# [ADN] ASSOCIATE DEGREE NURSING

#### **ADN 270**

# **Med-Surg Nursing I**

Emphasis will be placed upon the program framework of Life Span Development, Basic Human Needs as defined by Maslow, and the Wellness-Illness Continuum. Physical assessment, assessment techniques, and utilization of the Nursing Process will assist the student to assess "need" interferences and plan nursing interventions for client care. Critical thinking and selected RN clinical skills will be taught. Pre-requisite: per ADN handbook. (4 credit, 3 lecture, 3 lab)

#### **ADN 271**

# **Med-Surg Nursing II**

Emphasis will be placed upon the program framework of Life Span Development, Basic Human Needs as defined by Maslow, and the Wellness-Illness Continuum. Physical assessment, assessment techniques, and utilization of the Nursing Process will assist the student to assess "need" interferences and plan nursing interventions for client care. Critical thinking and selected RN clinical skills will be taught. Pre-requisite: per ADN handbook. (4 credit, 3 lecture, 3 lab)

#### **ADN 273**

# **Obstetrical Nursing**

The focus population for this nursing course will be maternity clients, and the family unit. The Five Step Nursing Process will be applied to care for clients at various stages throughout the life span and with various basic need interferences. Factors that influence a maternity client's or child's position along the wellness-illness continuum will be explored. Concepts of critical thinking, client teaching, health promotion, and caring will be covered in relation to the maternal client and neonate. Pre-requisite: per ADN handbook. (2.5 credit, 2 lecture, 1.5 lab)

# **ADN 274**

# **Pediatric Nursing**

The focus population for this nursing course will be children and the family unit. The Five Step Nursing Process will be applied to care for clients at various stages throughout the life span and with various basic need interferences. Factors that influence a maternity client's or child's position along the wellness-illness continuum will be explored. Concepts of critical thinking, client teaching, health promotion, and caring will be covered in relation to children. Pre-requisite: per ADN handbook. (2.5 credit, 2 lecture, 1.5 lab)

#### **ADN 275**

# **Psychiatric Nursing**

The focus of this course is the mental health — mental illness continuum. Major topics include use of the nursing process to assess the psychological needs of the client; establishing interpersonal relationships through therapeutic communication; use of nursing skills to do client teaching; and application of Psychiatric Nursing principles. Other topics integrated throughout the course will be: critical thinking, basic needs, life span development, cultural aspects of care; and roles of the registered nurse and caring. Learning opportunities include both theory content and selected lab/clinical experiences. Pre-Requisite: per ADN handbook. (3 credit, 2.5 lecture, 1.5 lab)

#### **ADN 276**

# Med-Surg Nursing III

This course addresses the nursing care of individuals throughout the life cycle with problems related to the cardiac, vascular, respiratory and hematological, neurological, orthopedic and dermatologic systems. The student is given the opportunity to identify basic needs and utilize the nursing process, nursing skills, and theoretical knowledge in health settings. Accountability and high standards of nursing practice as set forth by the Illinois Nursing and Advanced Practice Nursing Act are required of all students. Learning opportunities include lecture and clinical experiences. Pre-

requisite: per ADN handbook. (5 credit, 4 lecture, 3 lab)

#### **ADN 277**

# **Med/Surg Nursing IV**

This course addresses the nursing care of individuals throughout the life cycle with problems related to the neurosensory, orthopedic, and dermatological systems. The student is given the opportunity to identify basic needs and utilize the nursing process, nursing skills, and theoretical knowledge in health settings. Accountability and high standards of nursing practice as set forth by the Illinois Nursing and Advanced Practice Nursing Act are required of all students. Learning opportunities include lecture and lab/clinical experiences. Prerequisite: per ADN handbook. (5 credit, 4 lecture, 3 lab)

#### **ADN 278**

# **Community Health & Leadership Nursing**

This course focuses upon the current issues and trends in the practice of nursing and delivery of health care in a variety of settings including community health nursing. Emphasis is upon the transition of a student nurse to a graduate student nurse. A variety of subjects are explored including leadership, delegation, and legal, ethical and moral issues as related to nursing and health care. This course delves into the application of the Illinois Nursing and Advanced Practice Nursing Act. The student is given the opportunity to identify basic needs and utilize the nursing process, nursing skills and theoretical knowledge in acute and community health settings. Pre-requisite: per ADN handbook. (4 credit, 3 lecture, 3 lab)

#### **ADN 290**

# **Selected Topics in Nursing**

An in-depth study of topics in the health field. 'The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May

be offered as variable credit. Pre-requisite: Instructor consent. (3 credit, 3 lecture, 0 lab)

# [AG] AGRICULTURE

#### **AG 110**

# **Introduction to Ag Business**

This course is an introduction to the fundamental principles of agriculture business. Topics included are introduction to agricultural economics, marketing, sales, and management. This course is designed to introduce essential basics to further the interest of the student to explore the subject matter on more in-depth levels. (3 credit, 3 lecture, 0 lab)

#### **AG 111**

# **Agricultural Occupations**

The student is introduced to the broad field of agricultural business and its many employment opportunities. Job titles are described on the basis of duties performed, knowledge, and abilities needed. Included is a completion of a resume for the student's future use. (1 credit, 1 lecture, 0 lab)

#### **AG 113**

# **Intro to Ag Production**

This course is an introduction to the fundamental principles of agronomy. Topics will evolve around essential basics of crops and soil sciences as they apply to production agriculture. This course is designed with the intent to build a working knowledge of agronomic principles in order to prepare for more in-depth subject matter. (3 credit, 3 lecture, 0 lab)

# **AG 121**

# **Introductory Animal Science**

The application of the sciences of genetics, physiology, and nutrition to the improvement of the animal industries and an introduction to management and production practices. Includes animal breeds, breeding and selection; anatomy, physiology, nutrition, growth; environment, health and sanitation; products and marketing; production technology and economics; animal behavior; and current issues in animal science. (IAI AG 902) (4 credit, 3 lecture, 2 lab)

#### **AG 122**

# **Agriculture Economics**

This course provides an introduction to the principles of economics including production principles; production costs, supply and revenue; profit maximization; consumption and demand; price elasticity; market price determination; and competitive versus noncompetitive market models. These principles are applied to agriculture in the United States and world economies. Other topics include a survey of the world food situation; natural, human and capital resources; commodity product marketing; and agricultural problems and policies. (3 credit, 3 lecture, 0 lab)

# **AG 123**

# Farm Management

This course focuses on the business aspects of production agriculture. Emphasis is on balance sheet and income statement analysis, capital and credit use, enterprise, partial- and whole-farm budgeting, and investment analysis. Economic principles and cost concepts as they relate to agriculture are also discussed. Students learn to apply these tools to develop a farm management plan (3 credit, 3 lecture, 0 lab)

#### **AG 130**

# **Basic Mechanical Skills**

A combination of the various skills needed for success in diesel technology occupations. Safety practices emphasized on hand metal working tools, threaded fasteners, arc and gas welding methods, measuring tools, and maintenance operations required for daily productions. (3 credit, 1 lecture, 4 lab)

#### **AG 131**

# **Engine Electronics I**

Fundamental theories of electricity/electronics essential to diagnose, repair, and maintain today's diesel engine. Special emphasis placed on meter usage and diagnostic procedures including actual diagnosis and testing of the battery, charging, starting and ignition systems. Hands-on experience on both laboratory

components and complete diesel vehicles included. (3 credit, 2 lecture, 2 lab)

#### AG 158

# Hydraulics

Hydraulic systems both open and closed. The various components of hydraulics systems, such as pumps, valves, and actuators (both cylinders and motors) studied. Troubleshooting and testing hydraulic circuits introduced. (3 credit, 1 lecture, 4 lab)

# **AG 172**

# Internship

A work experience program in which the student is employed in an agricultural field for the summer months to acquire skills. This program will be coordinated with class work through the summer. May be offered as variable credit and repeated three times. (5 credit, 0 lecture, 25 lab)

#### **AG 221**

# **Introductory Crop Science**

The basic principles of plant growth, including human and environmental influences and theoretical and practical application of agronomic principles to crop production. Includes the historical and economic importance of crop plants for food, feed, and fiber; origin, classification, and geographical distribution of field crops; environmental factors and agronomic problems; crop plant breeding, growth, development, and physiology; cropping systems and practices; seedbed preparation, tillage, and crop establishment; pests and controls; and harvesting, storing, and marketing practices. (IAI AG 903) (4 credit, 3 lecture, 2 lab)

#### **AG 222**

# **Introductory Soils**

An introduction to the chemical, physical and biological properties of soils; the origin, classification, and distribution of soils and their influence on people and food production; the management and conservation of soils; and the environment impact of soil use. (IAI AG 904) (4 credit, 3 lecture, 2 lab)

#### **AG 290**

# **Selected Topics in Agriculture**

An in-depth study of selected problems or topics in Agriculture. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be offered as variable credit and repeated three times. (3 credit, 3 lecture, 0 lab)

# [ART] ART

#### **ART 121**

# **Art Appreciation**

A survey of the visual arts (painting, drawing, printmaking, sculpture, and architecture) as they transmit cultural traditions and humanistic and aesthetic values. Examines historical, social, and technological factors that contribute to understanding the function and meaning of works of art. (IAI F2 900) (3 credit, 3 lecture, 0 lab)

# **ART 141**

#### **Drawing**

A foundation for all areas of art. Instruction includes basic drawing techniques, media use and concepts. The course is designed to provide a survey of the extent and nature of drawing and to broaden the student's appreciation and skills in drawing. (3 credit, 0 lecture, 6 lab)

# ART 142

# Sculpture

An introductory course that will examine concepts in three-dimensional form. Major process areas of sculpture are explored through a variety of media. Both traditional and contemporary images in sculpture are examined through various methods of presenting sculptural ideas. (3 credit, 0 lecture, 6 lab)

# ART 143 Painting

An introduction to the expressive potential of painting media with emphasis in oils or acrylics. Concentrated work will be in composition, color and basic painting craftsmanship. (3 credit, 0 lecture, 6 lab)

# **ART 144**

### **Printmaking**

An introduction to printmaking techniques such as block, calligraphy, serigraphy, lithography, and monotype. Technical principles, composition, and design development will be emphasized. (3 credit, 0 lecture, 6 lab)

# **ART 161**

# **Basic Art Design**

A comprehensive study of the visual elements and principles involved in organizing two-dimensional pictorial space. Studio work will enable the student to create solutions to visual design problems in several areas of the design field. A variety of materials will be used to facilitate this study. (3 credit, 0 lecture, 6 lab)

#### **ART 162**

# **Advanced Basic Art Design**

An examination of the visual elements and design principles as they apply to three-dimensional art. Discussion and studio assignments relating to various materials and purposes for design are the primary content of this course. Pre-requisite: ART 161 (3 credit, 0 lecture, 6 lab)

#### **ART 163**

# **Introduction to Mural Painting**

An intensive course that explores the process and applied artistry of mural painting. Aside from design and painting skills, the course explores site selection, media choice, public relations, and cultural influence. Pre-requisite: ART 143, ART 161, or instructor consent. (3 credit, 2 lecture, 2 lab)

#### **ART 181**

### **Basic Photography**

Designed to provide basic skills in technical processes of photography for students and to

help them use photography as a medium of expression. (3 credit, 3 lecture, 0 lab)

#### **ART 182**

## **Advanced Photography**

Second course in a sequence on the art and technique of photography, with an emphasis on photography as an art form. Darkroom, classroom, and extensive field work will be included to increase the student's visual literacy and personalized style. Pre-requisite: ART 181 (3 credit, 3 lecture, 0 lab)

#### **ART 221**

# **Beginning Ceramics/Pottery**

Involves hand building and potter's wheel techniques with a variety of clay types. Decorating, glazing, and firing methods are also an integral part of the course. (3 credit, 0 lecture, 6 lab)

#### **ART 241**

### **Advanced Drawing**

Involves concentrated work in the reinforcement of basic drawing skills with emphasis on perceptual and expressive development. Major areas of concentration include a more subjective approach to individual expression, color and composition, and thematic development. Prerequisite: ART 141 (3 credit, 0 lecture, 6 lab)

#### **ART 243**

#### **Advanced Painting**

This course involves concentrated work in the reinforcement of painting skills with emphasis on perceptual and expressive development. Prerequisite: ART 243 (3 credit, 0 lecture, 6 lab)

#### **ART 260**

#### **Art Portfolio**

A course for all Associates of Fine Arts majors which includes the completion of a slide portfolio of student's best work. Faculty reviews each students' final portfolio and students complete a thesis explaining in detail the technical and aesthetic problems involved in his or her work. Pre-requisite: Instructor consent (1 credit, 0 lecture, 2 lab)

# **ART 261**

# **Life Drawing**

This course is an introduction to drawing the human figure using a variety of media. Drawings are derived from direct observation emphasizing descriptive drawing techniques of the human figure. Drawing activities should include full figure, features, and anatomical differentiation encompassing individual physiognomy. Pre-requisite: ART 141 and ART 241 or portfolio review. (3 credit, 0 lecture, 6 lab)

#### **ART 280**

# **Special Topics in Art**

This studio course offers advanced study, or exploration of a special topic(s) in the visual arts. Areas of focus may vary with individual students or at the discretion of the instructor. Topics may include drawing, painting, printmaking, ceramics, sculpture, photography, and fibers. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 0 lecture, 6 lab)

### **ART 281**

# **Special Topics in Art II**

This studio course offers advanced study, or exploration of a special topic(s) in the visual arts. Areas of focus may vary with individual students or at the discretion of the instructor. Topics may include drawing, painting, printmaking, ceramics, sculpture, photography, and fibers. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 0 lecture, 6 lab)

#### **ARTV 112**

# **Elements of Drawing and Illustration**

Designed to instruct students on the basic techniques of drawing and illustration. May be repeated three times. (3 credit, 1.5 lecture, 3 lab)

#### **ARTV 114**

# **Drawing and Illustration II**

Designed to instruct students on the techniques of drawing and illustration. This is a continuation of ARTV 112 Elements of Drawing and Illustration. This course may be offered as variable credit and repeatable three times. (3 credit, 1.5 lecture, 3 lab)

#### **ARTV 116**

# **Drawing and Illustration III**

Designed to instruct students on the basic techniques of drawing and illustration and introduce students to acrylic painting and watercolor. This is continuation of ARTV 112 Elements of Drawing and Illustration and ARTV 114 Drawing and Illustration II. This course may be offered as variable credit and repeatable three times. (3 credit, 1.5 lecture, 3 lab)

# [AUTO] AUTO TECHNOLOGY

# **AUTO 133**

## **Automotive Suspension/Steering**

Instruction in skills needed to diagnose, service, and repair modern automotive suspension/steering systems.

Suspension/steering designs, geometry, diagnosis, service, repair and four-wheel alignment procedures. Live vehicles and laboratory units. (3.5 credit, 2 lecture, 3 lab)

# **AUTO 134**

#### **Automotive Brakes**

Instruction in the skills needed to diagnose, service, and repair modern automotive brake systems. Brake system fundamentals; designs; laws of hydraulics and their applications; diagnosis; and service procedures, including brake machining processes. Live vehicles and laboratory units. (3 credit, 2 lecture, 3 lab)

#### **AUTO 136**

#### **Automotive Electrical/Electronics**

Fundamental theories of electricity/electronics essential to diagnose, repair, and maintain today's automobile. Special emphasis placed on

meter usage and diagnostic procedures including actual diagnosis and testing of the battery, charging, starting and ignition systems. Handson experience on both laboratory components and complete vehicles included. (3 credit, 2 lecture, 2 lab)

#### **AUTO 137**

# **Manual & Automatic Transmissions**

The study of various types of manual and automatic transmissions for the understanding of disassembly, assembly, function, construction, operation service and troubleshooting procedures. (3 credit, 2 lecture, 2 lab)

#### **AUTO 191**

# **Introduction to Auto Technology**

Provides the student with the opportunity to orientate, prepare, and perform routine service operations and job skills in auto technology. Personal and environmental safety practices, fasteners, gaskets, and sealants; thread and electrical connector repair; measuring instruments and common hand tools; and personal care of automobiles. Auto service and maintenance operations including lifting and vehicle support procedures. (3.5 credit, 2 lecture, 3 lab)

# **AUTO 193**

# **Automotive Engine Fundamentals**

A study of modern automotive engine designs, construction, operating principles, and related subsystems. Skills in engine disassembly using approved procedures, inspection for wear and damage, identification of design features, and reassembly of the engine to operating condition. Basic theory and diagnosis of the fuel, lubrication, and cooling systems included. Prerequisite: AUTO 191 (3.5 credit, 2 lecture, 3 lab)

# **AUTO 232**

# **Engine Overhaul**

All phases of overhaul of automotive engines. Pre-requisite: DSL 157 (3 credit, 1 lecture, 4 lab)

# [BIOL] BIOLOGY

# **BIOL 121**

# **Introductory Biology**

A course emphasizing scientific inquiry through selected concepts of biology including: chemical and cellular organization, function, genetics, evolution and ecology. Biological issues with personal and social implications will be introduced to enable students to make informed decisions. Laboratory required. (IAI L1 900L) (4 credit, 3 lecture, 2 lab)

#### **BIOL 141**

#### **Environmental Science**

A course that examines ecological principles in relation to environmental problems. Emphasizes basic ecological principles, current environmental issues and possible solutions. Laboratory required. (IAI L1 905L) (4 credit, 3 lecture, 2 lab)

#### **BIOL 161**

# **Basic Anatomy & Physiology**

An overview of the anatomy and physiology of the 11 organ systems that compose the human body. Anatomical terminology, cellular structure and function, metabolism, and tissues are also included. The course is geared toward prepractical nursing and allied health majors, but will provide a solid introduction to all students interested in learning human anatomy and physiology. (3 credit, 3 lecture, 0 lab)

## **BIOL 221**

# General Biology I

Cellular and Molecular Biology. An introduction to Biochemistry, molecular genetics, cell structure, function and processes. Laboratory required. Pre-requisite: High school biology; previous or concurrent enrollment in CHEM 121. (IAI L1 910L, BIO 910) (4 credit, 3 lecture, 2 lab)

#### **BIOL 222**

# **General Biology II**

Organismal Biology, Ecology, and Evolution.

An introduction to structure and function of major groups of microorganisms, fungi, animals and plants; structure and function of representative organ systems in animals and plants. Topics will also include evolutionary relationships and ecological principles.

Laboratory required. Pre-requisite: BIOL 221 (IAI L1 910L, BIO 910) (4 credit, 3 lecture, 2 lab)

# **BIOL 242**

## Microbiology

Basic concepts of microbiology. Topics include: cell structures, growth requirements, diversity and classification of microbes, bacterial genetics, pathology, and immunology. Laboratory required. Pre-requisite: "C" in high school chemistry or CHEM 123 or CHEM 121 (4 credit, 3 lecture, 2 lab)

#### **BIOL 261**

# **Human Anatomy and Physiology I**

A comprehensive study of the human anatomy and physiology of the integumentary, skeletal, muscular, nervous and sensory systems. Foundation topics discussed as a preface include: organization of the body, biological chemistry, cells, metabolism and tissues. Laboratory required with dissection a component. Pre-requisite: "C" in high school chemistry or CHEM 123 or CHEM 121. (4 credit, 3 lecture, 2 lab)

#### **BIOL 262**

# **Human Anatomy & Physiology II**

A comprehensive study of the endocrine, cardiovascular, lymphatic, digestive, respiratory, renal and reproductive systems. Additional topics include: nutrition, electrolytes, acid-base balance, embryology, growth and genetics. Laboratory required with dissection a component.

Pre-requisite: BIOL 261 (4 credit, 3 lecture, 2 lab)

# [BOT] BOTANY

## **BOT 121**

# **Introduction to Botany**

Emphasizes scientific inquiry through selected biological concepts using plants as the study organism. Special attention will be given to the personal and social implications of plants in human affairs. Topics include: The scientific method, molecular biology, cell biology, plant structure & function, plant genetics & heredity, evolution, ecology and plants & society. Laboratory required. (IAI L1 901L) (4 credit, 3 lecture, 2 lab)

# [BUS] BUSINESS

#### **BUS 111**

# **Introduction to Business**

A survey of business principles including economics, management, business operations, marketing, finance, accounting, data processing and international business. Provides a basic foundation for the business student; also recommended for non-business majors. (3 credit, 3 lecture, 0 lab)

#### **BUS 113**

# The Business of Hemp

This course is designed to provide students with information about the laws and regulations surrounding industrial hemp. Information about agronomic production, hemp economics, planting sources, and business resources will be provided. (1 credit, 1 lecture, 0 lab).

