and VTTK 2510 with a grade of "C" or better.

## **2550 Practical Surgical & Medical Experience II (2L, 2LB, 3CR):**

This course is a continuation and expansion of Veterinary Technology 1550. Instruction and experience will continue in practical aspects of veterinary surgical and medical nursing. All diagnosing and surgery will be performed by a staff veterinarian. Both large and small animals are used for laboratory sessions.

Prerequisite: VTTK 1550 with a grade of "C" or better and VTTK 2500 with a grade of "C" or better.

## **2600 Diagnostic Microbiology (2CR):**

This is a lecture and laboratory course which provides instruction in the fundamentals of microorganisms and their role in disease production. Laboratory exercises introduce the student to the techniques utilized in the identification of bacterial, fungal, and viral veterinary pathogens.

3 hours a week for 8 weeks lecture, 2 hours a week for 16 weeks lab.

## **2610 Infectious Diseases (3L, 3CR):**

Instruction is provided in the basic principles of infection, including etiologic agents, pathogenicity, and host's immune response. Much of the course consists of descriptions of infectious diseases of veterinary and zoonotic importance. Topics covering the use and prevention of infectious agents which may be employed as weapons in bio-terrorism are also included.

## **2620 Noninfectious Diseases (3L, 3CR):**

An introductory course on the causes, appearance, and handling of noninfectious diseases in companion and economic animals. Instruction covers traumatic, metabolic, nutritional, immune-mediated, neoplastic, congenital, toxicologic, and physical causes of disease.

## **2700 Laboratory and Exotic Animals (2L, 2LB, 3CR):**

An introduction to the uses, care, housing, and diseases of laboratory and exotic animal species is provided, both in commercial usage and in the home/pet environment. Emphasis is on the mammalian species, with information also provided concerning reptiles and birds. The course includes hands-on laboratory training in animal handling and restraint along with training in blood collection, drug dosing and administration, anesthesia, and related techniques. Students will be assigned dates to be responsible for the care of all vivarian animals kept by the Veterinary Technology Department.

## **2750 Clinical Problems (2L, 2LB, 3CR):**

This course consists of one lecture hour per week of preparation for the job market, the comprehensive examination and the Veterinary Technician National Examination. One hour of lecture and two hours of lab per week will involve actual or developed veterinary clinical activities that faculty present for students to work through. The final examination for this course will be the Veterinary Technology Program Comprehensive Examination that students must pass with a 70% or better to successfully complete this course. Prerequisites: All veterinary technology courses with a grade of "C" or better except VTTK 2950 (concurrent enrollment in veterinary technology courses is acceptable).

## **2810 Veterinary Office Procedures (1/2L, 1LB, 1CR):**

The course covers office procedures that a veterinary technician would be expected to participate in when working in a veterinary situation. Topics covered include medical records, computerized recordkeeping, veterinary ethics, telephone communications, and working relationships in the veterinary hospital.

## **2815 Large Animal Techniques (2LB, 1/2CR):**

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The work in this lab course will be done by the students under supervision. Techniques to be studied include: physical restraint in various species, breeding soundness evaluation for bulls, castration of various species, dehorning of cattle and goats, reduction of genital prolapse in cattle and sheep, fluid therapy techniques in various species, venipuncture for blood collection and/or IV therapy in various species, paracentesis of the abdominal cavity in cattle, local and general anesthesia techniques in various species, and some obstetrical techniques. This course is offered for S/U grade only.

### **2816 Large Animal Techniques II (2LB, 1/2CR):**

This lab course is similar to Large Animal Techniques I; however, different procedures will be practiced. This course is offered for S/U grade only.

### **2900 Nutrition in Veterinary Medicine (3L, 3CR):**

(3 hours of UW Transferable Elective)

Topics in this course include a brief review of chemical principles relevant to nutrition; classification of nutrients and feeds; basic anatomy and physiology of the digestive systems of domestic animals; basic nutritive processes including ingestion, digestion, absorption, circulation, metabolism, and excretion; specific feeding programs for various classes of cattle, swine, horses, and companion animals. Basic ration formulations for beef cattle and small animals are stressed as are other species on a comparative basis.

Prerequisite: VTTK 1925 with a grade of "C" or better.