# **BUS 115**

# **Keyboarding I**

Designed to give the student skill at operating a typewriter or computer keyboard by the touch method. (1 credit, 1 lecture, 0 lab)

#### **BUS 116**

# **Customer Service Skills**

Provides knowledge and skills needed for giving quality customer service. Develops communication skills to use with employees, customers, and managers. Introduces methods of establishing contact, exploring customer

needs, defining and resolving problems, and closing encounters. May be repeatable three times and offered as variable credit. (1 credit, 1 lecture, 0 lab)

#### **BUS 118**

# **Business Software Applications**

A study of current software applications used in the business world. Training in the use of microcomputer processing packages on the basis of demand within local markets. Repeatable 3 times. (3 credit, 3 lecture, 0 lab)

#### **BUS 131**

# **Beginning Word Processing**

Presentation of touch method of keyboarding with emphasis on correct technique, speed, and accuracy. Production of business letters, tables, and manuscripts. Basic word processing software functions on the computer. No prerequisite: Students who have had one year of high school word processing should consult a counselor before enrolling. (3 credit, 3 lecture, 0 lab)

#### **BUS 132**

# **Word Processing**

Provides students with word processing software skills. Production of business letters, memos, tables, and reports. Emphasis on producing office documents and production skills. Prerequisite: BUS 115 and IT 119 or equivalent or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **BUS 133**

#### **Business Communications**

Principles and practices in written and oral business communications. Development of the ability to use words and correct grammatical construction in oral and written business expression; the principles of planning, organizing, and writing effective communications; the refinement of listening skills; the development of human relation skills; and employment correspondence and employment practices. Pre-requisite: ENG 121 or concurrent enrollment. (3 credit, 3 lecture, 0 lab)

#### **BUS 134**

#### **Personal Finance**

Designed to empower students with the knowledge and skills necessary to develop a solid understanding of personal financial matters. Students will be equipped to develop successful habits and make practical life choices necessary for success in business and personal life. (3 credit, 3 lecture, 0 lab)

#### **BUS 135**

# **Payroll Accounting**

Emphasizes the method of computing wages and salaries, payroll records, and the preparation of government reports. (1 credit, 1 lecture, 0 lab)

#### **BUS 171**

## **Records Management**

Emphasizes the need for a records department with sufficient authority and control to make the functions of filing and record keeping distinct in the organization structure. (2 credit, 2 lecture, 0 lab)

#### **BUS 191**

#### **Financial Accounting**

Presentation of accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. Students study the common transactions entered into by service and merchandising businesses. The emphasis is on understanding and applying basic accounting principles and other concepts that guide the reporting of the effect of transactions on the financial condition and operating results of a business. How to prepare, analyze and interpret historical financial statements, as well, and the limitations of using these in making forwardlooking business decisions is included. The primary content emphasis will be accounting for current assets and liabilities, long-term assets and liabilities, and the stockholder's equity section of corporate balance sheets. (IAI BUS 903) (3 credit, 3 lecture, 0 lab)

#### **BUS 192**

# **Managerial Accounting**

Presents accounting as a system of producing

information for use in internally managing a business. The course emphasizes the identification, accumulation, and interpretation of information for planning, controlling and evaluating the performance of the separate components of a business. Included is the identification and measurement of the costs of producing goods or services and how to analyze and control these costs. Decision models commonly used in making specific short- and long-term business decisions are also included. Pre-requisite: Instructor Consent BUS 191. (IAI BUS 904) (3 credit, 3 lecture, 0 lab)

#### **BUS 193**

# **Computerized Accounting**

Provides students with experience using a computerized accounting system. Accounting activities using integrated accounting software: general ledger, accounts receivable, accounts payable, financial statement analysis and spreadsheet applications for accounting. Prerequisite: BUS 191 and IT 119. (3 credit, 3 lecture, 0 lab)

#### **BUS 234**

## **Office Systems Management**

The principles of automated office systems as applied to office systems management. Emphasis is on the role of the automated office in the business organization. Automation/technology, office system planning, physical facilities, equipment and human resources will be discussed. Pre-requisite: BUS 111 and ENG 121 (3 credit, 3 lecture, 0 lab)

#### **BUS 235**

# **Human Resource Management**

An introductory course in the basic principles of organization for effective personnel management. Selecting and training employees, planning and assigning work, human relations involving motivation, maintaining morale, and special problems are studied. Coordinated with courses involving field operations to provide exercises in which students direct the efforts of their fellow students. (3 credit, 3 lecture, 0 lab)

#### **BUS 236**

# **Spreadsheet Applications**

Designed to give the student a working knowledge of basic business math calculations using spreadsheet software. (3 credit, 3 lecture, 0 lab)

#### **BUS 256**

# **Business Career Development**

Designed to enhance the student's business career development skills. Personal skills, health & hygiene, image development, interpersonal communication skills, job search strategies, ethics and advancement in business careers. (2 credit, 2 lecture, 0 lab)

# **BUS 259**

# **Small Business Management**

Designed as an overview of small business operation as a career. Personal requirements of entrepreneurship, benefits, and liabilities of self-employment, the preoperational considerations of product or service need, financial requirements, organizational systems, and the legal and governmental controls affecting small business operation. (3 credit, 3 lecture, 0 lab)

#### **BUS 271**

# **Business Organization & Management**

Provides a study of business organization, management theory, and practice. Major emphasis placed on the study of the four functions of management: planning, organizing, leading, and controlling. Pre-requisite: BUS 111, BUS 115 and ENG 121 (3 credit, 3 lecture, 0 lab)

# **BUS 273**

#### **Business Internship**

Provides a practical work experience in which the student works in a business setting. Student is assigned to an approved business training station for a minimum of 5 hours per week of supervised business experience in an area relating to his/her declared vocational objective. Requires a minimum of 75 internship clock hours per hour of college credit. Pre-requisite: Sophomore business major and instructor

approval. (5 credit, 0 lecture, 25 lab)

# **BUS 276**

# Marketing

A general survey of the field of marketing including marketing functions, channels of distribution, marketing institutions, agencies and principles and policies of merchandising. (3 credit, 3 lecture, 0 lab)

# **BUS 278**

#### Sales

A course in general salesmanship involving the principles of successful selling of goods and services. Buying motives, sales psychology, customer approach, and sales techniques. (3 credit, 3 lecture, 0 lab)

# **BUS 290**

# **Selected Topics in Business**

An in-depth study of selected problems or topics in business. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be offered as variable credit and repeated three times. (3 credit, 3 lecture, 0 lab)

#### **BUS 293**

#### **Business Simulation**

Software simulation to allow students to learn by doing. Includes decision making, planning, and implementing decisions in a simulated business environment. Finance, marketing, and production decisions included. Pre-requisite: Instructor consent. (2 credit, 2 lecture, 0 lab)

# **BUS 297**

# **Business Law I**

Introduction to the legal system as it affects business activity. Areas of concentration include formation and nature of contracts, the agency relationships, and the Uniform Commercial Code Law of Sales and Commercial Paper. (3 credit, 3 lecture, 0 lab)

#### **BUS 298**

# **Legal & Social Environment of Business**

A study of the legal and social environment of business, with emphases on business ethics and corporate social responsibilities. Areas of concentration include governmental regulation of business, securities law, consumer protection law, labor law, and employment law. Prerequisite: BUS 297 (3 credit, 3 lecture, 0 lab)

#### **BUSV 179**

#### **Customer Service**

Provides knowledge and skills needed for giving quality customer service. Develops communication skills to use with employees, customers, and managers. Introduces methods of establishing contact, exploring customer needs, defining and resolving problems, and closing encounters. May be repeated three times. Pre-requisite: Student Ambassador (1 credit, 1 lecture, 0 lab)

# [CARP] CARPENTRY

# **CARP 178**

# **Basic Carpentry I**

Introductory course that provides an overview and introduction to basic carpentry techniques. (3 credit, 2 lecture, 2 lab)

# [CHEM] CHEMISTRY

# **CHEM 121**

# **General Chemistry**

Topics include: periodic table of elements, bonding, atomic structure, stoichiometry, thermochemistry, gases, solutions chemistry, condensed phases, phase transitions, fundamental particles and waves, modern materials. Laboratory required. Pre-requisite: One year of high school chemistry. (IAI P1 902L, CHM 911) (5 credit, 4 lecture, 3 lab)

#### **CHEM 122**

# General Chemistry & Qualitative Analysis II

Topics Include: colligative properties, kinetics,

equilibrium, acid-base chemistry, electrochemistry, redox reactions, thermodynamics, coordination compounds, nuclear chemistry, spectroscopy, environmental chemistry. Laboratory required. Pre-requisite: CHEM 121 (IAI CHM 912) (5 credit, 4 lecture, 3 lab)

#### **CHEM 123**

# **Basic Inorganic/Organic Chemistry**

Topics include: the general principles and theories of chemistry, including fundamentals of inorganic chemistry, atomic structure, and states of matter, periodicity, bonding, stoichiometry, solution chemistry, acid/base concepts, and hydrocarbon chemistry. Laboratory required. Pre-requisite: MATH 109 or placement on NextGen Accuplacer at MATH 128 or MATH 144 level. (IAI P1 902L) (4 credit, 3 lecture, 2 lab)

#### **CHEM 124**

# Basic/Organic/Biological Chemistry

Topics include: fundamental principles of organic chemistry and biochemistry, including study of structure, bonding, nomenclature, physical and chemical properties of organic and biologically significant compounds; also study of metabolic and biosynthetic pathways.

Laboratory required. Pre-requisite: CHEM 121 or CHEM 123 (4 credit, 3 lecture, 2 lab)

#### **CHEM 241**

# **Organic Chemistry I**

Topics include: alkanes, cycloalkanes, alkenes and alkynes, organ halogens, organometallic compounds, peroxides, alcohols, phenols, ethers, sulfur compounds, and aromatic compound; study of organic reactions, nomenclature, bonding and physical properties. Laboratory required. Pre-requisite: CHEM 122. (5 credit, 4 lecture, 3 lab)

# **CHEM 242**

# **Organic Chemistry II**

Topics include: aldehydes, ketones, carboxylic acids and derivatives, dicarbonyl compounds, amines, heterocyclic compounds, polycyclic aromatic compounds, and biological classes of compounds, organic reactions and physical properties; spectroscopic study of organic compounds. Laboratory included. Pre-requisite: CHEM 241 (IAI CHM 914) (5 credit, 4 lecture, 3 lab)

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# [CNA] CERTIFIED NURSING ASSISTANT

#### **CNA 131**

# **Certified Nurse Assisting**

Teaches and trains the nursing assistant to assist in patient care and function as effective members of the nursing team, under the supervision of a Registered Professional Nurse, in hospitals, nursing homes, and home health care settings. Orient to the work environment and responsibilities needed for quality patient care and good employee morale. May be repeated up to 3 times. (7 credit, 4 lecture, 6 lab)

Pre-requisite: Criminal background check requirements according to current Illinois Department of Public Health guidelines will be announced by the instructor on the first day of class. A fee is required for this background check and will be the responsibility of the student. Students must have a score of 20 or higher on the Reading portion of the ACT or a score of 54 or higher on the AccuPlacer reading test or a score of 236 on the NextGen AccuPlacer reading portion or a score of 480 on

the evidence-based reading and writing portion of the SAT and/or a composite SAT score of 1020 or higher, (or complete ENG 109-4 at SIC with a grade of "C" or better).

# [COM] COMMUNICATION

#### **COM 121**

# **Principles of Speaking**

An introductory course in traditional public speaking. COM 121 combines communication theory with the practice of oral communication

skills. The oral communication course: (1) develops awareness of the communication process, (2) provides intentional, organizational, and expressive strategies, (3) promotes understanding of an adaptation to a variety of communication contexts, and (4) emphasizes critical skills in listening, reading, thinking, writing, and speaking. Students are expected to prepare and give at least three substantive speeches including both informative and persuasive assignments. (IAI C2 900) (3 credit, 3 lecture, 0 lab)

#### **COM 122**

# **Applied Forensics I**

Designed to improve the student's understanding of and ability in informative speech, persuasive speech, extemporaneous speech, and impromptu speech. (3 credit, 3 lecture, 0 lab)

#### **COM 123**

# **Competitive Interpretation**

Designed to strengthen the student's ability in the oral interpretation of prose, poetry and drama. (1 credit, 1 lecture, 0 lab)

#### **COM 125**

#### **Introduction to Mass Media**

Provides an overview of the nature, functions, and responsibilities of the mass communication industries in a global environment with an emphasis on the media's role in American society. (3 credit, 3 lecture, 0 lab)

#### **COM 126**

# **Forensics Practicum**

Forensics Practicum is a survey laboratory intercollegiate course for students who want practice in competitive speech and debate tournaments. Coaches work with students individually and in groups to create and design communication activities for public presentations. This course may be offered for variable credits and repeatable three times. (1 credit, 0 lecture, 2 lab)

#### **COM 128**

# Film Appreciation

An introduction to film as an art form,

emphasizing a study of the aesthetic and production elements of the medium, including narrative genres, directorial style, cinematography, acting, and editing. (IAI F2 908) (3 credit, 3 lecture, 0 lab)

#### **COM 144**

# **Interpersonal Communication**

Designed to increase the student's understanding of human communication in informal, daily settings. Students will demonstrate improvement in, and appreciation for, various human communicative variables such as perception, listening, resolving conflict, and nonverbal communication. (3 credit, 3 lecture, 0 lab)

#### **COM 145**

#### **Intercultural Communication**

The course examines how culture influences the communication process including values, beliefs, norms, linguistic and nonverbal differences between cultures, cultural bias, ethnocentrism, globalization, and cultural adjustment. The course will review major theories of intercultural communication and the practical approaches to communicating more effectively with persons from other cultures. Additionally, this course will allow students to consider the role that communication has in creating, maintaining, or challenging cultural assumptions, norms, rules, and power structures. Students will explore how diverse underlying cultural orientations and patterns influence communication behaviors within and between cultures. Students will learn to evaluate their own and others' communicative behaviors from a culturally sensitive perspective. (3 credit, 3 lecture, 0 lab)

#### **COM 146**

# **Business & Professional Comm.**

Designed to introduce students to communication in the 21<sup>st</sup>-century workforce context. This course is presentation-centered but also engages pertinent communication theory. (3 credit, 3 lecture, 0 lab)

#### **COM 147**

# **Basic News Writing**

Introduction to news writing including, the techniques of news gathering, reporting, and interviewing; the use of library and online database research methods; and other related skills. Students write basic stories under real time constraints. (3 credit, 3 lecture, 0 lab)

#### **COM 148**

# **Basic News Editing**

Introduction to the principles and techniques of electronic editing, information management, and publication design emphasizing the editing of body copy and display type for maximum clarity and impact. (3 credit, 3 lecture, 0 lab)

#### **COM 221**

# **Argumentation and Debate**

A study of the principles of educational debate. Emphasis is concentrated in the following areas: prima facie case, affirmative and negative strategies, research, evidence, the logic of argument and composition. Students will be expected to participate in various forms of educational debate and to act as judges. (3 credit, 3 lecture, 0 lab)

#### **COM 222**

# **Applied Forensics II**

Designed to improve the student's understanding of and ability in informative speech, persuasive speech, extemporaneous speech, and impromptu speech. This is a continuation of the content in COM 122 Applied Forensics I. Students in this advanced course will build on their public

speaking skills to master new competitive speaking events. (3 credit, 3 lecture, 0 lab)

# **COM 246**

#### **Performance Studies**

Designed to develop the student's ability to understand the intellectual and educational content of literature. Analysis and interpretation of prose, poetry, and drama will be communicated through performance and written assignments. (IAI TA 916) (3 credit, 3 lecture, 0 lab)

#### **COM 280**

# **Selected Topics in Speech**

An in-depth study of selected problems or topics in speech. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# [COS] COSMETOLOGY

#### **COS 170**

#### **Salon Business**

This course is a survey of the business aspects of the cosmetology field. The student will learn how history and trends affect cosmetology, how personal behavior and appearance affects professional success, and best business practices for successful operations. Topics include personal attitude and appearance, business skills and management, communication, and client relations. Students will also learn the process for licensure and how to transition to the workforce. Pre-requisite: Admittance into the Cosmetology or Nail Technician program. May be repeated three times. (2 credit, 1 lecture, 2 lab)

#### **COS 171**

# **Cosmetology Theory I**

This course is designed to introduce the student to scalp and hair properties. Students will learn about anatomy and physiology of the scalp and hair, proper care and maintenance, as well as common issues with the scalp and hair. Students will also learn about infectious diseases and bacteria and their relation to cosmetology practice and safety. Pre-requisite: Admittance into the Cosmetology Program (per Cosmetology handbook). (2 credit, 2 lecture, 0 lab)

# **COS 172**

# **Cosmetology Clinic I**

The study of draping, shampooing, rinsing, conditioning, scalp hair care, hairstyling, thermal hairstyling and hair cutting /hair design, with continued practice of sanitation and disinfection methods. Students exchange cosmetology services on each other and perfect cosmetology skills on mannequins. Prerequisite: Admittance into the Cosmetology Program (per Cosmetology handbook). Concurrent enrollment in COS 171. (5 credit, 0 lecture, 15 lab)

#### **COS 173**

# **Cosmetology Theory II**

This course introduces the student to anatomy and physiology related to cosmetology. Students will learn the basics of anatomical structure necessary to cosmetology servicing, as well as physiological factors that affect skin and hair. Topics include function, nutrition, and disease of hair, skin, and cells. Students will also learn care and maintenance of skin and hair health. Prerequisite: Admittance into the Cosmetology Program (per Cosmetology handbook). (3 credit, 3 lecture, 0 lab)

#### **COS 174**

# **Cosmetology Clinic II**

Continuation of practice of draping, shampooing, rinsing, conditioning, scalp hair care, hairstyling, thermal hairstyling and facial. Demonstrations of superfluous hair removal, manicuring, pedicuring, and theory of massage. Students exchange cosmetology services on each other, on mannequins and begin to provide basic services in the salon clinic laboratory. Prerequisite: Admittance into the Cosmetology Program (per Cosmetology handbook). COS 171, 172, and 173 completed with grade "C" or higher. (5 credit, 0 lecture, 15 lab)

### **COS 175**

# **Cosmetology Theory III**

This course will introduce students to the science of chemical texturizing, the art of hair color, and cosmetological chemicals, their use, and their safety. Students will learn color theory in relation to the International Color System. Pre-requisite: Successful completion of COS 171, COS 172, COS 173, and COS 174 (per Cosmetology handbook). (2 credit, 2 lecture, 0 lab)

#### **COS 176**

# **Cosmetology Clinic III**

Continuation of the previous courses with the additional study of permanent waving, special perming techniques, and chemistry of hair coloring, color application techniques, hair lightening, chemical hair relaxing soft curl permanent, hair pressing and the artistry of artificial hair. Students will demonstrate skills learned through performance by exchanging services on each other, mannequins, and clients in the salon clinic laboratory. Pre-requisite: Successful completion of COS 171, COS 172, COS 173, and COS 174 (per Cosmetology handbook). (5 credit, 0 lecture, 15 lab)

#### **COS 177**

# **Cosmetology Theory IV**

Provides the student with a general understanding of the nail and its disorders, skin disorders, nail and skin analysis, hair design and creativity, and makeup application. Students may exchange cosmetology services on one another, on mannequins, or volunteers. Prerequisite: Successful completion of COS 171, COS 172, COS 173, COS 174, COS 175 and COS 176 (per Cosmetology handbook). (2 credit, 2 lecture, 0 lab)

# **COS 178**

# **Cosmetology Clinic IV**

Continuation of the previous courses with the additional study of artificial nails, skin care, make-up, wigs and hair additions. Students will demonstrate skills learned through performance by exchanging services on each other, mannequins, and clients in the clinic laboratory. Pre-requisite: Successful completion of COS 171, COS 172, COS 173, COS 174, COS 175 and CPS 176 (per Cosmetology handbook). (6 credit, 0 lecture, 18 lab)

# **COS 190**

# **Cosmetology Refresher**

An in-depth review of the science and practice of cosmetology. The content will include methods and procedures of practical chemical application, hair treatments, hair styling, hair dressing, shop management, interpersonal relations, esthetics nail technology, sanitation and decontamination. This course requires 250 hours of instruction and hands on application. May be repeated three times. Pre-requisite: Cosmetology License, Cosmetology Teacher's License, having held a Cosmetology License in good standing with the Department of Professional Regulations or have completed a 1500-hour cosmetology program or equivalent. (6 credit, 1 lecture, 15 lab)

#### **COS 210**

# **Cosmetology Teacher I**

Prepares the licensed cosmetologist to teach in a Cosmetology Program. The course will focus on the necessary teaching skills, including teaching learning principles, lesson planning and design, assessment of student learning, testing skills, classroom management, and student motivation and classroom climate. Pre-requisite: Valid Illinois Cosmetology License with two years of verifiable experience in the cosmetology field. (10 credit, 2 lecture, 24 lab)

#### **COS 211**

#### **Cosmetology Teacher II**

Designed to provide the student an opportunity to apply practical and theoretical knowledge presented in COS 210. Special emphasis is placed on effective communication techniques and business methods and management of the clinic and classroom setting. Pre-requisite: COS 210 Cosmetology Teacher I or concurrent enrollment; must have a valid IL Cosmetology license with 2 years of verifiable experience in the cosmetology field. (6 credit, 0 lecture, 18 lab)

#### **COS 270**

# Cosmetology Clinic V

Review and practice of skill areas taught in the

previous courses, demonstrations, and lectures. Each student will practice skills on each other, mannequins and clients during the clinic time. Each student is responsible for sanitation duties to be practiced in the clinic as required by the Department of Professional Regulations, State of Illinois. Pre-requisite: Successful completion of COS 171, COS 172, COS 173, COS 174, COS 175, COS 176, COS 177, and COS 178 (per Cosmetology handbook). (3 credit, 0 lecture, 9 lab)

# **COS 271**

## **Cosmetology Internship**

Designed to be an extended salon experience, which is a supplement, off campus, "ON THE JOB" experience for qualified students. Prerequisite: Successful completion of COS 171, COS 172, COS 173, COS 174, COS 175, COS 176, COS 177, COS 178, successful completion or concurrent enrollment in COS 270, and completion of at least 750 clock hours (per Cosmetology handbook). (2 credit, 0 lecture, 10 lab)

#### **COS 290**

# **Selected Topics in Cosmetology**

An in-depth study of problems, special projects or topics in the cosmetology field. The exact content will vary from semester to semester depending on the subject studied. This course may be offered as variable credit and repeated three times. Pre-requisite: Cosmetology License, Cosmetology Teacher's License, or currently enrolled in a cosmetology, esthetics, or nail technology program. (3 credit, 3 lecture, 0 lab)

# [CRJ] CRIMINAL JUSTICE

### **CRJ 112**

#### **Introduction to Criminology**

An introduction to the multi-disciplinary study and analysis of the nature, causes, and control of crime; measurement of crime; and the interactive roles of the system, victim, and offender. (IAI CRJ 912) (3 credit, 3 lecture, 0 lab)

# **CRJ 114**

# **Criminal Investigation**

Study of major phases of criminal investigation, gathering and preservation of evidence, identification of offenders, apprehension, recovery of stolen property, and presentation of evidence, survey of criminalistics. (3 credit, 3 lecture, 0 lab)

#### CRJ 115

#### Criminal Law I

Examination and analysis of the structure and function of substantive criminal law and the principles of criminal law, including the acts, mental state, and attendant circumstances that are necessary elements of crime. (3 credit, 3 lecture, 0 lab)

#### **CRJ 116**

#### **Introduction to Forensics**

This course introduces the field of forensic science through an exploration of its applications to criminal investigations. The course will review the basic applications of selected forensic science disciplines and will explore the underlying scientific principals and methods used within each. Demonstrations will give students some insight into what it is like to properly collect and interpret evidence and then to present that evidence in court. Pre-requisite: CRJ 114 preferred but not required. (3 credit, 3 lecture, 0 lab)

#### **CRJ 119**

#### **Introduction to Private Security**

This course provides an overview of the important role private security plays in our society. Topics covered include premises, retail, business, employment, and information/computer security as well as investigation, surveillance, and even homeland security. (3 credit, 3 lecture, 0 lab)

#### **CRJ 134**

#### **Introduction to Juvenile Justice**

An overview and analysis of the juvenile justice system in the United States. History and philosophies of society's reaction to juvenile behavior and problems. Interaction among the police, judiciary, and corrections are examined within the context of cultural influences. Introduces theoretical perspectives of causation and control. (IAI CRJ 914) (3 credit, 3 lecture, 0 lab)

# **CRJ 136**

#### **Introduction to Criminal Justice**

A survey and analysis of the criminal justice system, including an historical and philosophical overview of the development, with special emphasis on the system's primary components and the relationship of these components in the administration of criminal justice in the United States. (IAI CRJ 901) (3 credit, 3 lecture, 0 lab)

#### **CRJ 151**

# **Drugs and Crime**

Examination of the interaction between drug abuse and the criminal justice system. Examines drug pharmacology, drug laws, public policy and the roles of the police. (3 credit, 3 lecture, 0 lab)

#### **CRJ 211**

#### **Criminal Law II**

Consideration of legal aspects of law enforcement. Laws of arrest, search and seizure and constitutional due process, interrogation, evidence examination, and court procedures with special implications for criminal justice. Pre-requisite: CRJ 115 (3 credit, 3 lecture, 0 lab)

#### **CRJ 212**

#### **Police Administration**

Operation and organization of Law Enforcement units, administration of records, and compliance with all legal aspects of police department functions. All phases of personnel administration: instruction, discipline, motivation, leadership, planning, evaluation, etc. (3 credit, 3 lecture, 0 lab)

#### **CRJ 213**

#### **Introduction to Corrections**

An overview and analysis of the <u>United States</u> correctional system: history, evolution, and philosophy of punishment and treatment; operation and administration in institutional and

non-institutional settings; and issues in constitutional law. (IAI CRJ 911) (3 credit, 3 lecture, 0 lab)

#### **CRJ 214**

#### **Probation and Parole**

Historical development of probation and parole. A practical look at the way our current systems function in respect to both adult and juvenile offenders. Illinois probation and parole systems and recent trends in community corrections that are geared toward making ex-offender's re-entry into society a successful one. The challenges faced by professionals in the field regarding their supervisory relationship with the different classifications and ages of offenders. (3 credit, 3 lecture, 0 lab)

#### **CRJ 215**

#### **Court Procedures**

Offer skills and competence in the preparation of all documentation required to bring an alleged offender to trial and to present the law enforcement case before the court following rules of evidence. (3 credit, 3 lecture, 0 lab)

# **CRJ 216**

#### Law Enforcement Internship

A learning experience with a criminal justice agency that brings the knowledge learned in the classroom to the field. Students observe the operation of a criminal justice agency under the supervision of that agency. May be taken for two, three or five semester hours for a maximum of five semester hours. Students are required to spend a minimum of 75 contact hours for each semester hour taken. Pre-requisite: Consent of the Social Science Division Chairperson or designee and completion of at least twelve (12) semester hours of CRJ course work. (5 credit, 0 lecture, 25 lab)

#### **CRJ 218**

# **Traffic Administration and Laws**

Understanding the concept of traffic management in its three basic forms;
Engineering, Education and Enforcement.
Practical application of the educational concepts results in a student produced community based

safety program. Enforcement requirements and techniques of the Illinois Vehicle Code and accident investigation for patrol officer are also presented in a multimedia format. (3 credit, 3 lecture, 0 lab)

#### **CRJ 230**

# **Policing in America**

Examines police as a part of society's official control apparatus. Major topics include historical development of the police, role of the police in the criminal justice system, functions and effectiveness of the police and the relationship of the police to the communities they serve. (3 credit, 3 lecture, 0 lab)

# **CRJ 290**

# **Selected Topics in Criminal Justice**

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# **CRJ 291 Selected Topics in Criminal Justice**

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

#### **CRJ 292**

#### **Selected topics in Criminal Justice**

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6)

credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# CRJ 293 Selected Topics in Criminal Justice

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

#### **CRJ 294**

# **Selected Topics in Criminal Justice K-9 Police Training**

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

#### **CRJ 295**

# **Selected Topics in Criminal Justice K-9 Police Training**

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

#### **CRJ 296**

# Selected Topics in Criminal Justice K-9 Police Training

An in-depth study of problems, special projects or topics in the criminal justice field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# [DRA] DRAFTING

#### **DRA 130**

# **Intro to Computer Aided Design**

An introduction to Computer Aided Design. Including programs and techniques used to develop designs and drawings via drafting software. (3 credit, 3 lecture, 0 lab)

#### **DRA 133**

# 3-D Computer Aided Design

A continuation of Computer Aided Design involving actual three-dimensional design. Prerequisite: DRA 130 or Instructor consent. (3 credit, 3 lecture, 0 lab)

# [DSL] DIESEL TECHNOLOGY

# **DSL 130**

#### **Basic Mechanical Skills**

A combination of the various skills needed for success in diesel technology occupations. Safety practices emphasized on hand metal working tools, threaded fasteners, are and gas welding methods, measuring tools, and maintenance operations required for daily productions. (3 credit, 1 lecture, 4 lab)

#### **DSL 131**

# **Engine Electronics I**

Fundamental theories of electricity/electronics essential to diagnose, repair, and maintain today's diesel engine. Special emphasis placed on meter usage and diagnostic procedures including actual diagnosis and testing of the battery, charging, starting and ignition systems. Hands-on experience on both laboratory

components and complete diesel vehicles included. (3 credit, 2 lecture, 2 lab)

#### **DSL 132**

# **Engine Electronics II**

Advanced fundamental theories of electricity/electronics essential to diagnose, repair, and maintain today's diesel engine. Hands-on experience on both laboratory components and complete diesel vehicles included. Pre-requisite: DSL 131 (3 credit, 2 lecture, 2 lab)

### **DSL 133**

#### **Preventative Maintenance**

Introductory course in the maintenance of diesel powered equipment. It is intended to demonstrate the proper procedure to maintain, evaluate and perform basic maintenance to a unit of this type. Emphasis is placed on good record keeping and timely performance of required tasks. (4 credit, 1 lecture, 6 lab)

#### **DSL 153**

# **Introduction to Small Engine Repair**

Introduces the concepts of repairing small engines. Engine identification and inspection, basic engine principles and design, principles of operation of two and four stroke engines, basic electricity involving ignition systems, charging systems, and starting systems, lubrication, cooling systems, fuel systems, governor systems, exhaust systems, troubleshooting, and overhaul. (3 credit, 2 lecture, 2 lab)

#### **DSL 157**

# **Basic Internal Combustion Engine**

Principles of four-cycle internal combustion engines. Troubleshooting and overhauling gasoline engines with all operations of disassembly, repair or replacement, and reassembly. (3 credit, 2 lecture, 2 lab)

# **DSL 158**

# **Hydraulics I**

Hydraulic systems both open and closed. The various components of hydraulics systems, such as pumps, valves, and actuators (both cylinders and motors) studied. Troubleshooting and

testing hydraulic circuits introduced. (3 credit, 1 lecture, 4 lab)

#### **DSL 171**

# **Hydraulics II**

Hydraulic systems will be covered with an emphasis on whole systems and troubleshooting hydraulic circuits. Pre-requisite: DSL 158 (3 credit, 1 lecture, 4 lab)

#### **DSL 172**

# Internship

A work experience program in which the student is employed in a diesel technology field for the summer months to acquire skills. This program will be coordinated with class work through the summer. May be offered as variable credit and repeated three times. (5 credit, 0 lecture, 25 lab)

#### **DSL 230**

#### **Diesel Brakes**

Provides the theory and practical servicing of hydraulic brakes, air brakes, parking brakes, and anti-lock brake systems (ABS). (4 credit, 3 lecture, 2 lab)

#### **DSL 232**

# **Diesel Suspension & Steering**

Provides the theory and practical servicing of diesel suspension and steering designs, geometry, diagnosis, service, and repair and wheel alignment procedures. (4 credit, 2 lecture, 4 lab)

#### **DSL 233**

# **Electrical Diagnosis**

A continuation of DSL 132, troubleshooting procedures using volt/ohm meters and wiring diagrams with strong emphasis on scan tools and scan tool usage. Pre-requisite: DSL 131 and DSL 132 or instructor consent. (5 credit, 2 lecture, 6 lab)

#### **DSL 234**

## **Truck Transmissions & Drive Trains**

Development of diagnostic and repair skills as they relate to modern truck transmissions and power trains. Provides the student technician with an understanding of how these systems work, the varied systems that are used, and the foundation to diagnosis and repair problems that occur on these units. (4 credit, 3 lecture, 2 lab)

#### **DSL 235**

# **Diesel Heating & Air Conditioning**

Provides the theory and practical servicing of diesel air conditioning systems, heating and cooling systems, temperature controls, and refrigerant recovery, recycling and handling. (4 credit, 1.5 lecture, 5 lab)

#### **DSL 237**

# **Engine Diagnostics & Performance**

This course covers electronic control systems, electronic fuel systems, and electronic diagnostic tools, testing and adjusting fuel systems, component replacement and troubleshooting. Pre-requisite: DSL 131, DSL 132 DSL 233. (3 credit, 2 lecture, 2 lab)

#### **DSL 238**

# Final Drives Tracks & Undercarriage

Final drives, track systems, and undercarriage components will be studied as to their proper functions, maintenance, and repair. Prerequisite: DSL 277 (3 credit, 2 lecture, 2 lab)

#### **DSL 275**

# **Diesel Engines**

Introduces the procedure for complete diesel engine rebuild. Includes a discussion of combustion chamber types, major components and component disassembly inspection, and repair. Pre-requisite: DSL 157 (4 credit, 1 lecture, 6 lab)

#### **DSL 276**

# **Diesel Fuel Systems**

Introduction to basic fuel chemistry, fuel subsystems and general objectives of diesel fuel systems. Pre-requisite: DSL 275 or instructor consent (3 credit, 2 lecture, 2 lab)

#### **DSL 277**

## **Power Train Fundamental**

Transmissions and final drives to various tractors and farm equipment will be studied as to their proper functions, maintenance, and repair. (3 credit, 1 lecture, 4 lab)

#### **DSL 290**

# **Selected Topics in Diesel Technology**

An in-depth study of topics in the diesel technology field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. (3 credit, 3 lecture, 0 lab)

# [ECE] EARLY CHILDHOOD EDUCATION

# **ECE 114**

# Play and Learning Environment

Focuses on play as the principle medium of children's learning and development, from the ages of birth through age eight. Its objectives relate mainly to learning the teacher's role in supporting, facilitating, and guiding children's play. Main themes of the course are: Play: What is it? What is its value? How does it reflect diverse cultures? How does it relate to children's development and their learning? Environments for Children's Play: How does the physical environment and use of time and space support and enhance children's play? What equipment, materials, and arrangement of space are most appropriate at different ages? What behavior can teachers expect and plan for in various environments? The Teacher's Role in Children's Play: Active listening, how to speak positively and supportively with children at play; how to extend and expand on children's ideas; how to help children resolve conflicts and solve problems; the difference between encouragement and praise; planning and assessment for the play-centered learning environment; techniques of supervision to assure children's safety; how to anticipate, plan for, and respond to challenging behavior. (3 credit, 3 lecture, 0 lab)

# **ECE 115**

# **Infant-Toddler Development & Care**

Studies current theories and knowledge

concerning growth and development of infants and toddlers. Involves observations of group care of infants and toddlers including center based programs and family child care homes. Emphasizes the needs of both typically developing infants and toddlers and infants and toddlers with special needs. Diversity, Inclusion, Parents, Special topics, NAEYC Developmentally Appropriate Practice, NAEYC Accreditation Standards are integrated into course assignments. (3 credit, 3 lecture, 0 lab)

#### **ECE 116**

### **Infant-Toddler Curriculum**

Application of theories of development of children up to age three in a child centered environment. Development of competencies and skills needed by early childhood professionals. Two hours of practicum are required each week. (3 credit, 3 lecture, 0 lab)

#### **ECE 121**

#### **Introduction to ECE**

An overview of early childhood care and education, including the basic values, structure, organization and programming in early childhood. Examination of the student's personal qualities in relationship to expectations of the field. There is a 15 hour required clinical/field experience component for observation and interviews in a variety of early childhood settings. Pre-requisite: Successful completion or concurrent enrollment in ECE 141 and ECE 142 or instructor consent. (3 credit, 3 lecture, 0 lab)

# ECE 141

# **Child Development**

A foundation course in theory and principles of the developmental continuum, including an indepth study of physical, social/emotional, cognitive, language, and aesthetic development; an examination of current research and major developmental theories; an exploration of child development within a socio-cultural context, such as gender, family, race, ethnicity, language, ability, socio-economics, religion, and society; an emphasis on the implications for early

childhood professional practice. \*Encompassing birth through age eight and may include preadolescents. (IAI S6 903, ECE 912) (3 credit, 3 lecture, 0 lab)

#### **ECE 142**

# Health, Safety & Nutrition

The course is a study of the essential factors of health, nutrition, and safety as they apply to early childhood settings and school environments of children birth through age eight. Emphasis will be given to nutritional needs, health routines, health appraisals, safety, hygiene, childhood illness, social-emotional needs and first aid. Students will examine the relationship of the child, family, school and community on the child's health and well-being. The course will include information on program planning, classroom curriculum, current issues, and parent education around health and safety issues. (3 credit, 3 lecture, 0 lab)

#### **ECE 143**

#### **Guidance**, Observation and Assessment

This course introduces a variety of observation, assessment and guidance techniques in early childhood education settings birth to age eight. (4 credit, 4 lecture, 0 lab)

# **ECE 213**

#### Child, Family and Community

This course focuses on the child in the context of family and community. Includes issues of communication, diversity, professionalism, and social policy, and will promote awareness and effective use of community resources. (3 credit, 3 lecture, 0 lab)

# **ECE 214**

# **Language and Literacy Development**

Language and communicative development of children from birth through third grade, with a focus on children from birth through age five, will be studied. The relationship between language and other areas of development will be explored as well as ways to support language development with young children. Students will observe, record, and analyze samples of young children's communication. Examines factors and

conditions which affect early and beginning reading from birth through eight years of age. Emphasis will be placed on the methods, materials, organizational procedures, and assessment techniques in early literacy learning. In addition, students will participate in field experiences to apply the new knowledge they gain throughout the course. (3 credit, 3 lecture, 0 lab)

#### **ECE 215**

#### **Pre-School Administration**

Develops skills in administration and supervision for students who wish to work in early childhood education centers. Includes topics such as program planning, selection and use of staff, the role of the administrator and supervisor, administrative tasks, in-service training for staff improvement, and community resources for supplementing the center's services. (3 credit, 3 lecture, 0 lab)

#### **ECE 217**

# Supervision & Staff Dev. In ECE

Designed for early childhood administrators to evaluate, develop, and organize documentation, reviews, evidence of systems, and conduct teacher observations in order to the implement "The Human Resources Development Scale" contained within The Program Administrations Scale: Measuring Early Childhood Leadership and Management (2004). An online assessment at the beginning of the course to review existing documentation subscales of: (1) Staff Orientation, (2) Supervision and Performance Appraisal, and (3) Staff Development will be conducted. Individual action plans will be written by each student to identify the documentation needed to meet the criteria of the PAS. Students will increase their knowledge and skills in early childhood leadership and management practices aligned with the Program Administration Scale. (3 credit, 3 lecture, 0 lab)

#### **ECE 220**

#### Practicum I

Provides the student with both theory and practice in the contemporary early childhood

setting. Students engage in supervised participation in the NAEYC Accredited Child Study Center on campus, or an approved off campus site. Individual conferences, written reports/observations/reflections, outside reading, seminar sessions, and an online supplement component are also an integral part of this course. The student studies the behavior of children individually, and in groups, in light of current knowledge in child development including NAEYC Accreditation Standards, Head Start Performance Standards, and Illinois State Board of Education Early Learning Standards. The techniques of studying children and recording of behavior are included in this course. Direct attention will be given toward a study of current trends in early childhood care and education. Pre-requisite: ECE 141, ECE 121, ECE 142, ECE 115, ECE 114, ECE 116, ECE 143 and ECE 214 and instructor consent. (4 credit, 1 lecture, 9 lab)

#### **ECE 221**

#### **Practicum II**

A supervised practicum in an approved Clinical Site (NAEYC, NAFCC or Department approved site). Emphasis on using reflective practice to examine components of quality, set goals, and design a plan for professional growth for the early childhood educator of children ages birth through third grade. Focuses on the student's demonstration of competencies that produce positive developmental outcomes for young children ages birth through third grade. Prerequisite: ECE 121, ECE 141, ECE 142, ECE 115, ECE 114, ECE 116, CE 143, ECE 214, ECE 240, ECE 220 and instructor consent. (4 credit, 1 lecture, 9 lab)

# **ECE 240**

#### Math and Science Methods

A course on the standards, principles, and practices in teaching mathematics and science to young children ages birth through third grade with an emphasis on preschool age children. Focus will be placed on developing an integrated math and science curriculum that includes appropriate content, processes, environment

with materials, and child-centered choices. Field experiences required. (3 credit, 3 lecture, 0 lab)

#### **ECE 280**

# **Selected Topics in ECE**

An in-depth study of selected problems or topics in child care and development. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of four (4) credits toward graduation. (1 credit, 1 lecture, 0 lab)

#### **ECE 299**

#### **Director Practicum**

This course provides an opportunity for the student to engage in practical experiences as a director of a center. Students work in a supervised childcare setting where they assist the center director and perform the daily duties of a director. This course meets the experience requirements for Illinois Director Credential. This course may be offered for variable credit and is repeatable three times. Pre-requisite: Completion of an AAS in Early Childhood Education and instructor consent. (4 credit, 0 lecture, 8 lab)

# **[ECON] ECONOMICS**

#### **ECON 121**

### **Introduction to Macroeconomics**

Introduction to national income theories, economic fluctuations and growth, money and banking, and international economics. (IAI S3 901) (3 credit, 3 lecture, 0 lab)

#### **ECON 122**

### **Introduction to Microeconomics**

Introduction to price theories, the behavior of the firm under varying market conditions, and the behavior of the consumer. (IAI S3 902) (3

# [EDUC] EDUCATION

# **EDUC 120**

# **Online Technology**

Focuses on developing students' basic computer skills and the use of the school's online learning management system and electronic/computer systems: the MySIC portal, basic computer technology skills, participating in online/hybrid courses, and utilizing the Library's electronic research tools and online library resources. The course improves student's ability to effectively utilize these essential computer systems through a series of four modules. May be repeated three times.(1 credit, 1 lecture, 0 lab)

#### **EDUC 122**

# **Strategies for College Success**

Provides an interactive source designed to improve one's personal/social, academic, and career survival skills. Topics include the College's organization, offerings, service and role in the community; personal goal setting, motivation and self-awareness; learning modes; and library learning resources skills. This course may be offered as variable credit and repeatable three times. (2 credit, 2 lecture, 0 lab)

#### **EDUC 141**

#### **Introduction to Education**

Provides an introduction to teaching as a profession in the American education system. Offers a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. Includes organizational structure and school governance. A clinical component is required. (3 credit, 3 lecture, 0 lab)

#### **EDUC 220**

# **Children's Literature in Performance**

Focuses on literary forms that can be used not only as a means of enjoyment, but also as a learning tool for children. Script analysis, directing concerns, design issues, children's literature, and performance are stressed. Pre-

requisite: One of the following: ENG 122, COM 121, THTR 121, THTR 122 or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **EDUC 226**

# **Students with Special Needs**

A survey course that presents the historical, philosophical and legal foundations of special education, as well as an overview of the characteristics of individuals with disabilities, the programs that serve them under the Individuals with Disabilities Act, and the diversity of the populations of individuals with disabilities. Pre-requisite: EDUC 141 or PSYC 121 (or concurrent enrollment) or PSYC 221 or Instructor Consent. (3 credit, 3 lecture, 0 lab)

#### **EDUC 228**

# **Diversity of Schools and Society**

Social and Global Perspectives. How schooling is shaped by the social contexts in which it occurs, particularly in multicultural and global contexts. (3 credit, 3 lecture, 0 lab)

#### **EDUC 241**

# **Educational Psychology**

This course concerns psychological principles underlying educational practice. Theories concerning cognitive and psychological development, human learning, and motivation are studied with emphasis on application for instructions, including assessment. Emphasis will also be placed on learner-centered instruction and diversity. (3 credit, 3 lecture, 0 lab)

## **EDUC 243**

# **Human Growth & Development**

A study of growth and development of the individual from conception through adulthood. Emphasis on social, emotional, cognitive, physical aspects of growth and behavior related to school settings with special emphasis on the middle school years. A minimum of 20 hours of clinical experience focused on social, emotional, cognitive and physical aspects of behavior, preschool through the twelfth grades with observation of the learners. Includes research

methods and developmental theories. (3 credit, 3 lecture, 0 lab)

#### **EDUC 244**

# Human Growth & Development-Lifespan

A study of growth and development of the individual from conception through the lifespan. Emphasis on social, emotional, cognitive, physical aspects of growth and behavior related to school settings with special emphasis on the middle school years. A minimum of 20 hours of clinical experience focused on social, emotional, cognitive and physical aspects of behavior, preschool through the twelfth grades with observation of the learners, not methodology. (3 credit, 3 lecture, 0 lab)

#### **EDUC 260**

# **Educational Technology**

This course provides an introduction to integrating technology into the classroom. Topics include the using the Internet, manipulating Productivity Software Applications for educators, integrating multimedia and education software applications, and creating curriculum pages. May be offered as variable credit. May be repeated three times. (3 credit, 3 lecture, 0 lab)

# **EDUC 280**

# **Selected Topics in Education**

An in-depth study of selected problems or topics in education. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation and may be coffered as variable credit. (3 credit, 3 lecture, 0 lab)

## **EDUV 111**

#### **Tutor Training**

This course is designed to deliver training for prospective student tutors. A major activity is to

offer one-on-one and group peer tutoring. This course is intended to equip student peer tutors with the necessary skills to be most effective in the tutoring situation. Pre-requisite: A or B in the course for which the student wishes to tutor or consent. (1 credit, 1 lecture, 0 lab)

# [ELE] Electrical

#### **ELE 111 Basic Electrical**

A practical, real-world application on how electricity is distributed and used in plants and facilities. The course provides an overview and introduction to the knowledge and skills of basic electrical work.

# [EMP] EMPLOYMENT SKILLS

#### **EMP 111**

## **Job Skills Development**

Provides career development skills, job attainment skills, job survival skills, leadership skills and basic communication and math skills. May be offered as variable credit and repeatable three times. (3 credit, 3 lecture, 0 lab)

#### **EMP 112**

#### **Student Skills Development**

Provides basic student skills, college life orientation, and introduction to portfolio development skills, job attainment skills, job survival skills, leadership skills and team building skills. May be offered as variable credit and repeated three times. (4 credit, 4 lecture, 0 lab)

### **EMP 113**

# Student Skills Development II

Provides basic student skills, college life orientation, and introduction to portfolio development skills, job attainment skills, job survival skills, leadership skills and team building skills. May be offered as variable credit and repeated three times. This course is a continuation of EMP 112. (4 credit, 4 lecture, 0 lab)

#### **EMP 114**

# **Student Skills Development III**

Provides basic student skills, college life orientation, and introduction to portfolio development skills, job attainment skills, job survival skills, leadership skills and team building skills. May be offered as variable credit and repeated three times. This course is a continuation of EMP 113. (4 credit, 4 lecture, 0 lab)

#### **EMP 119**

# **Student Skills Development IV**

Provides basic student skills, college life orientation, and introduction to portfolio development skills, job attainment skills, job survival skills, leadership skills and team building skills. May be offered as variable credit and repeated three times. This course is a continuation of EMP 114. (4 credit, 4 lecture, 0 lab)

# [ENG] ENGLISH

#### **ENG 101**

# **Reading/Writing Improvement**

This developmental studies course is designed to provide review and practice in phonics, spelling, grammar, punctuation, and effective written communication. It also promotes and improves flexible reading rate, critical thinking skills such as skimming, scanning, and note taking, vocabulary skills, and reading comprehension skills. This course is repeatable three times and may be offered as variable credit. Pre-requisite: Placement test score (3 credit, 3 lecture, 0 lab)

#### **ENG 109**

# **Integrated Reading & Writing**

This course involves comprehensive instruction on basic reading, writing and study skills needed to be successful in college course work. Areas of instruction will cover a review of basic grammar, vocabulary development, comprehension skills, critical and literal reading skills, study strategies, paragraph and essay development, and, the use of technology to

complete assignments. May be offered as variable credit. Pre-requisite: Placement test score (4 credit, 4 lecture, 0 lab)

#### **ENG 121**

# **Rhetoric & Composition I**

Develops awareness of the writing process, provides intentional, organizational, and editorial strategies, stresses the variety of uses for writing, and emphasizes critical skills in reading, thinking, and writing. The course will be devoted to expository writing, including causal analysis, comparison/contrast, and argumentation. Students will also be introduced to the LRC and its facilities and proper uses. Pre-requisite: Placement test score (IAI C1 900) (3 credit, 3 lecture, 0 lab)

#### **ENG 122**

# **Rhetoric & Composition II**

A continuation of ENG 121, this course further develops expository writing and stresses the development of the ability to read with understanding and critical awareness. It includes the writing of literary analyses based on readings in poetry, drama, and fiction, and the production of a documented, multi-source research paper. Pre-requisite: ENG 121 or instructor consent. (IAI C1 901R) (3 credit, 3 lecture, 0 lab)

# **ENG 123**

#### **Introduction to Creative Writing**

Designed to teach the beginning writer the basic skills of writing fiction and poetry. Through guided practice in critical analysis of professional work, class critiques of student writing, and discussion and application of the principles of imaginative writing the student should be able to demonstrate skill in writing fiction and poetry, and should develop a further understanding and appreciation for fiction and poetry. (3 credit, 3 lecture, 0 lab)

#### **ENG 223**

# **Advanced Creative Writing**

Designed to provide an opportunity for experienced student writers to develop their skills as fiction writers and poets. Through guided practice in critical analysis of professional work, class critiques of student writing, and discussion and application of the principles of imaginative writing the student should further demonstrate skill in writing fiction and poetry, and should develop a further understanding and appreciation for fiction and poetry. May be taken three times. Pre-requisite: ENG 123 (3 credit, 3 lecture, 0 lab)