### **2950 Clinical Experience III (3CR):**

This course consists of 320 hours of work experience during which the student works in veterinary or veterinary-related institution that has been approved by the instructor. Evaluation forms are completed by the cooperating establishment. This course is offered for S/U grade only. The instructor must have information identifying the site for the completion of VTTK 2950 five working days prior to the start date for Clinical Experience III.

Prerequisites: VTTK 2520 with a grade of "C" or better or concurrent enrollment in VTTK 2520.

## **Welding Technology (WELD)**

### **0500 Intro to Shielded and Metal Arc Welding (2LB, 1CR):**

A 30 hour welding course using the shielded metal arc welding process. The course provides the training to weld light and medium thickness sheet and plate in all positions using E6010 and E7018 electrodes.

This course is offered for S/U only.

### **0600 Flux Cored Arc Welding (2LB, 1CR):**

A 30 hour welding course using the flux cored arc welding process. The course provides the training to weld medium and thick (3/4") in all positions using .045" electrode wire.

This course is offered for S/U only.

### **0700 Virtual Reality ARC Welding (1/2L, 1LB, 1CR):**

Instruction, study, and welding practice using a virtual reality welding simulator to supplement and enhance welding training.

### **0800 Maintenance and Repair Welding (2LB, 1CR):**

A 30 hour welding course using shielded metal arc welding (stick) and gas metal arc welding (wire) processes. The course provides the training to weld light and medium thickness sheet and plate in all positions.

This course is offered for S/U only.

### **1520 Welding for Fun (1L, 2LB, 2CR):**

This course will feature safety and basic welding procedures for those individuals who are interested in the more artistic aspects of welding. This course is not intended for those pursuing certification standards or job-entry level skills. 1 hour lecture, 2 hours lab.

### **1650 Print Reading: Welding Symbols (3L, 3CR):**

This course teaches the fundamentals of shop print interpretation as applied in the welding trade, including the standard American Welding Society (AWS) symbols used in design, fabrication, and construction.

### **1700 General Welding (1L, 5LB, 3CR):**

The study of shielded metal arc welding, oxyacetylene welding, cutting and brazing processes. The student will develop the skills necessary to produce good quality welds on mild steel joints using filler materials commonly used in industry. Manual oxyacetylene cutting of straight and bevel cuts. Safety practices will be included.

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### **1755 Shielded Metal Arc Welding (1L, 9LB, 5CR):**

Training to develop the manual skill necessary to make high quality shielded metal arc welds in the flat and horizontal positions on mild steel plate, single and multiple pass. To weld using mild steel electrodes, low hydrogen electrodes and iron power electrodes using DC welding power sources.

### **1760 Advanced Shielded Metal Arc Welding (8LB, 4CR):**

This course provides the training in shielded metal arc welding (SMAW) to develop the manual skills necessary to produce high quality multipass fillet and groove welds on medium thickness mild steel plates with backing in all positions.

Prerequisite: WELD 1755.

### **1772 FCAW (4LB, 2CR):**

The study of flux cored arc welding (FCAW) fundamentals and safety. It provides training to develop the manual skills necessary to make high quality welds in all positions on mild steel plates.

### **1773 GMAW (4LB, 2CR):**

The study of gas metal arc welding (GMAW) fundamentals and safety. It provides training to develop the manual skills necessary to make high quality welds in all positions on mild steel plates.

### **1780 GTAW - Plate (6LB, 3CR):**

The study of gas tungsten arc welding (GTAW) fundamentals and safety. It provides training to develop the manual skills necessary to make high quality GTAW welds in all positions on mild steel, stainless steel and aluminum, using both direct and alternating current.

### **1850 Fundamentals of Fabrication (1L, 2LB, 2CR):**

This course will provide the fundamentals of layout and fabrication for general shop weldments. The course will teach the basic tools and techniques for common shop layout and fabrication. A minor project is required along with a complete set of plans.

Prerequisite: WELD 1755 or WELD 1772 or WELD 1773 and WELD 1650 with a grade of "C" or better.

### **2500 Structural Welding (1L, 9LB, 5CR):**

This course provides training to develop the welding skills necessary to produce high quality groove welds with backing on 1" thick mild steel plates in all positions using the shielded metal arc welding and flux cored arc welding processes.