#### **ENG 243**

#### Intro to Drama

Designed to develop the student's understanding and appreciation of dramatic literature, this course includes a study of the historical development, the various modes, and the basic elements of drama. Analysis and interpretation of dramatic literature, as well as visual recreation of drama, are stressed. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (IAI H3 902) (3 credit, 3 lecture, 0 lab)

#### **ENG 245**

#### **World Literature**

Designed to produce an awareness of and appreciation for Western cultural heritage through the reading of representative works of three major periods: the ancient world, the Middle Ages, and the Renaissance. Emphasizes the historical background of each period and introduces methods of critical analysis used to interpret the readings or text. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (IAI H3 906) (3 credit, 3 lecture, 0 lab)

#### **ENG 246**

# **Modern Literature**

Introduces students to some of the outstanding literature of the modern period, including works from the late 19th Century to the present day. Emphasis will be given to three genres: poetry, drama, and fiction. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (IAI H3 907) (3 credit, 3 lecture, 0 lab)

#### **ENG 261**

## American Literature I

A survey of representative works illustrating the development of American literature from its

beginnings to the Civil War, with an emphasis on major literary movements understood in relation to their intellectual, social, and political contexts. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (IAI H3 914) (3 credit, 3 lecture, 0 lab)

#### **ENG 262**

#### **American Literature II**

A survey of representative works illustrating the development of American literature from the Civil War to the present, with an emphasis on major literary movements understood in relation to their intellectual, social, and political contexts. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (IAI H3 915) (3 credit, 3 lecture, 0 lab)

#### **ENG 280**

#### **Selected Topics in Literature**

An in-depth study of selected problems or topics in literature. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as a variable credit. (3 credit, 3 lecture, 0 lab)

# [EPT] EMERGENCY PREPAREDNESS TRAINING

#### **EPT 130**

# **Emergency Management Planning**

Prepares state and local governmental employees to design, prepare, conduct, and evaluate emergency procedures to be used in natural and man-made disasters. This course may be offered as variable credit and repeated three times. (3 credit, 3 lecture, 0 lab)

#### **EPT 131**

# **Emergency Preparedness Training I**

Prepares individuals in public and private entities/agencies, and educational institutions

that coordinate and manage emergency and disaster response services and related activities at various phases of natural and man-made emergencies and disasters. Topics covered may include any combination from the following topics: Incident Command System (ICS), National Incident Management Systems (NIMS), National Response Framework (NRF), Campus Violence Prevention, Campus Threat Assessment, and related emergency training. This course is intended to be offered as variable credit and may be repeated three times. (3 credit, 3 lecture, 0 lab)

#### **EPT 132**

# **Emergency Preparedness Training II**

A continuation of EPT 131 Emergency Preparedness Training I. Prepares individuals in public and private entities/agencies, and educational institutions that coordinate and manage emergency and disaster response services and related activities at various phases of natural and man-made emergencies and disasters. Topics covered may include any combination from the following topics: Incident Command System (ICS), National Incident Management Systems (NIMS), National Response Framework (NRF), Campus Violence Prevention, Campus Threat Assessment, and related emergency training. This course is intended to be offered as variable credit and may be repeated three times. (3 credit, 3 lecture, 0 lab)

# [FCS] FAMILY AND CONSUMER SCIENCES

#### **FCS 124**

# **Introduction to Nutrition**

Presents the basic principles and applications to everyday nutritional problems. Includes a study of the major food nutrients, their chemical properties, sources, metabolism and the minimum daily requirements for each age group in the life cycle. (3 credit, 3 lecture, 0 lab)

#### **FCS 280**

# **Selected Topics in Family & Consumer Science**

An in-depth study of selected problems or topics in family and consumer science. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credits toward graduation. May be offered as

variable credit. (3 credit, 3 lecture, 0 lab)

# [FIRE] FIRE SCIENCE

#### **FIRE 115**

# **Orientation to Fire Fighting**

Introduces the recruit firefighter to the fire science program. Subjects included: Fire Department Organization, Fire Behavior, Portable Extinguishers, Self—contained Breathing Apparatus, Building Conditions, Fire Hose and Appliances, Ropes and Knots, Communication and Safety. Course is designed to meet all objectives set forth in Module A by the Office of the State Fire Marshal for Basic Operations Firefighter certification. (4 credit, 4 lecture, 0 lab)

### **FIRE 116**

# Fire Suppression Techniques

Introduces the recruit firefighter to fire suppression techniques that occur on the fire ground during all stages of a fire. Subjects included: Ladders, Hose and Appliances, Water Supply, Forcible Entry, Fire Streams, and Ventilation. Course is designed to meet all objectives set forth in Module B of the Office of the State Fire Marshall for Basic Operations Firefighter Certification. (4 credit, 4 lecture, 0 lab)

# FIRE 117 Loss Control

Introduces the recruit firefighter to the nonsuppression support activities in the fire service. Subjects include: search and rescue, fire control, protecting evidence, fire detection, prevention and public education, firefighter survival. Course is designed to meet all objectives set forth in Module C of the Office of the State Fire Marshall for Basic Operations Firefighter Certification. (4 credit, 4 lecture, 0 lab)

#### **FIRE 132**

#### Fire Instructor I

Instructor I is designed to give the student the knowledge and ability to teach from prepared materials which are predominantly skills oriented. Areas covered include: communication, concepts of learning, human relations in the teaching-learning environment, methods of teaching, organizing the learning environment, records and reports, testing and evaluation, instructor's roles and responsibilities, teaching techniques, and use of instructional materials. May be offered as variable credit, may be repeated three times Prerequisite: Illinois OSFM FFII Certification, or FIRE 115, FIRE 116, and FIRE 117 (3 credit, 3 lecture, 0 lab)

#### **FIRE 134**

# **Strategy & Tactics II**

This course is designed for the individual who is responsible for commanding one to two companies at the fire or emergency scene. Subject areas which will be covered are: Company Officer leadership, safety, fire behavior, pre-fire planning, building construction, firefighting tactics, engine and ladder company operations and tactical exercises. This course will meet the requirements required by the OSFM in Illinois for certification towards Fire Officer I. May be offered as variable credit, may be repeated three times. Pre-requisite: Illinois Fire Fighter II certification or equivalent; or FIRE 115 and FIRE 116. (3 credit, 3 lecture, 0 lab)

# FIRE 135 Hazardous Materials Operations

This course is designed to teach the student knowledge of basic hazard and risk assessment techniques, knowledge of selecting and using proper personal protective equipment provided to the first responder operational level, knowledge of performing basic control, containment and/or confinement operations within the capabilities of the resources and equipment available. Can be offered as variable credit. May be taken three times Pre-requisite: Fire Fighter II and Hazardous Materials Awareness (3 credit, 2 lecture, 2 lab)

#### **FIRE 136**

# **Fire Prevention Principles**

Fire Prevention Principles covers materials in the areas of fire inspection, fire investigation, and fire cause determination. Inspection topics include: laws, codes, ordinances, life safety code applications, building construction, occupancy, and inspection techniques, installed systems and water supply. Fire investigation concentrates on determining point of origin and cause. Can be offered as variable credit. May be taken three times Pre-requisite: IL OSFM FFII Certification or FIRE 115, FIRE 116 and FIRE 117 (3 credit, 2.5 lecture, 1 lab)

#### **FIRE 137**

# Certified FF III Mod A

This course is designed for the student who wishes to go beyond the Firefighter II certification. Topics include orientation, SCBA, fire behavior, ladders and hose. Can be offered as variable credit. May be taken three times Prerequisite: IL OSFM FFII certification (3 credit, 2 lecture, 2 lab)

#### **FIRE 138**

## Certified FF III Mod B

This course is designed for the student who wishes to go beyond the Firefighter II certification. Topics include rescue, nozzles & fire streams, ventilation, water supply, overhaul, building construction. Can be offered as variable credit. May be taken three times Pre-requisite: IL OSFM FFII certification (3 credit, 2 lecture, 2 lab)

#### **FIRE 139**

#### Certified FF III Mod C

This course is designed for the student who wishes to go beyond the Firefighter II certification. Topics include ropes and knots, communications, sprinkler systems, fire prevention, public fire education, fire cause determination. Can be offered as variable credit. May be taken three times Pre-requisite: IL OSFM FFII certification. (3 credit, 2 lecture, 2 lab)

#### **FIRE 150**

## **Strategy & Tactics I**

This course is designed for the individual who is responsible for commanding a fire or emergency scene involving multiple companies. Subject areas include strategic concepts in firefighting, duties and responsibilities of command officers, ICS system, and multiple company operations. Can be offered as variable credit. May be taken three times Pre-requisite: FF II certification or equivalent. (3 credit, 3 lecture, 0 lab)

#### **FIRE 153**

# Fire Management Principles I

Fire Management Principles I is designed to provide the Fire Officer, who is in charge of a single fire company or station, with information and skills in supervisory practices, personnel management, and budget. Areas of instruction will include: the role and function of the Company Fire Officer, basic management principles and concepts, leadership, motivation, order giving, discipline and conflict resolution. Requires 40 clock hours of instruction. Can be offered as variable credit. May be taken three times Pre-requisite: Fire Fighter II Certification (3 credit, 3 lecture, 0 lab)

#### **FIRE 154**

# Fire Management Principles II

The Fire Management Principles II course is designed to provide the Fire Officer, who is in charge of a single fire company or station, with information skills in personnel management. The course provides coverage in the areas of basic communications, report writing, inter-

personal communication, group dynamics, coaching and counseling skills, and performance appraisal. Requires 40 clock hours of instruction. Can be offered as variable credit. May be taken three times Pre-requisite: FIRE 153 (3 credit, 3 lecture, 0 lab)

#### **FIRE 159**

# Fire Service Vehicle Operations

Introduces the recruit firefighter to the basic knowledge and skills to safely perform Fire Service Vehicle Operations, as it applies to classroom skills only, as defined by NFPA 1451, Fire Service Vehicle Operations Program. Course is designed to meet all criteria set forth by the Office of the State Fire Marshall for Basic Operations Firefighter Certification program. (4 credit, 4 lecture, 0 lab)

## **FIRE 170**

#### **Technical Rescue Awareness**

Technical Rescue Awareness is a prerequisite for all new "operations" level rescue programs. Areas of instruction include structural collapse, rope, confined space, vehicle and machinery, water, wilderness and trench rescues. This course may be offered for variable credit and repeatable three times. (1 credit, 1 lecture, 0 lab)

# **FIRE 191**

#### Fire Brigade Level I

The initial class for the instruction of underground coal miners in the location and use of firefighting equipment, location of escapeways, and exits. Trainees will become familiar with the proper routes of travel to the surface and proper evacuation procedures to be followed in the event of an emergency. Scenarios appropriate for beginners will be used in the burn tunnel. This course will meet or exceed the Federal requirements for new Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. Pre-requisite: Employer verification of initial safety and SCBA training. (3 credit, 3 lecture, 0 lab)

#### **FIRE 192**

# Fire Brigade Level II

A continuation of FIRE 191 Beginning Fire Brigade Level I. The course consists of beginning level instruction for underground coal miners in the safe techniques for fighting flammable, electrical and equipment fires. Trainees will be required to demonstrate safe firefighting techniques as part of a team. specific scenarios appropriate for beginners will be used in the Burn Tunnel in light smoke. This course will meet or exceed the Federal requirements for new Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated three times and may be offered as variable credit. Pre-requisite: FIRE 191 or instructor consent (3 credit, 3 lecture, 0 lab)

#### **FIRE 193**

# Fire Brigade Level III

A continuation of FIRE 192. A mid-level program for the instruction of underground coal miners in fire drill techniques based on a mine specific plan for evacuation; location of escapeways, and particular routes of travel to the surface following an emergency. Trainees will be introduced to the use of "live fire props" as a training tool for fighting fires, with special emphasis on the use of the fire ladder. Mine specific scenarios appropriate for intermediate fire brigade members will be used in the Burn Tunnel in moderate smoke. This course will meet or exceed the Federal requirements for Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. Prerequisite: FIRE 191 and FIRE 192 or instructor consent (3 credit, 3 lecture, 0 lab)

#### **FIRE 194**

## Fire Brigade Level IV

A continuation of FIRE 193, Intermediate program for the instruction of underground coal miners in the team approach to fire fighting and

evacuation. Trainees will demonstrate all aspects of firefighting and evacuation procedures as required in the Code of Federal Regulations (Part 75.1101-23) and as outlined in their mine specific firefighting and evacuation plan. Trainees will utilize various "live fire props" during training to simulate various types of mine fires. Mine specific scenarios appropriate for intermediate fire brigade members will be used in the Burn Tunnel. This course will meet or exceed the Federal requirements for Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. Pre-requisite: FIRE 191, FIRE 192 and FIRE 193 or instructor consent. (3 credit, 3 lecture, 0 lab)

## **FIRE 195**

# Fire Brigade Level V

An advanced program for the instruction of underground coal miners in the location and use of firefighting equipment, and the location of escapeways to the surface. Utilizing a mine specific map that contains a mock fire, each trainee will map the specific action their team will take to control or maintain the fire area. Mine specific scenarios appropriate for advanced fire brigade members will be used in the Burn Tunnel, These scenarios will include the use of "live fire props" in a mine fire. This course will meet or exceed the Federal requirements for Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. Pre-requisite: FIRE 191, FIRE 192, FIRE 193 and FIRE 194 or instructor consent. (3 credit, 3 lecture, 0 lab)

# **FIRE 196**

## Fire Brigade Level VI

A continuation of FIRE 195 Advanced Fire Brigade Level 5. Trainees will develop a procedural route to safety as part of an

emergency evacuation of their mine. This will include identifying proper procedures such as a specific meeting area, accounting of all individuals and de-energizing of electrical equipment, securing the area, communication with outside parties and routes to be taken. Mine specific scenarios appropriate for advanced fire brigade members will be used in the Burn Tunnel. This course will meet or exceed the Federal requirements for Fire Brigade Members. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. Pre-requisite: FIRE 191, FIRE 192, FIRE 193, FIRE 194 and FIRE 195 or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **FIRE 197**

# **Beginning Mine Rescue**

The U.S. Department of Labor's Mine Safety and Health Administration (MSHA) requires that every operator of an underground mine establish "at least two mine rescue teams" and that each team member and alternate be "fully qualified, trained, and equipped to provide emergency mine rescue service" (Part 49.2(a)(1) and (b). This course is designed to meet or exceed the requirements of Title 30, CFR, Part 49, which pertains to the training of rescue teams and their personnel. Scenarios appropriate for beginner mine rescue members will be used in the Burn Tunnel in light smoke. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated three times and may be offered as variable credit. Pre-requisite: Employer verification of initial safety and SCBA training. (3 credit, 3 lecture, 0 lab)

# **FIRE 198**

### **Intermediate Mine Rescue**

This course is a continuation of FIRE 197, Beginning Mine Rescue. Intermediate Mine Rescue is the second course in the progression of the mine rescue series of courses designed to meet or exceed the requirements of Title 30, CFR, Part 49, which pertains to the training of rescue teams and their personnel. Trainees will demonstrate the principles of mine rescue and current national mine rescue contest rules. Scenarios appropriate for intermediate mine rescue members will be used in the Burn Tunnel in moderate smoke. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated 3 times and may be offered as variable credit. FIRE 197 or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **FIRE 199**

#### Advanced Mine Rescue

Advanced Mine Rescue is the third course in the progression of the mine rescue series of courses designed to meet or exceed the requirements of Title 30, CFR, Part 49, which pertains to the training of rescue teams and their personnel. Trainees will illustrate the mine rescue communication system of their specific mine and demonstrate mine rescue team techniques appropriate for advanced Mine Rescue Teams. Scenarios appropriate for advanced mine rescue members will be used in the Burn Tunnel in heavy smoke. This course may be team taught with industry. Content may vary based on specific mine plans and state and federal requirements. This course may be repeated three times and may be offered as variable credit. Pre-requisite: FIRE 197 and FIRE 198 or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **FIRE 290**

# **Selected Topics in Fire Science**

An in-depth study of topics in fire science. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. Pre-requisite: instructor consent. (3 credit, 3 lecture, 0 lab)

#### **FIRE 291**

### Fire Brigade Training

A course designed to equip coal miners and

other industry employees with first responder fire brigade skills. Safe use of firefighting equipment is taught. Instruction for fighting flammable liquid fires, removing victims from the fire scene, and SCBA donning and doffing procedures is given. Working as a team member is stressed. All students participate in evolutions in the burn tower. This course may be repeated, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as a variable credit. Pre-requisite: instructor consent. (1 credit, 0 lecture, 2 lab)

# **[FOS] FOOD SERVICE**

#### **FOS 112**

# Food Service Sanitation & Safety

A study of personal hygiene and the principles involved in maintaining sanitary standards necessary to comply with regulations for a food service operation. May be repeated three times. (.5 credit, .5 lecture, 0 lab)

#### **FOS 199**

#### **Food Service Refresher**

A short continuing education course for certified food service managers and food handlers designed to cover the Illinois Public Health "core curricular" areas required under the Illinois Food Service Sanitation Code 750.551 (c) (1) (C). May be repeated three times. Prerequisite: Illinois Food Service Sanitation Manager Certificate (FSSMC). (0.5 credit, 0.5 lecture, 0 lab)

# [GOVT] GOVERNMENT

# **GOVT 121**

#### **American Government**

Historical development and organization of national, state, and local governments; the Federal system, national and state constitutions. (IAI S5 900) (3 credit, 3 lecture, 0 lab)

# **GOVT 226**

#### **Introduction to International Relations**

Study of international relations with emphasis on contemporary international problems and relations. Includes analysis of international behavior, international law, foreign policy, causes of conflicts, and potential solutions. (IAI S5 904) (3 credit, 3 lecture, 0 lab)

#### **GOVT 260**

# **Politics in States and Communities**

Historical development and organization of state government with an emphasis on the Illinois General Assembly and state constitutions. This course may be offered for variable credit and may be repeated three times. (3 credit, 3 lecture, 0 lab)

#### **GOVT 261**

### **Federal and National Politics**

A hands on interdisciplinary study of politics at the national level. Study will be through lecture, discussions, guided study, and a trip to our Nation's Capital. May be repeated three times. Pre-requisite: instructor consent. (3 credit, 3 lecture, 0 lab)

#### **GOVT 280**

# **Selected Topics in Government**

An in-depth study of selected problems or topics in government. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 1 lecture, 4 lab)

#### **GOVT 281**

#### Federal & National Politics II

A continuation of GOVT 261 Federal and National Politics I. A hands on interdisciplinary study of politics at the national level. Study will be through lectures, discussions, guided study, and a trip to our Nation's Capital. Can be repeated three times. (variable 1-3 credit, 1-3 lecture, 0 lab)

# [GRAP] GRAPHICS

# **GRAP 121**

# **Engineering Graphics I**

Introduction to engineering and design and graphics, including sketching, computer aided drafting, dimensioning, tolerancing, multi-view orthographic representations, auxiliary views, section views and working drawings. Students are required to use CAD in this course. (3 credit, 2 lecture, 4 lab)

# [HIST] HISTORY

#### **HIST 121**

#### **History of Western Civilization to 1648**

Political, social and economic history of the Western world from its Middle Eastern origins to contemporary movements and problems. (IAI S2 902) (3 credit, 3 lecture, 0 lab)

#### **HIST 122**

#### Western Civilization from 1648

Political, social, and economic history of the Western world from its Middle Eastern origins to contemporary movements and problems. Considers the development of European nationalism, liberalism, and imperialism, and surveys World War I and II and subsequent developments. (IAI S2 902) (3 credit, 3 lecture, 0 lab)

#### **HIST 141**

# **History of Latin America**

Political and constitutional history of principal Latin American nations, including political relations, independence, and social and economic movements. (IAI S2 920N) (3 credit, 3 lecture, 0 lab)

# **HIST 161**

#### **Black American History**

A survey of the history of Black Americans

from Africa to the present. (IAI S2 923 D) (3 credit, 3 lecture, 0 lab)

#### **HIST 241**

# **American History I**

Historical survey of the development of the United States and its people from its origins to current movements and problems. Development of the United States from colonization to 1865. Special emphasis is placed on the Constitution, Western Movement and the growth of nationalism. (IAI S2 900) (3 credit, 3 lecture, 0 lab)

#### **HIST 242**

# **American History II**

Historical survey of the development of the United States and its peoples from its origins to current movements and problems. Development of the United States from 1865 to the present with special emphasis on the emergence of the United States in world affairs. (IAI S2 901) (3 credit, 3 lecture, 0 lab)

# [HLTH] HEALTH

#### **HLTH 112**

# Heartsaver First Aid, Cardiopulmonary Resuscitation, & AED

This course will include those skills that would enable a person to give proper immediate care to those who have been injured or suddenly become ill, until competent medical care can be obtained. It will include how to recognize a serious medical emergency and knowledge of how to get help. First aid skills, cardiopulmonary resuscitation skills, and safety will be emphasized. Demonstration of skills will be required for completion of the course. This course is designed to serve those worksites that must comply with OSHA or other Federal regulations. It is designed for lay people. The course focuses on basic first aid and CPR. Optional modules: Child and Infant CPR. These are taught at the discretion of the instructor and are geared toward the needs of the specific institution requesting training. This course may be offered as variable credit and repeatable three times. (0.5 credit, 0.5 lecture, 0 lab)

### **HLTH 113**

# First Aid, Cardiopulmonary Resuscitation, & AED - Advanced

Instruction in the immediate and temporary care to be given to a victim of an accident or sudden illness until the services of a physician can be obtained. Successful completion of the course will prepare the student for testing for the standard certification in First Aid and in CPR. (2 credit, 2 lecture, 0 lab)

#### **HLTH 116**

# **Heartsaver Pediatric First Aid**

Heartsaver Pediatric First Aid is designed to teach rescuers the knowledge and psychomotor skills they need to recognize emergencies at the worksite or in the community. It is designed for lay people that work with the public, such as day care workers, teachers, foster care workers, camp counselors, youth organizations, and coaches for children's sports organizations. The course contains child/infant first aid, asthma care, adult/child CPR w/mask and adult/child AED with the following optional module: infant CPR c/mask. These are taught at the discretion of the instructor and are geared toward the needs of the specific institution requesting training. The course will be offered as variable credit and may be repeated three times. (0.5 credit, 0.5 lecture, 0 lab)

#### **HLTH 118**

# **Introduction to Phlebotomy**

Prepares the student in the techniques of phlebotomy (blood collecting), selection and care of equipment, and maintenance of safety standards in health care facilities. (3 credit, 2.5 lecture, 1 lab)

#### **HLTH 121**

# Science of Personal Health

Emphasizes physical, social, emotional and

spiritual health and wellness throughout the life cycle. Presents current issues on health. (3 credit, 3 lecture, 0 lab)

#### **HLTH 130**

# **Health Care Observation - Phlebotomy**

Students will participate in an internship at a health care facility. The exact content will vary based on the site and preceptor. This cannot exceed a total of four (4) credit hours toward graduation. May be offered as variable credit. Pre-requisites: HLTH 118(4 credit, 1 lecture, 6 lab)

# **HLTH 131**

#### **Health Care Observation – Medical Assistant**

Students will participate in an internship at a health care facility. The exact content will vary based on the site and preceptor. This course cannot exceed a total of four (4) credit hours toward graduation. May be offered as variable credit. Pre-requisites: HLTH 130, and CNA 131 (4 credit, 1 lecture, 6 lab)

#### **HLTH 135**

#### **AHA BLS Instructor Course**

This course is designed to prepare an instructor candidate to teach AHA Basic Life Support (BLS) Instructor-led and blended learning classes. This course educates the instructor candidate on how to adequately use AHA instructor training materials, ensures the student meets the learning objectives, offers student coaching skills, provides an objective skills performance evaluation, and follows AHA instructor training center/course policies. The course covers core content and disciplinespecific content required to teach AHA courses. Pre-requisite: Instructor candidate must present a current provider card in the BLS discipline, complete the online AHA BLS Essentials Course, complete an instructor candidate application, and align with SIC as their Training Center (TC). The instructor candidate must demonstrate proficiency in BLS skills, BLS instruction, and be monitored before an instructor card is issued. The candidate must agree to teach a minimum of four courses in a

two-year period, keep their provider card current, and must be monitored by the SIC Training Center Faculty (TCF) every 2 years. Variable credit and may be repeated three times. (0.5 to 1 credit, 0.5 to 1 lecture, 0 lab)

#### **HLTH 137**

#### **AHA Heartsaver Instructor Course**

The Heartsaver instructor course is designed to prepare students to become an American Heart Association lay instructor. The course covers the science, skills and philosophy of resuscitation as taught by the AHA for lay rescuers. The course provides instructor candidates with AHA educational philosophy, policies, and procedures as well as information for comprehension of Heartsaver level basic life support subject matter. This course educates the instructor candidate on how to adequately use AHA instructor training materials, ensures the student meets the learning objectives, offers student coaching skills, provides an objective skills performance evaluation, and follows AHA instructor training center/course policies. The course covers core content and disciplinespecific content required to teach AHA courses. Pre-requisite: Instructor candidate must present either a current Heartsaver First Aid/CPR/AED, Heartsaver CPR/AED, or Heartsaver Pediatric First Aid/CPR/AED card. The candidate must then complete the online AHA Heartsaver Essentials Course, complete an instructor candidate application, and align with SIC as their Training Center (TC). The instructor candidate must demonstrate proficiency in Heartsaver skills, Heartsaver instruction, and be monitored before an instructor card is issued. The candidate must agree to teach a minimum of four courses in a two-year period, keep their provider card current, and must be monitored by the SIC Training Center Faculty (TCF) every 2 years. Variable credit and may be repeated three times. (0.5 to 1 credit, 0.5 to 1 lecture, 0 lab)

#### **HLTH 150**

# **Pharmacy Technician Preparation**

A course that is intended to prepare the student

to function successfully in the role of pharmacy technician in both community and hospital pharmacies. Emphasis is placed upon the knowledge and skills necessary to ensure medication safety in the pharmacy setting. (7 credit, 4 lecture, 6 lab)

#### **HLTH 153**

# **Medication Calculations**

Designed as a preliminary class for pharmacology in the Practical Nursing Program. The class develops mathematical skills necessary for the student to learn medication computation. This course may be repeated two (2) times. (4 credit, 4 lecture, 0 lab)

#### **HLTH 195**

## **Medical Terminology**

Studies of anatomy, prefixes, suffixes, Greek and Latin root words and the information of words pertaining to medical and nursing subjects. Increases the efficiency of nurses, medical records technicians and medicine posting clerks. Systematic study of medical terms related to models, charts, and slides illustrating the various systems of the body and their diseases. Emphasizes use and spelling of the terms in records, correspondence and forms. (3 credit, 3 lecture, 0 lab)

#### **HLTH 290**

# **Selected Topics in Health Care**

An in-depth study of topics in the health field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. Pre-requisite: instructor consent. (3 credit, 3 lecture, 0 lab)

### **HLTH 291**

# **Selected Topics in Healthcare**

An in-depth study of topics in the health field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May

be offered as variable credit. (3 credit, 3 Lecture, 0 lab)

# [HORT] HORTICULTURE

#### **HORT 121**

#### **Introduction to Horticulture**

An introduction to the principles and practices involved in the development, production and use of horticultural crops (fruit, vegetables, greenhouse, turf, nursery, floral and landscape). (IAI AG 905) (3 credit, 3 lecture, 0 lab)

# [HUM] HUMANITIES

#### **HUM 280**

## **Selected Topics in Humanities**

An in-depth study of selected problems or topics in humanities. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be repeated three times if different topics are considered but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 1 lecture, 4 lab)

# [IT] INFORMATION TECHNOLOGY

#### IT 110

## **Basic PC Assembly and Repair**

This course provides the student an introduction to computer assembly and repair, operating system installation and troubleshooting. (2 credit, 2 lecture, 0 lab)

### IT 111

#### **Intro to Information Technology**

This course provides the student with the basic

skills needed to pursue learning in Information Technology (IT). This course introduces students to the history of computers, the Internet and the World Wide Web and provides basic information and terminology about the Internet, computer hardware and computer software. May be taken as variable credit. May be taken three times. (2 credit, 2 lecture, 0 lab)

#### IT 113

## Social Networking & Web 2.0

This course provides the student with skills to navigate Web 2.0. Web 2.0 includes social networking, blogging, podcasts and cloud computing. (2 credit, 2 lecture, 0 lab)

#### IT 114

## **Introductory Operating Systems**

This course provides the student an introduction to operating systems. (2 credit, 2 lecture, 0 lab)

#### IT 115

## **Introductory Word Processing**

This course provides the student an introduction to word processing. (3 credit, 3 lecture, 0 lab)

## IT 116

## **Introductory Spreadsheets**

This course provides the student an introduction to spreadsheet software. (2 credit, 2 lecture, 0 lab)

## IT 118

#### **Introductory Presentation Software**

This course provides the student an introduction to presentation software. (2 credit, 2 lecture, 0 lab)

#### IT 119

## **Basic Software Applications**

This course is an introductory computer course intended to acquaint and train students in the use of business software including word processing, database management, spreadsheets, presentation software, and Internet access methods. Pre-requisite: This course requires the student to have access to a computer running Microsoft Windows along with the Microsoft

Office software suite which includes Microsoft Word, Microsoft Excel, Microsoft PowerPoint and Microsoft Access. Computers with the correct software are available for student use on the SIC campus. Typing skills or Instructor consent. May be taken three times. (IAI BUS 902) (3 credit, 3 lecture, 0 lab)

#### IT 131

## **Introductory Web Design**

This course provides the student an introduction to web design. (2 credit, 2 lecture, 0 lab)

#### IT 132

## **Introductory Programming**

This course provides the student an introduction to computer programming. (2 credit, 2 lecture, 0 lab)

#### IT 133

## **Systems Analysis**

This course is an introduction to the methodology, tools and techniques of systems analysis. This course examines the interrelationships between a computer system and the environment, or organization, in which the system operates. Students will gain an appreciation of how information flows through an organization, how information is organized and managed, and the techniques by which the value of information is optimized. (3 credit, 3 lecture, 0 lab)

## IT 134

## Physical and Mental Side of eSports

This course is designed to promote the physical and mental well-being of individuals who are members on a competitive esports team. The course will emphasize personal well-being and mental health as well as being a productive member of a team. Topics include: Setting and attaining goals and objectives, mental and physical preparation for competition, importance of strategy, motivation, the inner self, sportsmanship, teamwork, leadership, senses and emotions, winning and losing with professionalism, toxic environments and stereotypes, physical and mental self-care,

gaming addiction. May be taken three times. Pre-Requisite: Instructor consent (1 credit, 1 lecture, 0 lab)

#### IT 135

## **Advanced Software Applications**

This course is an intermediate computer course intended to advance the students skills in the use of business software including word processing, database management, spreadsheets, presentation software, and personal information management systems. Pre-requisite: IT 119 (3 credit, 3 lecture, 0 lab)

## IT 136

## eSports Fundamentals

This course is designed to introduce students to various aspects of esports and competitive video gaming. Topics include regulatory organizations, streaming technologies, social media platforms, publishing companies, and professional esports teams. May be taken three times. (1 credit, 1 lecture, 0 lab)

#### IT 137

## eSports Practicum

This course is designed for students who want to practice and prepare for competitive esports tournaments. Coaches will work with students individually and in groups to prepare and implement strategies for competing in a esports tournaments of a variety of games. This course may be offered for variable credit and repeatable three times. Pre-requisite: Instructor consent (1 Credit, 0 Lecture, 2 Lab)

## IT 151

# **Windows Operating Systems**

This course provides the student with information about the Microsoft Windows operating system. The student will learn to install, troubleshoot, secure and maintain the Microsoft Windows operating system. This course is designed to prepare the student to become certified as a Microsoft Certified Solutions Associate. (3 credit, 3 lecture, 0 lab)

## IT 153

#### IT Essentials I

This course provides the student with information and training on computer hardware and maintenance. This course will allow the student to recognize and compare various computer hardware and peripheral devices. This course provides hands on activities and labs for students to learn how to assemble, disassemble and configure a computer, install peripheral devices, and troubleshoot hardware and software problems. This course is designed to help the student prepare for the CompTIA A+ certification. May be taken three times. (4 credit, 4 lecture, 0 lab)

#### IT 154

## **History & Evolution of Gaming**

This course will look at the history and development of video games from the first video games to the current generation of console, PC, mobile, and VR games. Topics of discussion will also include the technology behind video games, genres of video games, the economic impact of video games, and training simulators. (2 credit, 2 lecture, 0 lab).

#### IT 155

#### **Fundamentals of UNIX**

This course provides the student with skills related to the UNIX/Linux operating system. This course is designed to help the student prepare for the CompTIA Linux+ certification. (4 credit, 4 lecture, 0 lab)

## IT 157

#### **IT Support Professional**

This course, developed by Google, provides the student with information and training to prepare for an entry-level position in IT Support. This course is designed to help the student prepare for the Google IT Support Professional certification. (5 credit, 5 lecture, 0 lab)

#### IT 170

## **Computer Network Gaming**

Introduction to the fundamentals of network computer gaming including hardware and software considerations. Some of the concepts covered will include: fundamental TCP/IP addressing, choosing and optimizing appropriate

hardware, choosing and optimizing appropriate software, and using the Internet as a resource. This course may be offered as variable credit and repeated three times. (3credit, 3 lecture, 0 lab)

## IT 171

#### **Introduction to Game Design**

This course is used to introduce students to the game design process and how to design 2D games. (3 credit, 3 lecture, 0 lab)

#### IT 173

## **Programming I**

The first in a sequence of courses for majors in Computer Science, Mathematics, and Engineering. Introduces a disciplined approach to problem-solving and algorithm development, in addition to an introduction to procedural and data abstraction. Covers: selection, repetition, and sequence control structures; program design, testing, and documentation using good programming style; block-structured high-level programming languages; and arrays, records, and files . Pre-Requisite: Instructor consent, MATH 109 or higher (IAI CS 911) (3 credit, 3 lecture, 0 lab)

## IT 191

## **Fundamentals of Web Design**

This course focuses on the overall production processes surrounding web site design with particular emphasis on design elements involving layout, navigation and interactivity. (3 credit, 3 lecture, 0 lab)

#### IT 195

## **Computer Security I**

This course provides the student with information and training on computer security, including risk mitigation, infrastructure security, application security, operational security, and information security along with identifying applicable policies, laws and regulations. This course is designed to help the student prepare for the CompTIA Security+ certification. (4 credit, 4 lecture, 0 lab)

#### IT 196

## **Computer Security PenTest**

This course provides the student with information and training on computer penetration testing. This course will provide the student with the knowledge and skills required to plan and scope a penetration testing engagement which includes vulnerability scanning, understanding legal and compliance requirements, analyzing results, and producing a written report with remediation techniques. This course is designed to help the student prepare for the CompTIA PenTest+ certification exam. Prerequisite: Instructor consent. (4 credit, 4 lecture, 0 lab)

#### IT 210

## **Introductory Networking**

This course provides the student an introduction to networking. (2 credit, 2 lecture, 0 lab)

#### IT 215

#### **Network Fundamentals**

This course provides the student with the knowledge and skills to implement network architecture with basic network security. The student will also learn to configure, maintain, and troubleshoot network devices using the appropriate tools. This course is designed to help the student prepare for the CompTIA Network+ certification. This course is part of a series to help prepare the student for the Cisco Certified Network Associate certification. (4 credit, 4 lecture, 0 lab)

#### IT 216

## **Intro Switching Routing & Wireless**

This course focuses on switching technologies and router operations that support small-to-medium business networks, including wireless local area networks (WLAN) and security concepts. In this second course in a 3-course CCNA series students perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. (4 credit, 4 lecture, 0 lab)

#### **LAN Administration**

This course provides the student with the competencies manage a local area network in a business environment. Pre-requisite: IT 215, or concurrent enrollment in IT 215, or instructor consent. (4 credit, 4 lecture, 0 lab)

#### IT 218

## **Networking, Security & Automation**

This final course in the CCNA series describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. It covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks. (4 credit, 4 lecture, 0 lab)

#### IT 230

## **Internship**

Provides field experience in which the student is working in a position with at least one of the following responsibilities: network maintenance, computer maintenance, software management, web site management or development, or other approved area related to Information Technology. This course may be repeated three times and may be offered as variable credit. Prerequisite: instructor consent. (4 credit, 0 lecture, 20 lab)

### IT 271

#### **Database Management Systems**

A study of database management systems. Includes representatives of the hierarchical, network, and relational models. Covers the major aspects of database technology, from initial planning, through schema development, to formal operation. A mixture of background theory and practical operation. Emphasizes the restrictions imposed by particular database models, and consequent processing advantages or disadvantages. Pre-requisite: IT 119 (3 credit, 3 lecture, 0 lab)

#### IT 273

## **Programming II**

An advanced treatment of the C++ programming language, including the object-oriented extensions of C++ with a primary focus on data structures. Through the language C++, the course explores linked lists, stacks, queues, trees, and graphs. This course provides a framework for developing a professional programming style. This course provides an advanced treatment of algorithm development and analysis and the development of skill in creating programs through both the top down and object-oriented paradigms. Pre-requisite: IT 173 (IAI CS 911) (3 credit, 3 lecture, 0 lab)

### IT 290

## **Selected Topics in Information Tech**

An in-depth study of topics in the Information Technology field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. Pre-requisite: instructor consent. (4 credit, 4 lecture, 0 lab)

# [MATH] MATHEMATICS

# MATH 100 Bridge Math

This course provides an intensive review of intermediate algebra concepts and skills. Topics include review of real numbers, first degree equations and inequalities, polynomials and factoring, algebraic fractions and equations, integer and rational exponents, radicals, complex numbers, second degree equations, and graphing. This course may be repeated three times and may be offered as variable credit. (4 credit, 4 lecture, 0 lab)

## **MATH 101**

## **Math Improvement**

This developmental studies course is designed to promote and improve basic math skills such as whole number operations, estimation and rounding, order of operations, fractions, decimals, percents, basic algebraic functions, and problem solving. This course may be offered as variable credit and repeatable three times. Pre-requisite: Math placement test. (3 credit, 3 lecture, 0 lab)

#### **MATH 106**

## **Beginning Algebra**

Properties of linear equations and inequalities, exponents, polynomials and factoring, algebraic fractions, graphing, systems of equations in two variables, roots and radicals, and quadratic equations. Pre-requisite: MATH 101. (3 credit, 3 lecture, 0 lab)

#### **MATH 108**

#### Geometry

Undefined geometric terms, postulates, and theorems, properties of parallel lines; properties of triangles, congruent triangles, and similar triangles; quadrilaterals; circles; perimeter and area of two-dimensional figures; surface area and volume of three-dimensional figures; and proof. Pre-requisite: MATH 106. (3 credit, 3 lecture, 0 lab)

#### **MATH 109**

## Intermediate Algebra

Review of real numbers, first degree equations and inequalities, absolute value equations, polynomials and factoring, algebraic fractions and equations, integer and rational exponents, radicals, complex numbers, second degree equations and inequalities, graphing, and functions. May be offered as variable credit. Prerequisite: MATH 106 or instructor consent. (3 credit, 3 lecture, 0 lab)

## **MATH 110**

## **Supportive Skills for Heart of Mathematics**

Math 110 is a course designed to support students in Math 144 Heart of Mathematics and serves as a co-requisite course for college level math retention and completion. This course provides the integrated review for the concurrent Math 144 transfer course, focusing on

supportive skills in topics that will be studied in depth during Math 144: foundational vocabulary; rounding; operations with rational numbers; fractions, decimals and percents; finance formulas; and linear equations. (1 credit, 1 lecture, 0 lab)

#### **MATH 126**

## **Trigonometry**

Review of geometric concepts, trigonometric functions, and the inverse functions, radian measure, identities and equations, solutions of oblique and right triangles, and power and roots of complex numbers. Pre-requisite: MATH 109. (3 credit, 3 lecture, 0 lab)

## **MATH 128**

## College Algebra

The algebra of functions-linear, polynomial, rational, exponential, and logarithmic; solving equations and inequalities based upon these functions; systems of equations and matrix operations; conic sections; and sequences and series. Pre-requisite: MATH 108 and MATH 109 or placement on NextGen Accuplacer at MATH 128 level. (3 credit, 3 lecture, 0 lab)

#### **MATH 141**

## **Statistics**

Descriptive statistics, basic probability theory, probability distributions, statistical inference, correlation and regression, and the analysis of variance. An emphasis will be placed on applications in business, education, nursing, social sciences, and STEM fields. Pre-requisite: Math 128 or Math 144. (IAI M1 902) (3 credit, 3 lecture, 0 lab)

#### **MATH 142**

#### **Finite Mathematics**

Counting techniques, set theory, probability theory, equations of lines, systems of linear equations, linear applications, matrices and matrix applications, linear programming, and the Simplex method. Pre-requisite: MATH 128 or instructor consent. (IAI M1 906) (3 credit, 3 lecture, 0 lab)

#### **MATH 143**

## **Applied Calculus**

Linear, quadratic, and higher order polynomial functions; exponential and logarithmic functions and their applications; mathematical modeling; concepts and techniques of differentiation; curve sketching; finding maxima and minima of functions; concept and techniques of definite and indefinite integrals; the fundamentals theorem of calculus; and applications of differentiation and integration in business and social science. Pre-requisite: MATH 128 or instructor consent. (IAI M1 900-B) (4 credit, 4 lecture, 0 lab)

#### **MATH 144**

#### **Heart of Mathematics**

Focuses on mathematical reasoning and the solving of real-life problems, rather than on routine skills and appreciation. Explores some of the most profound ideas in mathematics. Topics include number theory, geometry, graph theory, and counting techniques and probability. Prerequisite: MATH 109 with a grade of "C" or better or placement on NextGen Accuplacer at MATH 144 level.. (IAI M1 904) (3 credit, 3 lecture, 0 lab)

#### **MATH 151**

## **Occupational Math**

Review of the concepts of whole number arithmetic, fractions, decimals, percents, and ratios and proportions. Practical applications of arithmetic and geometry, measurement systems, and basic algebra concepts. Pre-requisite: MATH. (4 credit, 4 lecture, 0 lab)

## MATH 161 Pre-Calculus

Topics include: rational, real, and complex number systems, elementary functions including polynomial, rational, exponential, logarithmic and trigonometric, and analytic geometry.

Preparation for calculus. Pre-requisite: MATH 108 and MATH 128 or MATH 144. (4 credit, 4 lecture, 0 lab)

#### **MATH 162**

## Calculus & Analytic Geometry I

Treatment of the major concepts and techniques of single variable calculus, with careful statements but few proofs. Differential and integral calculus of the elementary functions with associated analytic geometry. Prerequisite: MATH 161 or MATH 128 and MATH 126 or instructor consent. (IAI M1 900-1, MTH 901) (5 credit, 5 lecture, 0 lab)

### **MATH 204**

## **Algebraic and Arithmetic Systems**

General problem solving techniques; functions; whole numbers, integer, rational numbers, irrational numbers, and real numbers; number theory; probability; and statistics. For elementary education majors only. Pre-requisite: MATH 108 (Geometry) or one year of high school Geometry and MATH 109 (Intermediate Algebra) or equivalent. You may not enroll in this course unless you have completed one year of high school Geometry with a grade of "C" or better OR have previously completed MATH 108 (Geometry) with a grade of "C" or better. (3 credit, 3 lecture, 0 lab)

## **MATH 205**

## **Geometry for Elementary Teachers**

Parallel and perpendicular lines; measurement of angles, line segments, time, and temperature; ratio and proportions; congruence and similarity; area, surface area, and volume; Greek constructions, proofs, and the Cartesian coordinate system. For elementary education majors only. Pre-requisite: MATH 204 or instructor consent. (IAI M1 903) (3 credit, 3 lecture, 0 lab)

#### **MATH 221**

## Calculus & Analytic Geometry II

Develops the techniques of single-variable calculus begun in Calculus I and extends the concepts of function, limit, derivative and integral to functions of more than one variable. The treatment is intuitive, as in Calculus I. Techniques of integration, introduction to multivariate calculus, elements of infinite series.