Weld testing will be based on the American Welding Society Structural Welding Code D1.1.

### **2510 Pipe Welding I (1L, 7LB, 4CR):**

This course provides training to develop the welding skills necessary to produce high quality groove welds on open root steel pipe in the 2G, 5G, and 6G (45 degree fixed) positions using E6010 and E7010 electrodes with downhill travel. Weld testing will be based on the American Petroleum Institute (API 1104) pipeline welding practices.

### **2520 Pipe Welding II (1L, 8LB, 5CR):**

Shielded metal arc welding pipe (uphill)—the student will gain technical knowledge of pipe welding procedures and develop welding skills necessary to make high quality welds on open root mild steel pipe in the 2G, 5G, and 6G positions using E6010 and E7018 electrodes. Weld testing will be based on the American Society of Mechanical Engineers (ASME 1X) Boiler and Pressure Vessel Code.

### **2540 Pipe Layout and Fabrication (1L, 2LB, 2CR):**

This course will provide the fundamentals of Layout and Fabrication of a weldment consisting of plate and typical pipe connections.

Prerequisite: MATH 1515 with a grade of "C" or better.

### **2645 SMAW and GTAW (4LB, 2CR):**

This course provides the student with a thorough technical understanding of Shielded Metal Arc Welding and Gas Tungsten Arc Welding preparation for pipe welding. It develops the skills necessary to produce quality groove welds on 2" and 4" schedule 80 carbon steel pipe in all positions using GTAW for the Root Pass and E7018 for fill and Cover Passes.

This course is offered for S/U only.

### **2670 Welding Inspection Technology (3L, 3CR):**

Students will study the theory of shielded metal arc welding (SMAW), oxyacetylene welding (OAW), cutting (OC), brazing (TB), and destructive and nondestructive testing methods. Attention will be given to the types of welds, joints, filler rods, and electrodes used with metals commonly joined by welding. Safety practices will be included.

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### **2680 Welding Metallurgy (3L, 3CR):**

The study of gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), flux cored arc welding (FCAW), submerged arc welding (SAW), air carbon arc cutting (AAC), and plasma arc cutting (PAC) processes. Also the study of procedure and welder qualifications, basic welding metallurgy, metal identification, test positions, destructive and nondestructive testing methods, filler rods and electrodes, and various welding codes commonly used for welding of carbon and alloy steels, cast irons, and hardfacing applications.

### **Women's Studies (WMST)**

#### **1080 Introduction to Women's Studies (3L, 3CR):**

Introduction to key issues in women's studies. Topical examination of women's participation in, and relationship to, institutions of society such as family and school, as well as processes and activities such as work, art, literature and politics in historical and cross-cultural analysis.

### **Zoology (ZOO)**

#### **1500 Introduction to Human Anatomy and Physiology (3L, 3LB, 4CR):**

This lecture and laboratory course is an introductory study of the structure and function of the human body designed to meet the needs of students preparing for some LPN programs, medical office assistant programs, and some Health and Physical Education majors. Credit may NOT be earned for both ZOO 1500 and ZOO 2015/2025, nor does this course prepare a student to take ZOO 2025.

#### **2015 Human Anatomy (3L, 3LB, 4CR):**

This lecture/laboratory course provides instruction concerning the structure of the human body with regard to its composition and arrangement. Students in biology, nursing, allied health, and pre-professional programs are encouraged to take this course.

Prerequisite: BIOL 1000 or 1010 with a grade of "C" or better or approval of instructor.

#### **2025 Human Physiology (3L, 3LB, 4CR):**

This lecture/laboratory course provides instruction concerning the function of the human body with regard to the manner in which the component parts interact with each other to ensure the survival of the organism. Students in biology, nursing, allied health, and pre-

professional programs are encouraged to take this course.

Prerequisite: ZOO 2015 with a grade of "C" or better or approval of instructor.

#### **2450 Principles of Fish and Wildlife Management (3L, 3CR):**

An introductory course for the following majors: wildlife conservation, biology, agriculture, range management, extension agents, ecology, environmental science, recreation management, and education. The topics include wildlife values, habitat, ecology and management, population structure, natural history, and contemporary issues.

Prerequisite: BIOL 1000 or 1010 with a grade of "C" or better.