Pre-requisite: MATH 162 or instructor consent. (IAI M1 900-2, MTH 902) (5 credit, 5 lecture, 0 lab)

#### **MATH 222**

## Calculus & Analytic Geometry III

Further topics in calculus. Definite integrals over solid regions, applications of partial derivatives, vectors and vector operations, derivatives of vector functions, line integrals. Green's theorem. Pre-requisite: MATH 221 or instructor consent. (IAI M1 900-3, MTH 903) (5 credit, 5 lecture, 0 lab)

#### **MATH 225**

## **Differential Equations**

A course covering methods of solving ordinary differential equations. This course covers a variety of topics: existence and uniqueness of solutions, first order differential equations, linear differential equations with constant coefficients, the general solution to homogeneous linear equations, the general solution to linear nonhomogenous equations, variation of parameters, undetermined coefficients, linear independence and the Wronskian, exact equations, separable equations, substitution methods and applications, high-order (second order) differential equations, method of undetermined coefficients, solutions of initial value problems by LaPlace transforms, systems of linear differential equations, numerical methods, initial value problems, and applications from physics, engineering, business, and other areas. Prerequisite: MATH 222 or concurrent enrollment (3 credit, 3 lecture, 0 lab)

#### **MATH 280**

## **Selected Topics in Mathematics**

An in-depth study of selected problems or topics in mathematics. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are

considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# [MUS] MUSIC

#### **MUS 121**

## **Music Appreciation**

Designed to train students in perceptive listening and to introduce them to representative music masterpieces. Emphasis will begin on the elements of music, and will continue with various musical forms and periods, and great performers and composers. (IAI F1 900) (3 credit, 3 lecture, 0 lab)

#### **MUS 122**

#### **Basic Guitar**

Beginning instruction on an acoustical guitar for those students who have had no previous instruction or those who already play, but need to learn musical notation. Activities will include group instruction, singing and accompanying traditional and contemporary songs, performing in a guitar ensemble, listening to a wide variety of guitar music. This course is repeatable up to three times. (1 credit, 0 lecture, 2 lab)

## **MUS 124**

#### **Private Applied Music I**

Private study of any band or orchestra instrument or voice under the supervision of a college-approved instructor. An examination by jury at the conclusion of the semester will be required of music majors. A laboratory fee of \$190 per credit will be charged. This course may be repeated three times. (4 credit, 0 lecture, .5 lab)

#### **MUS 125**

## **Private Applied Music II**

A continuation of MUS 124. This course may be repeated three times. A laboratory fee of \$190 per credit will be charged. (4 credit, 0 lecture, .5 lab)

#### **MUS 126**

#### **Introduction to American Music**

Historical survey of the development and major cultural contributions of American music and composers, including symphonic, jazz, and popular forms, within the context of the American culture of the time. (IAI F1 904) (3 credit, 3 lecture, 0 lab)

#### **MUS 127**

## **Group Piano Instruction**

Group instruction designed for students with little or no keyboard experience. Theory, technique, sight-reading, harmonization, improvisation, and performance activities are a part of this course. (1 credit, 0 lecture, 2 lab)

#### **MUS 128**

## **Introduction to Choral Singing**

This course is designed for the beginning singer to introduce and develop basic singing techniques, sight reading skills, and basic music theory concepts. Public performances presented each semester. (1 credit, 0 lecture, 2 lab)

#### **MUS 141**

#### Chorus

Open to all college students as well as interested persons of the community; may be taken four times for academic credit (Repeated three times). Public performances presented each semester. (1 credit, 0 lecture, 2 lab)

## **MUS 142**

#### Chorus II

A continuation of MUS 141 Chorus. Open to all college students as well as interested persons of the community; may be taken four times for academic credit (repeated three times). Public performances presented each semester. (1 credit, 0 lecture, 2 lab)

## **MUS 143**

#### **Chorus III**

A continuation of MUS 142 Chorus II. Open to all college students as well as interested persons of the community; may be taken four times for academic credit. Public performances presented each semester. (1 credit, 0 lecture, 2 lab)

#### **MUS 144**

## **Chorus IV**

A continuation of MUS 143 Chorus III. Open to all college students as well as interested persons of the community; may be taken four times for academic credit. Public performances presented each semester. (1 credit, 0 lecture, 2 lab)

## **MUS 145**

### **Concert Choir I**

A student-only ensemble open to all interested students regardless of major. This performing ensemble learns choral music from both historical and contemporary periods. Concerts are performed on- and off-campus. One weekly rehearsal is required. May be taken four times (repeated three times) not to exceed four credit hours. (1 credit, 0 lecture, 2 lab)

#### **MUS 146**

#### **Jazz Choir**

Principles and performance of jazz singing and musicianship. Jazz compositions of all styles and periods. Emphasis on developing the rudiments of vocal jazz techniques. (1 credit, 0 lecture, 2 lab)

#### **MUS 147**

## **Concert Choir II**

A student-only ensemble open to all interested students regardless of major. This performing ensemble learns choral music from both historical and contemporary periods. Concerts are performed on- and off-campus. One weekly rehearsal is required. May be taken four times (repeated three times) not to exceed four credit hours. Pre-requisite: Completion of two (2) semesters of MUS 145, Concert Choir I (1 credit, 0 lecture, 2 lab)

## **MUS 148**

## Jazz Choir II

Principles and performance of jazz singing and musicianship. Jazz compositions of all styles and periods. Emphasis on developing the rudiments of vocal jazz techniques. May be taken four times for credit (repeated three times) not to exceed four credit hours. (1 credit, 0 lecture, 2 lab)

## **MUS 161**

#### Band

Open to all college students as well as persons from the community who have had previous instrumental experience. May be taken four times for credit (repeated three times). Public performances presented each semester. Prerequisite: Previous instrumental training or experience. (1 credit, 0 lecture, 2 lab)

#### **MUS 162**

## **Jazz Band**

Participation in Jazz band provides a quality musical and learning experience through the rehearsal and performance of stage band music. The music used in jazz band provides another avenue of experience no usually found in concert band. May be taken four times for credit (repeated three times) not to exceed four credit hours. (4 credit, 0 lecture, 8 lab)

#### **MUS 164**

#### Musical Theatre Choir

Principles and performance of musical theatre. This course will focus on the study and performance of musical theatre literature with an emphasis on developing the rudiments of vocal, staging, and ensemble techniques. This course may be repeated three times. (1 credit, 0 lecture, 2 lab)

#### **MUS 168**

## **Introduction to Instrumental Music**

This course is designed for the beginning instrumentalist to introduce and develop basic band techniques, sight reading skills, and basic music theory concepts. Public performances presented each semester. Pre-requisite: Previous instrumental training or experience. (1 credit, 0 lecture, 2 lab)

#### **MUS 181**

## Theory of Music I

An in-depth study of music that is intended for music majors or minors or those who have had prior training or knowledge of the fundamentals of music. Study includes analysis, harmonization, and aural skills training. Prerequisite: Previous musical training is not

required but would be useful. (3 credit, 3 lecture, 0 lab)

#### **MUS 182**

## Theory of Music II

A continuation of MUS 181. This course is intended for music majors or minors or those who have had prior training or knowledge of the fundamentals of music. Including analysis, harmonization, and aural skills training. Prerequisite: prior music training or knowledge and MUS 181. (3 credit, 3 lecture, 0 lab)

## **MUS 191**

## **Aural Skills I**

A laboratory course designed to complement Music Theory I. This course is designed to help develop the skill of sight singing; emphasis in ear training, sight singing, and keyboarding skills. (1 credit, 0 lecture, 2 lab)

#### **MUS 192**

#### **Aural Skills II**

A laboratory course designed to complement Music Theory II. This course is designed to help develop the skill of sight singing; emphasis in ear training, sight singing, and keyboarding skills. (1 credit, 0 lecture, 2 lab)

#### **MUS 222**

#### **Fundamentals of Music**

A practical, applied approach to music designed for those who have little or background in its fundamentals. Methods and skills will be systematic introduced at the adult-beginner level. Includes such activities as singing, recorder, guitar, and autoharp. (3 credit, 3 lecture, 0 lab)

#### **MUS 224**

## **Private Applied Music III**

A continuation of MUS 125. A laboratory fee of \$190 will be charged. This course may be repeated three times. (4 credit, 0 lecture, .5 lab)

#### **MUS 225**

## **Private Applied Music IV**

A continuation of MUS 224. A laboratory fee of \$190 will be charged. This course may be repeated three times. (4 credit, 0 lecture, .5 lab)

#### **MUS 245**

#### **Concert Choir III**

A student-only ensemble open to all interested students regardless of major. This performing ensemble learns choral music from both historical and contemporary periods. Concerts are performed on- and off-campus. One weekly rehearsal is required. A continuation of MUS 147, Concert Choir II. May be taken four times (repeated three times) not to exceed four credit hours. (1 credit, 0 lecture, 2 lab)

## **MUS 247**

#### **Concert Choir IV**

A student-only ensemble open to all interested students regardless of major. This performing ensemble learns choral music from both historical and contemporary periods. Concerts are performed on- and off-campus. One weekly rehearsal is required. A continuation of MUS 245, Concert Choir III. May be taken four times (repeated three times) not to exceed four credit hours. (1 credit, 0 lecture, 2 lab)

#### **MUS 280**

#### **Selected Topics in Music**

An in-depth study of selected problems or topics in music. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. (3 credit, 1 lecture, 4 lab)

#### **MUS 281**

## Theory of Music III

A continuation of MUS 181 & MUS 182. Study includes advanced harmonic techniques, modulation, altered chords, chromatic harmony and introduction of contemporary harmonic principles. Advanced aural skills training is included as a part of this course. Pre-requisite:

MUS 182 or equivalent. (3 credit, 3 lecture, 0 lab)

#### **MUS 282**

## Theory of Music IV

A continuation of MUS 281. Advanced harmonic techniques, twentieth century techniques, and advanced aural skills training are a part of this course. Pre-requisite: MUS 281. (3 credit, 3 lab, 0 lab)

#### **MUS 291**

## **Aural Skills III**

A laboratory course designed to complement Music Theory III. This course is designed to help develop the skill of sight singing; emphasis in ear training, sight singing, and keyboarding skills. (1 credit, 0 lecture, 2 lab)

#### **MUS 292**

#### **Aural Skills IV**

A laboratory course designed to complement Music Theory IV. This course is designed to help develop the skill of sight singing; emphasis in ear training, sight singing, and keyboarding skills. (1 credit, 0 lecture, 2 lab)

# [NUR] PRACTICAL NURSING

## NUR 170 (Fundamentals I) Practical Nursing Basic Procedures

Introduces the practical nursing student to the functions, approach, application and complexities of nursing skills. Basic nursing procedures are introduced. The Skills Procedure checklists incorporated in the textbook will be utilized for the performance and assessment of skills. Pre-requisite: per PN handbook. (3 credit, 1.5 lecture, 5 lab)

# NUR 171 (Fundamentals II) Practical Nursing Principles & Procedures I

Introduces the practical nursing student to the functions, approach, application, and complexities of nursing skills. Basic nursing procedures are practiced. Introduces more advanced skills. Pre-requisite: per PN handbook. (3 credit, 1.5 lecture, 5 lab)

## NUR 172 (Pharmacology I)

## Practical Nursing Principles & Procedures II

Studies the action of drugs on the human body: includes the theory and practice of medication administration, drug actions, and medication calculations. Pre-requisite: per PN handbook. (4 credit, 3 lecture, 3 lab)

# NUR 173 (Nutrition/Growth & Development) Practical Nursing Principles & Procedures III

Explores human growth and development in a comprehensive manner. Discusses biophysical, cognitive, affective, social, and spiritual aspects of growth and development. Explores developmental changes occurring from birth to death as they relate to nursing interventions. Prerequisite: per PN handbook. (3 credit, 3 lecture, 0 lab)

#### **NUR 176**

## **Community and Mental Health Nursing**

Emphasizes personal and community aspects of mental health and illness. Mental function, dysfunction, treatment, and nursing care. Provides opportunities for observation of holistic care in community and mental health facilities. Pre-requisite: per PN handbook. (2 credit, 1.5 lecture, 1 lab).

## **NUR 177**

#### **Pediatric Nursing**

Builds upon growth and development patterns and concepts. Provides interventions for well and hospitalized children related to developmental and physical needs. Common childhood disorders and appropriate nursing care for disorders and injuries. Pre-requisite: per PN handbook. (2 credit, 1.5 lecture, 1 lab)

#### **NUR 178**

## **Mother and Newborn Nursing**

Addresses antepartum, intrapartum, postpartum, and neonatal periods. Discusses normal as well as pathophysiological reproduction, birth process and neonatal conditions. Emphasizes family involvement and cultural needs. Prerequisite: per PN handbook. (3 credit, 2 lecture, 3 lab).

#### **NUR 190**

# Nursing Care of the Adult I (Medical-Surgical)

Care of selected patients in clinical affiliations and the study of disease conditions, symptoms, diagnostic measures and their nursing implications. Emphasizes dietary and pharmacological treatment and nursing care. Pre-requisite: per PN handbook. (4 credit, 3 lecture, 3 lab)

# **NUR 198 (Medical-Surgical) Nursing Care of the Adult II**

The care of selected patients in clinical affiliations and the study of disease conditions, symptoms, diagnostic measures and their nursing implications. Dietary and pharmacological treatment and nursing care are emphasized. Pre-requisite: per PN handbook. (4 credit, 3 lecture, 3 lab)

## NUR 199 (Pharmacology II) Nursing Care of the Adult III

Continues affiliation at selected clinicals as well as study of disease conditions, symptoms, diagnostic measures, and their nursing implications. Emphasizes dietary and pharmacological treatment and nursing care. Emphasizes the pharmacological aspects of medical/surgical nursing. Pre-requisite: per PN handbook. (5 credit, 4 lecture, 3 lab)

#### **NUR 211**

## **Nursing of the Adult IV (Medical-Surgical)**

Continues affiliation at selected clinical sites and/or lab activities as well as study of disease conditions, symptoms, diagnostic measures and their nursing implications. Emphasizes dietary and pharmacological treatment and nursing care. Pre-requisite: per PN handbook. (3 credit, 2 lecture, 3 lab)

#### **NUR 219**

## **Health Profession Advanced Student Skills**

Provides review of job attainment skills, job survival skills, leadership skills and team building skills. Emphasis on critical thinking, reading strategies, documentation, practice tests and rationales for answers. May be offered as variable credit and repeated three times. (2 credit, 2 lecture, 0 lab)

# [OUTR] OUTDOOR RECREATION

#### **OUTR 111**

#### **Recreation Foundations**

Recreation Foundations provides students with a general understanding of the field of outdoor recreation. Students will learn about the history of recreation in America and its beneficial effect on social behaviors and on the economy. Particular focus will be given to understanding the overall dynamics of the industry including key entities involved and the relationships between them. Students will also look at the possibility for both negative and positive environmental effects and the need for integrating stewardship principles into current programs. (3 credit, 3 lecture, 0 lab)

#### **OUTR 112**

# **Outdoor Program Planning**

Outdoor Program Planning will provide students with the practical skills and understanding necessary to effectively develop outdoor recreation programs in any venue. Students will gain an understanding of critical processes and milestones necessary in any outdoor recreational program and how to properly monitor and evaluate program success. In addition to other learning activities, students will develop plans for two outdoor recreation programs including feedback programs, evaluation techniques and process improvement. (3 credit, 3 lecture, 0 lab)

#### **OUTR 115**

## **Outdoor Recreation Practicum**

Outdoor Recreation Practicum provides students with the opportunity to observe practitioners in the field of outdoor recreation and to obtain practical experience in program dynamics, planning and execution. Students will work closely with faculty to identify an appropriate

location or organization for the experience and to identify key tasks to be observed and understood. Written reports, observations/reflections and supplemental reading will be required. This course may be offered for variable credits and at various venues and is repeatable three times. Pre-requisite: OUTR 111 or instructor consent. (1 credit, 0 lecture, 3 lab)

#### **OUTR 131**

# **Leadership in Outdoor Recreation**

Leadership in Outdoor Recreation is structured to help students understand key leadership principals necessary to effectively support develop and support goals of outdoor recreation organizations. Students will look at the history of effective outdoor leadership including professional and recreational organizations. They will be provided with leadership theory and principals and learn effective means to their implementation and practice. Facilitation of student, group and employee growth and development will be explored in detail and students will develop assessment tools to practically measure understanding and professional growth. Pre-requisite: OUTR 111 or instructor consent. (3 credit, 3 lecture, 0 lab)

## **OUTR 151**

#### **Introduction to Ecotourism**

Introduction to Ecotourism provides students with the fundamental concepts and practices surrounding this emerging field of tourism. Students will explore the growing role and impacts of ecotourism in regional natural resources management and economic development strategies. Case studies will be evaluated and students will develop an evaluation of local ecotourism activities and initiatives and provide recommendation for growth. (2 credit, 2 lecture, 0 lab)

#### **OUTR 152**

#### **Environmental Ethics**

Environmental Ethics is an introductory course in the philosophical treatment of modern environmental issues in our society. It provides students with a cursory understanding of ethical dilemmas in our environment and ways in which dialogue is undertaken to address those issues. Students will engage in topical discussions on environmental issues from a theoretical standpoint as well as a natural standpoint with the goal of developing a more comprehensive view of environmental stewardship. In addition to tests, discussions and article reviews, students will complete a report on one environmental issue affecting America and one environmental issue affecting our region. (2 credit, 2 lecture, 0 lab)

#### **OUTR 153**

#### Intro to So. Illinois Tourism

Introduction to Southern Illinois Tourism guides students through a survey of regional tourism highlights, the history of tourism in this area and tourism's impact on the Southern Illinois economy. Students will learn about the breadth of tourism opportunities, how they are marketed, who manages/operates them, their growth and/or decline and the potential for future successes. Areas of tourism focus will include historical sites, natural resources/outdoor recreation opportunities and other key tourism draws. (2 credit, 2 lecture, 0 lab)

## **OUTR 154**

## So. Illinois Natural Resource Survey

Southern Illinois Natural Resource Survey introduces students to the vast array of natural resources this region offers for recreational and educational purposes. Students will learn about recreational programs available at various sites, organizations and entities involved and the natural and cultural history surrounding them. Students will be required to report on a minimum of two (2) locations including interviews with site supervisors or district biologists. (2 credit, 1 lecture, 2 lab)

## **OUTR 155**

#### **Environmental Interpretation**

Environmental Interpretation provides students desiring to gain employment in the environmental education sector, skills and classroom experience interpreting natural and/or cultural resources. Students will learn to present natural sites to attendees in ways that are both informative and captivating. (2 credit, 1 lecture, 2 lab)

## **OUTR 170**

## **Basic Archery**

Introduction to the basic techniques and skills required for archery, with an emphasis in target shooting. This course may be repeated three times and offered as variable credit. (3 credit, 0 lecture, 6 lab)

#### **OUTR 171**

## **Intermediate Archery**

Introduction to the intermediate techniques and skills required for archery, with an emphasis in target shooting. This course may be repeated three times and offered as variable credit. Prerequisite: OUTR 170. (3 credit, 0 lecture, 6 lab)

#### **OUTR 172**

## **Advanced Archery**

Introduction to the advanced techniques and skills required for archery, with an emphasis in competitive target shooting. This course may be repeated three times and offered as variable credit. Pre-requisite: OUTR 170 and OUTR 171. (3 credit, 0 lecture, 6 lab)

## **OUTR 173**

## **Pro-Am Competition Archery**

Introduction to the advanced techniques and skills required for professional and amateur (Pro-Am) competition archery. This course may be repeated three times and offered as variable credit. Pre-requisite: OUTR 170, OUTR 171, and OUTR 172 or instructor consent. (3 credit, 0 lecture, 6 lab)

## **OUTR 174**

## **ASA Indoor Rules & Procedures**

Introduction to the basic rules, procedures, and code of conduct of the Archery Shooters Association's (ASA) indoor archery programs. The course will give students a working knowledge of the organization, management, and administration of ASA and will familiarize

students with ASA indoor archery event promotion, scheduling, and related services. Facilities management and program development for competitive indoor archery programs within ASA and the development of skills in public relations will be stressed. Adopting the ASA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

#### **OUTR 175**

#### **ASA Rules and Procedures**

Introduction to the basic rules, procedures, and code of conduct of the Archery Shooters Association (ASA). The course will give students a working knowledge of the organization, management, and administration of ASA and will familiarize students with ASA athletic event promotion, scheduling, and related services. Facilities management and program development for competitive archery programs within ASA and the development of skills in public relations will be stressed. Adopting the ASA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

#### **OUTR 190**

## **Outdoor Recreation Internship**

Provides students with practical work experience in which to gain a better understanding of the field of outdoor recreation. The internship creates an important occupational experience in areas of leadership, organizational dynamics, program planning/oversight and day-to-day operations. Internship sites may include selected governmental agencies, non-governmental organizations and/or outdoor recreation businesses. This requires a minimum of 75 internship clock hours per hour of college credit. This course may be offered as variable credit and repeated three times. Pre-requisite: OUTR 111 and OUTR 112 or instructor consent. (5 credit, 0 lecture, 25 lab)

#### **OUTR 199**

## **Program Learning Assessment**

Students will demonstrate their understanding of the field of Outdoor Recreation and their ability to practically implement key concepts and practices by writing a final research paper surveying everything learned in the program. Students will be allowed to pick from a variety of topics including, but not limited to, modern challenges affecting outdoor recreation, development of sustainable outdoor recreation opportunities in certain geographies, and the economic impact of outdoor recreation. Prerequisite: OUTR 111, OUTR 112, and OUTR 131 or instructor consent. (1 credit, 1 lecture, 0 lab)

#### **OUTR 211**

## **Physical and Mental Side of Archery**

The course is designed to promote physical fitness and teach a series of physical and mental exercises to improve the success of bow hunters and competitive 3D archers. Topics have been chosen to take the students methodically from proper shooting form to developing a mindset in which one becomes completely focused on his or her objective, thus achieving, improving, and maintaining athletic prowess. Exercise and fitness rules, principles, and techniques taught in the course have proven to be effective in the fields of both amateur and professional archery and include human movement research and motivation studies. Safety and injury prevention will be stressed. (1 credit, 1 lecture, 0 lab)

### **OUTR 212**

#### **Basic Compound Bow Mechanics**

The course is designed to provide basic information and instruction in the overall construction and function of the modern compound bow. Although a brief history of the compound bow's evolution and function will be discussed, the major emphasis of the course will be on the mechanical, or technical, features of the compound bow, including basic tuning, repair, and maintenance. Safety and injury prevention will be stressed. Industry health and safety concerns will be addressed. The course will also provide an introduction to archery equipment manufacturing, marketing, and related services and will examine the business side of the archery maintenance industry.

Planning and development activities in archery maintenance and service, including facilities management and an emphasis on strong public relations, will be covered. (1 credit, 1 lecture, 0 lab)

## **OUTR 213**

## **Advanced Compound Bow Mechanics**

The course serves as a sequel to Basic Compound Bow Mechanics. In the advanced course, students will deepen their knowledge of compound bows and their performance. It is designed to give students a comprehensive skill set regarding archery equipment as well as an indepth knowledge of archery tools from which they can safely and effectively tune compound bows to their maximum performance efficiency. Compound bow accessories will be covered. Safety and injury prevention will be stressed. The course will continue its examination of the archery industry and its management principles, including financial planning, public relations, the field of archery maintenance, and standard sport recreation services. Pre-requisite: OUTR 212 or instructor consent. (1 credit, 1 lecture, 0

## **OUTR 214**

#### **USCA Rules and Procedures**

Introduction to the basic rules, procedures, and code of conduct of the U.S. Collegiate Archery Association (USCA). The course will give students a working knowledge of the organization, management, and administration of USCA and will familiarize students with USCA athletic event promotion, scheduling, and related services. Facilities management and program development for competitive archery programs and teams within USCA and the development of skills in public relations will be stressed. Adopting the USCA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

#### **OUTR 215**

#### **USAA Rules and Procedures**

Introduction to the basic rules, procedures, and code of conduct of USA Archery (USAA). The

course will give students a working knowledge of the organization, management, and administration of USAA and will familiarize students with USAA athletic event promotion, scheduling, and related services. Facilities management and program development for competitive archery programs and teams within USAA and the development of skills in public relations will be stressed. Adopting the USAA code of conduct for its members will be required. (1 credit, 1 lecture, 0 lab)

## **OUTR 216**

## Mind and Matter in Competition

The course is designed to promote physical and mental fitness and teach a series of physical and mental exercises to improve the success of competitive teams. Topics have been chosen to take the students methodically from proper technique and form to developing a mindset in which one becomes completely focused on his or her objective, thus achieving, improving, and maintaining athletic prowess. Exercise and fitness rules, principles, and techniques taught in the course have proven to be effective in the fields of both amateur and professional competition and include human movement research and motivation studies. Safety and injury prevention will be stressed. (1 credit, 1 lecture, 0 lab)

## **OUTR 231**

## **Indoor Archery ITAA Rules**

Introduction to the basic rules, procedures, and code of conduct for indoor archery competition sanctioned by the Illinois Target Archery Association (ITAA). The course will give students a working knowledge of the organization, management, and administration of ITAA and will familiarize students with ITAA archery event promotion, scheduling, and related services. Facilities management and program development for competitive indoor archery programs and teams within ITAA and the development of skills in public relations will be stressed. Adopting the ITAA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

#### **OUTR 232**

## **Indoor Archery NFAA Rules**

Introduction to the basic rules, procedures, and code of conduct for indoor archery competition sanctioned by the National Field Archery Association (NFAA). The course will give students a working knowledge of the organization, management, and administration of NFAA and will familiarize students with NFAA archery event promotion, scheduling, and related services. Facilities management and program development for competitive indoor archery programs and teams within NFAA and the development of skills in public relations will be stressed. Adopting the NFAA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

## **OUTR 233**

## **Indoor Archery USAA Rules**

Introduction to the basic rules, procedures, and code of conduct for indoor archery competition sanctioned by USA Archery (USAA). The course will give students a working knowledge of the organization, management, and administration of USAA and will familiarize students with USAA archery event promotion, scheduling, and related services. Facilities management and program development for competitive indoor archery programs and teams within USAA and the development of skills in public relations will be stressed. Adopting the USAA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

## **OUTR 234**

## **Indoor Archery USCAA Rules**

Introduction to the basic rules, procedures, and code of conduct for indoor archery competition sanctioned by the US Collegiate Archery Association (USCAA). The course will give students a working knowledge of the organization, management, and administration of USCAA and will familiarize students with USCAA archery event promotion, scheduling, and related services. Facilities management and program development for competitive indoor archery programs and teams within USCAA and

the development of skills in public relations will be stressed. Adopting the USCAA code of conduct for its members will be emphasized. (1 credit, 1 lecture, 0 lab)

#### **OUTR 235**

## **Indoor Archery Fundamentals**

Introduction to the basic techniques and skills required for indoor archery, with an emphasis in target shooting. This course may be repeated three times and offered as variable credit. (3 credit, 0 lecture, 6 lab)

#### **OUTR 236**

## **Indoor Archery Intermediate**

Introduction to the intermediate techniques and skills required for indoor archery, with an emphasis in target shooting. This course may be offered as variable credit and repeated three times. Pre-requisite: OUTR 235. (3 credit, 0 lecture, 6 lab)

#### **OUTR 237**

## **Indoor Archery Advanced**

Introduction to the advanced techniques and skills required for indoor archery, with an emphasis in competitive indoor target shooting. This course may be offered as variable credit and repeated three times. Pre-requisite: OUTR 235 and OUTR 236 or instructor consent. (3 credit, 0 lecture, 6 lab)

#### **OUTR 238**

# **Indoor Archery Pro-Am**

Introduction to the advanced techniques and skills required for professional and amateur (Pro-Am) competition in indoor archery. This course may be repeated three times and offered as variable credit. Pre-requisite: OUTR 235, OUTR 236, and OUTR 237 or instructor consent. (3 credit, 0 lecture, 6 lab)

#### **OUTR 290**

## **Selected Topics in Outdoor Recreation**

An in-depth study of topics in the outdoor recreation field. Classes may include industry-specific recreational opportunities such as mountain biking, outfitting and guiding, horsemanship, water sports and other outdoor

recreation venues. The exact content will vary from semester to semester depending on the subject studied. This course may be offered as variable credit and repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. Student may work individually or on group projects. Pre-requisite: OUTR 111 or instructor consent. (3 credit, 3 lecture, 0 lab)

# [OWL] OUTFITTERS WILDLIFE MANAGEMENT

## **OWL 110**

## **Guiding in Outdoors**

This course introduces the basic concepts needed to be an apprentice outdoor guide or outfitter. Learning will take place in the indoor classroom and in the great outdoors. Students are required to participate in all camping, hiking, backpacking, and overnight excursions. Modern and traditional equipment will be used. Topics will include trip planning, safety, event preparedness, client relations, and campsite essentials. Emphasis will be placed on the basis principles of "leave no trace" and environmental awareness. (2 credit, 1 lecture, 2 lab)

#### **OWL 111**

### **Hunting Education**

This course will certify the student to become an assistant hunter safety course instructor. Students will receive instruction in the safe handling and storage of hunting arms and ammunition, hunting laws and ethics, care and handling of game, and wildlife conservation. (2 credit, 2 lecture, 0 lab)

## **OWL 112**

#### **Wildlife Business Basics**

This course is an introduction to the field of wildlife and natural resource enterprise management in North America. Topics will include a survey of business elements of hunting and wildlife enterprises including hunting as a source of revenue through leases, habitat

consulting, and outfitting. Students will learn how guiding, client relations, and outdoor knowledge management translate into successful business operations. The course will also cover brand management, professional relations, and provide an opportunity to explore outdoor recreation based tourism and recreational real estate. (2 credit, 2 lecture, 0 lab)

#### **OWL 113**

## **Firearms Safety**

This course includes structured hands-on activities in the areas of firearm regulations and safety with an emphasis on use in the wildlife management industry. Students will learn hunting safety, techniques, and ethics for firearm use. Topics include identification and safe handling of firearms, firearm owner responsibility, personal preparedness, and wildlife harvest techniques using firearms. The student will work with pistols, rifles, and shotgun on a range and in a field situation. (2 credit, 1 lecture, 2 lab)

#### **OWL 114**

## **Bow Hunting Safety**

This course includes structured hands-on activities in the areas of archery and bow hunting with an emphasis on use in the wildlife management industry. Students will learn hunting safety, techniques, and ethics for bow hunting equipment. Topics include identification and safe handling of bow hunting implements, bow hunter responsibility, personal preparedness, and wildlife harvest techniques using bow hunting equipment. The student will learn how to handle and use archery equipment in a safe environment. The students will develop an understanding of hunting safety and techniques using archery and bow hunting equipment. (2 credit, 1 lecture, 2 lab)

#### **OWL 115**

## **Freshwater Fishing**

This course includes discussion and structured hands-on activities in the area of freshwater fishing. Topics include an introduction to the sport, as well as techniques, regulations, equipment, and styles to catching and harvesting freshwater fish. Students will learn the proper way to manage fisheries, and the environmental factors that affect fish, their habitat, and the sport of freshwater fishing. (3 credit, 2 lecture, 2 lab)

#### **OWL 116**

## **Big Game Management**

This course is designed to give students training for professional guiding and hunting as it relates to deer and other large game. The student will be working with firearms, archery equipment, food plot equipment, and other equipment for big game management. (3 credit, 2 lecture, 2 lab)

#### **OWL 117**

## **Waterfowl Management**

This course is designed to train students in the areas of waterfowl management, hunting, and guiding. Students will learn about species of waterfowl, wetlands and habitats of waterfowl, techniques for managing waterfowl populations, and rules and regulations. The student will be working with shotguns, decoys, calls, and other field equipment for waterfowl hunting. (3 credit, 2 lecture, 2 lab)

#### **OWL 118**

## **Upland Game Bird Management**

This course is designed to give students training for professional guiding and hunting as it relates to turkey and other small game. The students will work with firearms, archery equipment, decoys, calls, and other equipment for hunting of turkey and small game, such as rabbits and squirrels. (3 credit, 2 lecture, 2 lab)

## **OWL 119**

## **Exotic Wildlife**

This course includes discussion and structured hands-on activities in the area of exotic wildlife hunting in both mammals and birds. Topics include an introduction to exotic species, exotic game habitat, hunting techniques, and exotic game regulations. Students will be studying the difference between native and exotic game along with their traits. Students will learn techniques

to properly hunt these species. (3 credit, 3 lecture, 0 lab)

#### OWL 131

## **Habitat and Food Plot Installation**

This course is designed to familiarize students with major topics in wildlife habitats and nutrition. Students will gain knowledge of basic wildlife management principles as they apply to habitats and areas/food plots that support wildlife species. Topics include basic nutritional principles, concepts of wildlife ecology, population dynamics, and wildlife management strategies. (3 credit, 2 lecture, 2 lab)

#### **OWL 132**

## Range Management

This course is designed to introduce students to the principles of ecology and management of wildlife populations. Students will be introduced to the characteristics of and factors affecting wildlife populations, as well as techniques and theories of management. Topics covered will include population survey methodology, animal capture and handling, harvest analysis of game species, habitat assessment, range improvement, as well as study and recognition of the more common wildlife diseases. (3 credit, 2 lecture, 2 lab)

#### **OWL 133**

## Wildlife Outfitter Media Production

This course introduces the basic concepts needed to produce wildlife photography and videography. Topics will include care and handling of cameras, basic camera functions, camera frames/zoom/pans, editing videography and photography, storyline development, product implementation in media, and media distribution. Students will learn to film/photograph, edit the film/photograph, create a storyline with media, implement products into the story, and distribute the media on various platforms. (3 credit, 3 lecture, 0 lab)

## **OWL 135**

#### **Outfitter Wildlife Internship**

Provides students with practical work experience in which to gain a better understanding of the field of outfitter wildlife management. The internship creates an important occupational experience in areas of leadership, organizational dynamics, program planning/oversight and day-to-day operations. Internship sites may include selected governmental agencies, non-governmental organizations and/or outfitter/wildlife businesses. This requires a minimum of 75 internship clock hours per hour of college credit. This course may be offered as variable credit and repeated three times. Prerequisite: instructor consent. (5 credit, 0 lecture, 25 lab)

#### **OWL 171**

# **Basic Shotgun Shooting**

Introduction to the basic techniques and skills required for safely shooting with a shotgun, with an emphasis in trap shooting. Other disciplines of shooting sports will be touched upon. This course may be repeated three times. (1 credit, 0 lecture, 2 lab)

#### **OWL 172**

## **Intermediate Shotgun Shooting**

Introduction to multiple discipline tournament style of competition shooting with an emphasis in trap, skeet, and sporting clays. This course may be repeated three times. (1 credit, 0 lecture, 2 lab)

## **OWL 173**

## **Advanced Shotgun Shooting**

Advanced approach to the professional style of shooting competition with an emphasis in skeet, trap and sporting clays. This course brings together all the technical and applied areas of competitive shooting in all three disciplines. This course may be repeated three times. (1 credit, 0 lecture, 2 lab)

## **OWL 290**

# **Selected Topics in Wildlife**

An in-depth study of problems, special projects, identification or topics in wildlife, conservation, habitat, and/or wild game. Topics may include but are not limited to the following: wildlife identification, habitat improvement, endangered species, conservation, wildlife law,

environmental science, ecology, safety, ethics, systematics, and/or nature. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. This course may be offered as variable credit and repeated three times. (3 credit, 3 lecture, 0 lab)

# [PE] PHYSICAL EDUCATION

## PE 121

## **Bowling**

Introduction to the basic techniques and skills required for bowling. This co-educational course has no pre-requisite. May be repeated three times (1 credit, 0 lecture, 2 lab)

#### PE 122

## **Intermediate Bowling Baker Method**

Introduction to the techniques and skills required for Baker-Style collegiate bowling. This style of bowling is team-oriented in nature as opposed to individual. May be repeated three times. Prerequisite: PE 121. (1 credit, 0 lecture, 2 lab)

#### PE 123

## **Recreational Sports**

Includes activities such as volleyball, basketball, softball and soccer. This course is designed to develop interest in activities that can be played in one's backyard or in a park. May be taken as variable credit and repeated three times. (1 credit, 0 lecture, 2 lab)

#### PE 124

## **Pro-Am Bowling Fundamentals**

Introduction to the basic techniques and fundamental skills required to bowl as a professional or amateur in the Professional Bowlers Association (PBA). Repeatable three times. (1 credit, 0 lecture, 2 lab)

#### PE 126

## **Physical Fitness Through Conditioning**

Fitness through exercise with emphasis on

weight lifting and/or running to develop cardiovascular endurance and muscle tone. May be repeated three times. Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### PE 127

# **Physical Fitness Conditioning II**

Fitness through exercise with emphasis on weight lifting and/or running to develop cardiovascular endurance and muscle tone (may be repeated three times). Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### PE 129

## Physical Fitness Conditioning III

Fitness through exercise with emphasis on weight lifting and/or running to develop cardiovascular endurance and muscle tone (may be repeated three times). This course is a continuation of Physical Fitness Conditioning II. This course may be offered as variable credit. Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

## PE 130

#### **Basic Self-Defense**

Includes the development of situational awareness and preventative strategies to defend oneself. May be taken as variable credit and repeated up to three times. (1 credit, 0 lecture, 2 labs)

#### PE 142

#### Yoga

Introduction to the specific skills and techniques of yoga. The student may gain health benefits such as improved body positioning, increased flexibility, increased muscular endurance, and increased muscular strength. This course may be repeated but cannot exceed a total of two (2) credit hours toward graduation. May be offered as variable credit. (1 credit, 0 lecture, 2 lab)

## **PE 144**

#### Men's Team Baseball I

Introduction to the skills, knowledge, attitudes and physical conditioning necessary for playing baseball. (2 credit, 0 lecture, 4 lab)

#### PE 145

#### Women's Team Softball I

An introduction to the rules, regulations, skills and physical conditioning necessary for playing softball. Includes theory, demonstration, and participation. (2 credit, 0 lecture, 4 lab)

#### **PE 146**

## Women's Team Softball II

Group instruction in skills, techniques, rules, terminology, and scoring of softball. Emphasis on experience in playing the game. Laboratory participation is required. This course is intended for sophomore students on the softball team. Pre-requisite: Sophomore student on the softball team. (2 credit, 0 lecture, 4 lab)

#### PE 161

## Women's Team Volleyball I

Introduction to the skills, rules, attitudes and strategies of volleyball, including theory and demonstration. Students will be expected to participate under game conditions. This course is intended for freshman players of the volleyball team.

#### PE 162

## Basketball

Introduction to the basic skills, knowledge, attitudes, and physical conditioning necessary for playing basketball. Emphasis on recreational values. May be repeated once. (.5 credit, 0 lecture, 1 lab)

## PE 163

## **Bowling Center Operation**

Develops operational and managerial skills for those in charge of recreational bowling centers. (1 credit, 1 lecture, 0 lab)

#### PE 169

## Fitness Through Walking

This course is a walk/jog class designed to

condition the heart and muscles through continuous walking, jogging, or running. The use of circuit training via free weights and other aerobic exercise may be used. The student will be provided knowledge of cardio respiratory endurance, muscular strength and flexibility. May be repeated three times. (.5 credit, 0 lecture, 1 lab)

#### PE 174

## **NAIA Rules & Regulations**

Introduction to the basic rules, procedures, and code of conduct of National Association of Intercollegiate Athletics (NAIA) collegiate bowling. The course will give students a working knowledge of the organization, management, and administration of NAIA and will familiarize students with athletic event promotion, scheduling, and related services. Facilities management and program development for competitive bowling programs and teams within NAIA and the development of skills in public relations will be stressed. Study of the NAIA code of conduct for bowling members will be required. (1 credit, 1 lecture, 0 lab)

## PE 175 PBA Rules & Regulations

Introduction to the basic rules, procedures, and code of conduct of the Professional Bowlers Association (PBA). The course will give students a working knowledge of the organization, management, and administration of the PBA and will familiarize students with athletic event promotion, scheduling, and related services. Facilities management and program development for competitive bowling programs and teams within the PBA and the development of skills in public relations will be stressed. Study of the PBA's code of conduct for bowling members will be required. (1 credit, 1 lecture, 0 lab)

## PE 176

#### **USBC** Rules and Procedures

Introduction to the basic rules, procedures, and code of conduct of the United States Bowling

Congress (USBC) Collegiate Division. The course will give students a working knowledge of the organization, management, and administration of USBC Collegiate and will familiarize students with USBC Collegiate athletic event promotion, scheduling, and related services. Facilities management and program development for competitive collegiate bowling programs and teams within USBC and the development of skills in public relations will be stressed. Adopting the USBC Collegiate code of conduct for its members will be required. (1 credit, 1 lecture, 0 lab)

#### PE 177

## **Physical & Mental Sides of Bowling**

The course is designed to promote physical fitness and teach a series of physical and mental exercises to improve the success of competitive bowlers. Topics have been chosen to take the students methodically from proper bowling form to developing a mindset in which one becomes completely focused on his or her objective, thus achieving, improving, and maintaining athletic prowess. Exercise and fitness rules, principles, and techniques taught in the course have proven to be effective in the fields of both amateur and professional bowling and include human movement research and motivation studies. Safety and injury prevention will be stressed. (1 credit, 1 lecture, 0 lab)

#### **PE 178**

#### **NCAA Rules & Procedures**

Introduction to the basic rules, procedures, and code of conduct of National College Athletic Association (NCAA) collegiate bowling. The course will give students a working knowledge of the organization, management, and administration of NCAA and will familiarize students with athletic event promotion, scheduling, and related services. Facilities management and program development for competitive bowling programs and teams within NCAA and the development of skills in public relations will be stressed. Study of the NCAA code of conduct for bowling members will be required. (1 credit, 1 lecture, 0 lab)

## PE 179

#### NJCAA Rules & Procedures

Introduction to the basic rules, procedures, and code of conduct of National Junior College Athletic Association (NJCAA) collegiate bowling. The course will give students a working knowledge of the organization, management, and administration of NJCAA and will familiarize students with athletic event promotion, scheduling, and related services. Facilities management and program development for competitive bowling programs and teams within NJCAA and the development of skills in public relations will be stressed. Study of the NJCAA code of conduct for bowling members will be required. (1 credit, 1 lecture, 0 lab)

#### PE 180

#### **NAIA Rules & Procedures**

Introduction to the basic rules, procedures, and code of conduct of National Association
Intercollegiate Athletics (NAIA) bowling. The course will give students a working knowledge of the organization, management, and administration of NAIA and will familiarize students with athletic event promotion, scheduling, and related services. Facilities management and program development for competitive bowling programs and teams within NAIA and the development of skills in public relations will be stressed. Study of the NAIA code of conduct for bowling members will be required. (1 credit, 1 lecture, 0 lab)

#### PE 181

## **Coaching High School Bowling**

Basic theory, techniques, and principles of coaching competitive high school bowling. (1 credit, 1 lecture, 0 lab)

## PE 182

## **Coaching Collegiate Bowling**

Basic theory, techniques, and principles of coaching competitive collegiate bowling. (1 credit, 1 lecture, 0 lab)

#### PE 183

**Aerobic Fitness Exercise** 

Individualized exercise program which uses multi-station exercise equipment utilizing sub maximal weights with multiple repetitions. Course is intended to improve cardiovascular efficiency, strength, endurance, flexibility and all-around fitness. May be repeated three times. Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### PE 184

#### **Aerobic Fitness Exercise II**

Fitness through exercise with emphasis on weight lifting and/or running to develop cardiovascular endurance and muscle tone. May be repeated three times. This course may be offered for variable credit. Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### PE 185

#### **Aerobic Fitness Exercise III**

Fitness through exercise with emphasis on weight lifting and/or running to develop cardiovascular endurance and muscle tone. May be repeated three times. This course may be offered for variable credit. This course is a continuation of Aerobic Fitness Exercise II. Pre-requisite: Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### PE 186

#### **Aerobic Fitness Exercise IV**

Fitness through exercise with emphasis on weight lifting and/or running to develop cardiovascular endurance and muscle tone. May be repeated three times. This course may be offered for variable credit. Pre-requisite:

Doctor's permission for those with history of health problems. (1 credit, 0 lecture, 2 lab)

#### **PE 188**

## Men's Team Golf I

Introduction to the skills, knowledge, attitudes and physical condition necessary for playing golf. Includes theory, demonstration, and participation. May be repeated three times. (2 credit, 0 lecture, 4 lab)

## PE 189

## Fitness Through Walking II

This course is a walk/jog class designed to condition the heart and muscles through continuous walking, jogging, or running. The use of circuit training via free weights and other aerobic exercise may be used. The student will be provided knowledge of cardio respiratory endurance, muscular strength and flexibility. Maybe repeated three times. (.5 credit, 0 lecture, 1 lab)

## PE 209

## Fitness Through Walking III

This course is a walk/jog class designed to condition the heart and muscles through continuous walking, jogging, or running. The use of circuit training via free weights and other aerobic exercise may be used. The student will be provided knowledge of cardio respiratory endurance, muscular strength and flexibility. Maybe repeated three times. (.5 credit, 0 lecture, 1 lab)

#### PE 219

## Fitness Through Walking IV

This course is a walk/jog class designed to condition the heart and muscles through continuous walking, jogging, or running. The use of circuit training via free weights and other aerobic exercise may be used. The student will be provided knowledge of cardio respiratory endurance, muscular strength and flexibility. Maybe repeated three times. (.5 credit, 0 lecture, 1 lab)

#### PE 220

## **Theory of Coaching**

Theory, techniques, and principles of coaching selected team or individual sports. (3 credit, 3 lecture, 0 lab)

#### PE 221

## Men's Team Basketball I

Individual skills and team techniques are covered as students gain knowledge and an understanding of basketball. Laboratory participation is required. This course is intended for freshman students on the men's basketball

team. Pre-requisite: Freshman student on the men's basketball team. (2 credit, 0 lecture, 4 lab)

#### PE 222

## Men's Team Basketball II

A continuation of PE 221 with emphasis on developing the skills in basketball. This course is intended for sophomore students on the men's basketball team. Pre-requisite: PE 221 or instructor consent. (2 credit, 0 lecture, 4 lab)

#### PE 229

# Fitness Through Walking V

This course is a walk/jog class designed to condition the heart and muscles through continuous walking, jogging, or running. The use of circuit training via free weights and other aerobic exercise may be used. The student will be provided knowledge of cardio respiratory endurance, muscular strength and flexibility. Maybe repeated three times. (.5 credit, 0 lecture, 1 lab)

## **PE 244**

#### Men's Team Baseball II

Development of advanced skills of batting, fielding, and playing all positions; strategies of offense and defense; methods of conducting team practices; training and conditioning; review of rules and scouting techniques. Pre-requisite: PE 144 or instructor consent. (2 credit, 0 lecture, 4 lab)

## PE 261

# Women's Team Volleyball II

Introduction to the skills, rules, attitudes and strategies of volleyball, including theory and demonstration. Students will be expected to participate under game conditions. This course is intended for sophomore players of the volleyball team. (2 credit, 0 lecture, 4 lab)

#### PE 288

## Men's Team Golf II

Group instruction in skills, techniques, rules, terminology and scoring of golf. Emphasis

on experience in playing the game. Laboratory participation is required. The course is intended for sophomore students on the golf team. (2 credit, 0 lecture, 4 lab)

# [PHIL] PHILOSOPHY

#### **PHIL 121**

## **Introduction to Philosophy**

Acquaints the student with the categories of and methods of philosophical inquiry, and surveys some major systems of philosophical thought from classical to contemporary times. (IAI H4 900) (3 credit, 3 lecture, 0 lab)

#### **PHIL 122**

## **Fundamentals of Logic**

Designed to develop a knowledge and understanding of the methods and principles used to distinguish correct from incorrect reasoning. Three areas are stressed: (1) the uses of language and fallacies, (2) deduction, and (3) induction. May be taken concurrently with PHIL 121. (IAI H4 906) (3 credit, 3 lecture, 0 lab)

#### **PHIL 221**

## **Fundamentals of Ethics**

Designed to investigate the nature of actions, the meaning of right and good, the principle ethical theories, and the organization of individual and social values from a philosophical perspective. Pre-requisite: PHIL 121 or instructor consent. (IAI H4 904) (3 credit, 3 lecture, 0 lab)

### **PHIL 224**

## **Comparative Religion**

Comparison and investigation of contemporary and historical major Eastern and Western religions such as Hinduism, Buddhism, Confucianism, Taoism, Shintoism, Jainism, Judaism, and Islam. Examines philosophical, historical, social and political aspects. (IAI H5 904N) (3 credit, 3 lecture, 0 lab)

#### **PHIL 280**

## Selected Topics in Philosophy

An in-depth study of selected problems or topics in philosophy. The exact content and instructional methodology will vary from semester to semester depending on the materials to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation and may be coffered as variable credit. (3 credit, 3 lecture, 0 lab)

# [PHYS] PHYSICS

## **PHYS 121**

## **Basic Physics**

Topics include: the concepts and methods of physics; mechanics; heat and thermodynamics; electricity and magnetism, and modern physics. Laboratory required. Pre-requisite: MATH 109 or placement on NextGen Accuplacer at MATH 128 or MATH 144 level. (IAI P1 900L) (4 credit, 3 lecture, 2 lab)

#### **PHYS 221**

### **General Physics I**

Topics include: mechanics (kinematics; Newton's Laws; work and energy; impulse and momentum; rotational dynamics; gravitation and Kepler's laws; and harmonic motion) and fluids (fluid statistics and dynamics). Laboratory required. Pre-requisite: MATH 162 (IAI P2 900L) (5 credit, 4 lecture, 2 lab)

#### **PHYS 222**

## **General Physics II**

Topics include: Electricity and magnetism (charge; electric field and potential; current, resistance, capacitance, dielectrics and inductance; electromotive force; direct current circuits, alternating current circuits, RLC circuits, laws of Gauss, Ampere and Faraday; and magnetic properties) Maxwell's equations; electromagnetic waves; optics, interference,

diffraction. Laboratory required. Pre-requisite: PHYS 221 (IAI PHY 912) (5 credit, 4 lecture, 2 lab)

#### **PHYS 241**

#### **Statics**

Topics include: Static equilibrium of particles and rigid bodies, analysis of forces in trusses, frames, beams and cables, determination of centroids and moment of inertia, friction, virtual work. Pre-requisite: MATH 221 and PHYS 221 or concurrent enrollment. (IAI EGR 942) (3 credit, 3 lecture, 0 lab)

## **PHYS 242**

## **Dynamics**

Topics include: kinematics of particles in rectilinear and curvilinear motions; Newton's second law, energy and momentum applied to a particle or system of particles; kinematics of rigid body motion; application of Newton's second law, energy and momentum to the motion of a rigid body; mechanical vibrations. Pre-requisite: PHYS 241 (IAI EGR 943) (3 credit, 3 lecture, 0 lab)

# [PLC] PROGRAMMABLE LOGIC CONTROLLER

## **PLC 131**

## **Intro to Programmable Logic Controllers**

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include processor units, numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming. (3 credit, 2 lecture, 2 lab)

# [PLUM] PLUMBING

#### **PLUM 111**

## **Foundations of Plumbing**

This course introduces basic plumbing tools,

materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system. (3 credit, 3 lecture, 0 lab)

#### **PLUM 131**

## **Intro to Plumbing**

This course introduces basic plumbing tools, materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system. (3 credit, 3 lecture, 0 lab)

# [PR] PUBLIC RELATIONS

## PR 111

#### **Public Relations Skills**

Prepares individuals to perform the techniques of direct consumer persuasion, public relations, recruitment, marketing, leadership skills, organizational skills, presentations, customer service, legal/ethical issues, and interpersonal skills. This course may be offered for variable credit and repeatable three times. (4 credit, 1 lecture, 6 lab)

# [PST] Powersports Technology

#### **PST 132**

## MC/ATV/UTV Electronics

The theory, principles, and function of powersport electrical systems. Includes the electrical aspects of design, operation, and repair of motorcycle and ATV/UTV engines. Includes ignition systems and electric starter systems of powersport vehicles. Pre-requisite: DSL 131. (3 credit, 2 lecture, 2 lab)

## **PST 140**

## Intro, Set-up, and Maintenance

A survey of the skills needed for success with powersports vehicles. An emphasis on proper

maintenance techniques for on- and off-road land-based recreational vehicles is provided. (3 credit, 2 lecture, 2 lab)

#### **PST 172**

#### **Practicum**

A course to allow the student an opportunity to receive practical experience in a powersports to acquire work-related skills. This program will be coordinated with classwork throughout the semester. (2 credit, 0 lecture, 4 lab)

#### **PST 232**

### Suspension, Brakes, and Wheels

A survey of the principles of brake systems, wheels, and suspension systems of motorcycles, ATVs and UTVs. (4 credit, 3 lecture, 2 lab)

#### **PST 270**

## **Fuel Systems**

A survey of fuel types and systems for current 2and 4-stroke engines. Includes coverage of fuel distribution systems and fuel chemistry that pertains to powersports machines. Hands-on learning of inspection, diagnosis, servicing, and troubleshooting. (3 credit, 2 lecture, 2 lab)

# **PST 275**

## **Engines**

A survey of the principles of powersport engines functions and repair. Introduces the procedure for complete powersports engine rebuild. Includes a discussion of 2- and 4-stroke engine types, major components and component disassembly inspection, and repair. (4 credit, 3 lecture, 2 lab)

# [PSYC] PSYCHOLOGY

#### **PSYC 121**

## **Introduction to Psychology**

A survey of the study of human and animal behavior with emphasis on the scientific nature of contemporary psychological investigation. Topics may include the biology of behavior, sensation and perception, learning, memory, cognition, motivation, emotion, life-span development of behavior, personality, abnormal behavior and its therapies, social behavior, and individual differences. (IAI S6 900) (3 credit, 3 lecture, 0 lab)

## **PSYC 131**

#### **Human Relations**

Helps occupational program student apply basic principles of psychology in everyday relations with co-workers and customers. Studies group sociology and inter-group relationships within the work organization. Credit toward graduation will not be given for both PSYC 131 Human Relations and PSYC 121 Introduction to Psychology. Not applicable toward A.A. or A.S. degrees. (3 credit, 3 lecture, 0 lab)

## **PSYC 221**

## **Child Psychology**

Introduction to theory and research on the biological, physical, social, and cognitive development of the human child from conception to adolescence. Topics may include genetic factors, prenatal development, sensory and perceptual changes, motor system development, language acquisition, social learning, cultural influences, and aspects of abnormal development. Focused observations will be conducted in a variety of settings. (IAI S6 903) (3 credit, 3 lecture, 0 lab)

#### **PSYC 244**

## **Human Growth & Development - Lifespan**

A study of growth and development of the individual from conception through adulthood. Emphasis on social, emotional, cognitive, physical aspects of growth and behavior related to school settings with special emphasis on the middle school years. Includes research methods and developmental theories. (3 credit, 3 lecture, 0 lab)

## **PSYC 246**

#### Social Psychology

Integration of theory and empirical research as they relate to: research methods; attitude formation and change; social cognition; interpersonal relations; group processes; and social influence. Pre-Requisite: PSYC 121 (IAI PSY 908) (3 credit, 3 lecture, 0 lab)

#### **PSYC 260**

## Abnormal Psychology

Integration of theory and empirical research as they relate to: research methods; definition, assessment and categorization of abnormal behavior; biological, psychosocial, and sociocultural origins of abnormal behavior; and treatment and prevention. Pre-requisite: PSYC 121. (IAI PSY 905) (3 credit, 3 lecture, 0 lab)

#### **PSYC 280**

## **Selected Topics in Psychology**

An in-depth study of selected problems or topics in psychology. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credits toward graduation. May be offered as variable credit. (3 credit, 3 lecture, 0 lab)

# [SAFE] SAFETY

## **SAFE 131**

# OSHA General Industry Safety & Awareness Training

Ideas and methods for preventing personal injury and property damage in a variety of general industry workplaces are discussed. Examples of topics to be covered include but are not limited to: Scaffolding Safety, Forklift Operations, Fall Prevention, Fire Prevention, Fire Protection, Back Injury Prevention, Machine Guarding, Material Handling and Storage, Personal Protective Equipment, Trenching and Excavating, Work Zone Safety, and General Safety and Health. This course is variable credit (.5 to 4 hours) and repeatable 3 times. (4 credit, 4 lecture, 0 lab)

## **SAFE 132**

# OSHA Construction Industry Safety & Awareness Training

Ideas and methods for preventing personal injury and property damage in a variety of construction workplaces are discussed.

Examples of topics to be covered include but are not limited to: Scaffolding Safety, Forklift
Operations, Fall Prevention, Fire Protection,
Back Injury Prevention, Machine Guarding,
Material Handling and Storage, Personal
Protective Equipment, Trenching and
Excavating, Work Zone Safety, and General
Safety and Health. This course is variable credit
(.5 hours to 4 hours) and repeatable 3 times. (4 credit, 4 lecture, 0 lab)

#### **SAFE 150**

## **Theater Safety**

Covers the unique problems that threaten the health and safety in the theater and their solutions. Includes: Current safety laws and how they apply to theaters; general safety practices; chemical hazards and personal protection equipment; costume shop safety; and scene and prop shop safety. Intended to meet the training requirements of the "right-to-know" laws which apply to theaters and shops. (.5 credit, .5 lecture, 0 lab)

#### **SAFE 171**

## **Introduction to Basic Handgun Shooting**

Introduction to the basics of handgun shooting, to include classroom instruction and practical application on supervised range facilities. This class may be offered as variable credit and repeated three times. Pre-requisite: Minimum 18 years of age; completion of ALL Additionally Required Forms; possession of Illinois FOID Card (2 credit, 2 lecture, 0 lab)

## **SAFE 173**

## **NRA Basic Pistol Shooting**

The goal of this course is to teach the basic knowledge, skills and attitude necessary for owning and using a pistol safely. Includes classroom instruction and practical application on supervised range facilities. This class may be

offered as variable credit and repeated three times. Pre-requisite: Minimum 18 years of age; completion of ALL Additionally Required Forms; possession of Illinois FOID Card (2 credit, 2 lecture, 0 lab)

#### **SAFE 290**

## **Selected Topics in Firearms**

An in-depth study of problems, special projects or topics in the firearms and/or hunting. Topics may include but are not limited to the following: firearms, firearms simulation training, safety, ethics, and responsibilities of gun ownership. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. This course may be offered as variable credit and repeated three times. Pre-requisite: If the selected topic requires hands on use with firearms, participants must possess a valid Illinois FOID Card. (3 credit, 3 lecture, 0 lab)

# **SERVI SERVICE LEARNING**

#### **SERV 121**

## **Service Learning**

A service learning experience to encourage the personal, academic and professional development of the individual. Student selection and placement within the college or with an agency, community-based organization, business or institution based upon the student's interest, knowledge and skills. Service opportunities may include, but are not limited to, tutoring, literacy training, neighborhood improvement, youth activities, environmental safety, animal shelter care, elderly and disabled assistance, hospital or mental health care. Student may enroll one time each semester for up to four semesters. As an elective, the course is offered on a "Pass/Fail" basis, and is not calculated as part of the overall grade point average. This course may be repeated three times and offered as variable credit. (3 credit, 0 lecture, 6 lab)

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# **[SOC] SOCIOLOGY**

## **SOC 121**

## **Introductory Sociology**

A study of society, including the rules, interactions, and cultural patterns that organize everyday life. Analysis of social conflict, the structure and function of institutions, the dynamics of individual and group interactions, social stratification, and interactions among diverse groups of people. (IAI S7 900) (3 credit, 3 lecture, 0 lab)

## **SOC 221**

## The Family in Society

Survey of the contemporary family in historical and cross-cultural perspectives. Includes trends in mate selection, marriage, child-rearing, employment, gender roles, and communication within the family. (IAI S7 902) (3 credit, 3 lecture, 0 lab)

# [SPAN] SPANISH

**SPAN 111** 

**Conversational Spanish** 

Basic application of the Spanish language for those individuals needing basic communication skills. Use of a basic vocabulary and simple, active conversation. Variable credit and repeatable three times. (3 credit, 3 lecture, 0 lab)

#### **SPAN 121**

## **Elementary Spanish**

An introduction to Spanish with the use of simple, active conversation; reading and structural analysis of the language with stress of accent and correct pronunciation. (4 credit, 3 lecture, 2 lab)

#### **SPAN 122**

## **Elementary Spanish II**

A continuation of SPAN 121 with an intensive and analytical approach to the Spanish language by means of conversations, cultural readings, grammar and simple composition. Pre-requisite: SPAN 121 or one year of high school Spanish. (4 credit, 3 lecture, 2 lab)

#### **SPAN 221**

## **Intermediate Composition Reading I**

Grammar composition, oral practice, and selected readings of Spanish authors. Prerequisite: SPAN 122 or two years of high school Spanish. (4 credit, 3 lecture, 2 lab)

#### **SPAN 222**

## **Intermediate Composition Reading II**

A continuation of SPAN 221. Pre-requisite: SPAN 221. (4 credit, 3 lecture, 2 lab)

## [THTR] THEATER

#### **THTR 121**

## **Introduction to Theater**

An introductory survey of theatre/drama as a performing art form. Includes study and analysis of historical, social, aesthetic and technical aspects of traditional and contemporary theatrical/dramatic expression. (IAI F1 907) (3 credit, 3 lecture, 0 lab)

#### **THTR 122**

**Principles of Acting** 

Through exercises, improvisation, and scene study the student learns the importance of relaxation, concentration, involvement, contact, sense memory, visualization, and the development of the actor's sense of truthful behavior in imaginary circumstances. Prerequisite: THTR 121 or instructor consent. (IAI TA 914) (3 credit. 3 lecture, 0 lab)

#### **THTR 123**

## Stagecraft and Technical Theatre

Introduces students to the fundamentals of the basic scene design and set construction, along with shop safety, tool use, and painting in conjunction with lighting design and special effects. Principles, procedures and practice of these technical considerations are covered. (IAI TA 911) (3 credit, 2 lecture, 2 lab)

#### **THTR 125**

## Stage Make-up

It is the responsibility to each performer to learn the craft of make-up, that final dressing of the character which will enable him/her to perform his/her role as fully and effectively as possible. This course is designed to teach this craft to those who would be actors, make-up artists, or simply have an interest in learning more about this theatrical art form. We will focus on the theory and techniques of effectively applying various types of make-up and stress the practical application of the make-up to the actor's own face. Pre-requisite: THTR 122 (3 credit, 3 lecture, 0 lab)

#### **THTR 126**

## **Theater Practicum**

This course provides students with practical experience in acting, writing, directing, scene design and building, lighting and performance unity. Educational objectives are determined by a contract between the instructor and student. This course may be repeated three times. Prerequisite: THTR 121 or THTR 122, or ART 121, or MUS 121 or instructor consent. (1 credit, 0 lecture, 2 lab)

#### **THTR 127**

## **Technical Theatre Direction**

Aadvanced study and practical application of the principles of scenery design/construction, scene painting, technical drafting, costume design/construction, theatre sound design, lighting design and installation, planning and budgeting. May be repeated three times. Prerequisite: THTR 123 and THTR 223 or instructor consent. (3 credit, 2 lecture, 2 lab)

#### **THTR 140**

#### **Beginning Ballet**

Designed for students with no dance experience. The course will examine the history of ballet, basic barre and center floor combinations, ballet vocabulary and steps, and elementary combinations of ballet technique for the beginning student. May be repeated three times. (2 credit, 1 lecture, 2 lab)

#### **THTR 141**

## **Beginning Jazz Dance**

This course is designed to cover beginning level Jazz Dance Technique. This course will enable the student to achieve beginning technical and performance skills through participation in a dance class and culminating dance performance. The student will engage in basic exercises designed to increase flexibility, strengthen muscles, and increase endurance. The course also meets the needs of students with a variety of interests including dance as fitness, Musical Theatre movement, or as a refresher course for more experienced dancers. May be offered as variable credit. May be repeated three times. Pre-requisite: THTR 140 or instructor consent. (2 credit, 1 lecture, 2 lab)

#### **THTR 142**

## **Beginning Tap Dance**

This course is designed to cover beginning level Tap Dance Technique. This course will enable the student to achieve beginning technical and performance skills through participation in a dance class and culminating dance performance. The student will engage in basic exercises designed to increase flexibility, strengthen muscles, and increase endurance. The course also meets the needs of students with a variety of

interests including dance as fitness, Musical Theatre movement, or as a refresher course for more experienced dancers. May be offered as variable credit. May be repeated three times. Pre-requisite: THTR 140 or instructor consent. (2 credit, 1 lecture, 2 lab)

#### **THTR 143**

#### **Modern Dance**

Introduction to body awareness and movement in space. Technique, placement, and creative experiences are included in this course. Dance warmups, techniques of dance, dance patterns, and analysis of rhythm. Concepts of dance composition are studied through improvisation, vocabulary and spatial awareness. May be repeated three times. (2 credit, 1 lecture 2 lab)

#### **THTR 220**

#### Children's Literature in Performance

Focuses on literary forms that can be used not only as a means of enjoyment, but also as a learning tool for children. Script analysis, directing concerns, design issues, children's literature, and performance are stressed. Prerequisite: One of the following: ENG 122, COM 121, THTR 121, THTR 122 or instructor consent. (3 credit, 3 lecture, 0 lab)

### **THTR 223**

## Stage Theory & Design

Allows the student to work with more advanced materials and techniques of stagecraft. The course will emphasize design elements and allow the student to work on analysis and design of a main stage production. Design possibilities will include lighting, sound, and scenery. Prerequisite: THTR 123 or instructor consent. (3 credit, 3 lecture, 0 lab)

## **THTR 243**

## **Introduction to Drama**

Designed to develop the student's understanding and appreciation of dramatic literature, this course includes a study of the historical development, the various modes, and the basic elements of drama. Analysis and interpretation of dramatic literature, as well as visual recreation of drama, are stressed. Pre-requisite: ENG 121 and ENG 122 or instructor consent. (3 credit, 3 lecture, 0 lab)

#### **THTR 280**

## **Selected Topics in Theatre**

This course will examine the theory and application of various elements necessary for the creation of living theatre. An in-depth study of selected problems or topics in theatre arts. The exact content and instructional methodology will vary from semester to semester depending on the theatrical discipline to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be repeatable three times if different topics are considered, but cannot exceed a total of six (6) credits toward graduation. (3 credit, 1 lecture, 4 lab)

# **TRUK TRUCK DRIVING**

#### **TRUK 112**

## **Tractor Trailer Driver Refresher**

Review of techniques used to operate a semitractor trailer. Pre-requisite: Valid Illinois class A CDL driver's license or equivalent license from another state or instruction permit; current DOT physical examination; completion of a drug test; completion of TRUK 150 or equivalent knowledge and experience as determined by the instructor. (.5 credit, .5 lecture, 0 lab)

## **TRUK 131**

## Forklift Operation & Safety

Intended to prevent accidents, injuries and fatalities that may be caused by the improper and unsafe use of forklifts. Explains the requirements of the OSHA standard, 1910.178 Powered Industrial Trucks. (.5 credit, .5 lecture, 0 lab)

## **TRUK 150**

#### **Truck Driving**

Instruction is provided in basic and advanced

driving techniques of semi-tractor trailers. Students will be prepared for both the written portion of the Illinois CDL exam and the Illinois Class "A" CDL Skills and Road Test. Instructional emphasis will also be given to job attainment and career development skills. May be offered as variable credit. May be repeated three times. (11 credit, 6 lecture, 10 lab)

#### **TRUK 151**

## **Intro to Truck Driving**

Review the Commercial Motor Vehicle Safety Act rules and regulations in preparation for the written portion of the Illinois Secretary of State's Commercial Driver's License Examination. (1 credit, 1 lecture 0 lab)

# TRUK 152 Truck Driving I

An introduction to the skills and techniques utilized in the operation of a semi-tractor trailer unit. Instruction will include driver safety and introduction to backing, shifting and cornering techniques. Students will be assisted with job placement. Industry recruiters will conduct employment seminars throughout the class. (3 credit, 2 lecture, 2 lab)

# **TRUK 153**

## **Truck Driving II**

Hands-on instruction to improve and upgrade the skills and techniques utilized in the operation of a semi-tractor trailer unit. Instruction will include pre-trip inspection, backing, shifting and cornering techniques. The Illinois Secretary of State's Commercial Driver's License Pre-Trip, Skills and Road Examinations will be administered at the conclusion of this course. (3 credit, 1 lecture, 4 lab)

### **TRUK 154**

## **Class B Truck Driving**

Review the Commercial Motor Vehicle Safety Act rules and regulations in preparation for the written portion of the Illinois Secretary of State's Commercial Driver's License Examination. An introduction to the skills and techniques utilized in the operation of a Class B vehicle. Students will be assisted with job placement. Industry recruiters will conduct employment seminars throughout the class. Hands-on instruction to improve and upgrade the skills and techniques utilized in the operation of a Class B unit. Instruction will include pretrip inspection, backing, shifting and cornering techniques. The Illinois Secretary of State's Commercial Driver's License Pre-Trip, Skills and Road Examinations will be administered at the conclusion of this course. (3.5 credit, 2 lecture, 3 lab)

#### **TRUK 199**

## **Truck Driving Externship**

Provides experience with a truck-driving agency that brings the knowledge learned in the classroom to the field. This course may be offered as variable credit and repeatable three times. Pre-requisite: TRUK 150 (4 credit, 0 lecture, 20 lab)

## **TRUK 290**

## **Selected Topics in Transportation**

An in-depth study of topics in the transportation technology field. The exact content will vary from semester to semester depending on the subject studied. This course may be repeated three times if different topics are considered, but cannot exceed a total of six (6) credit hours toward graduation. May be offered as variable credit. Pre-requisite: instructor consent. (3 credit, 3 lecture, 0 lab)

# [VET] VET ASSISTANT

### **VET 110**

## **Small Animal Nursing I**

Skill development in handling, restraint, and nursing techniques in dogs and cats. Emphasis on obtaining medical history, record keeping, bathing, administering medicine. Obtaining blood, urine, and fecal specimens, providing client information and preventive health. (3 credit, 1 lecture, 4 lab)

#### **VET 114**

## **Animal Grooming**

This course provides basic knowledge of animal

grooming Basic canine anatomy, coat and skin disorders, animal behavior, safe handling and restraining, and grooming tools and techniques will be included. Grooming standards for specific breeds as well as grooming and clipping techniques for thinning, cutting, and styling each one is covered, as well as creative grooming for mixed breeds. (3 credit, 2 lecture, 2 lab)

#### **VET 115**

## **Animal Facilities Management**

This course is designed to introduce the principles and processes involved with housing and caring for animals as part of a business model. In addition, students will be familiarized with other aspects of owning and operating a variety of animal related businesses, including grooming salons, retail businesses, boarding facilities, and shelters. Areas to be addressed include location, zoning, licensure, interior and exterior design, pricing, hiring, equipment and client relations. (3 credit, 3 lecture, 0 lab)

#### **VET 118**

## **Veterinary Practice Management**

Office practices used in a veterinary hospital including OSHA regulation, invoices, inventory, estimate preparation, record keeping, legal issues, grief management and customer relations. (2 credit, 2 lecture, 0 lab)

## **VET 231**

## **Vet Tech Internship I**

Skill and proficiency development through participation in clinical rotations at Humane Societies, clinical practices, animal disease lab and other clinical sites. Rotations include: equine, food animal, surgery, small animal radiology, necropsy, clinical pathology, wildlife, and exotic animals. (3 credit, 0 lecture, 25 lab)

# [WELD] WELDING

## **WELD 111**

#### **Basic Welding**

Provides skills in electric arc welding, Oxy-Acetylene welding, and cutting. Metallurgy of

welding as well as all positions of welding will be explored. Variable credit and may be repeated three times. (3 credit, 1 lecture, 4 lab)

#### **WELD 112**

## Metallurgy/Blueprint Reading

Fundamental characteristics and properties of industrial metals, along with Basic Blueprint and Shop Drawing Interpretation. (4 credit, 4 lecture, 0 lab)

#### **WELD 131**

## Arc Welding I

A study of shielded metal arc welding procedures used by industries concentrating on metallic arc welding in flat, horizontal, overhead and vertical positions. (3 credit, 1 lecture, 4 lab)

#### **WELD 132**

## **Gas Welding & Cutting**

A study of the techniques, procedures, and uses of oxyacetylene welding and cutting equipment in flat, horizontal and vertical positions. (3 credit, 1 lecture, 4 lab)

#### **WELD 133**

## Low Hydrogen I

A continuation of WELD 131, emphasizing shielded metal arc welding in flat, horizontal, vertical and overhead positions. Pre-requisite: WELD 131 or instructor consent. (3 credit, 1 lecture, 4 lab)

## **WELD 134**

## Low Hydrogen II

A continuation of arc WELD 133 using the low-hydrogen electrode. Concentrates on bend testing in vertical (up-hill) and overhead positions using multi-pass vee groove welds. Pre-requisite: WELD 131 and WELD 133 or instructor consent. (3 credit, 1 lecture, 4 lab)

#### **WELD 135**

## **Advanced Gas Welding**

A continuation of Welding 132. Horizontal, vertical, and overhead welding are emphasized. Also brazing and soldering techniques. Pre-

requisite: WELD 132 or instructor consent. (3 credit, 1 lecture, 4 lab)

# WELD 137 Pipe Welding

Designed to introduce the student to pipe welding (fixed position) and basic pipe layout. Pre-requisite: WELD 131, WELD 133, WELD 139 and WELD 151 or instructor consent. (3 credit, 1 lecture, 4 lab)

#### **WELD 138**

## **Industrial Welding**

An advanced skill development course concerning the repair of thick metals and castings as found on track machines, agriimplements, mining and earth moving equipment. Emphasis on hard facing, i.e., wearpoints, track blocks, and dozer blades. Prerequisite: WELD 112, WELD 131, WELD 132, WELD 133, and WELD 134. (6 credit, 1 lecture, 10 lab)

## **WELD 139**

# **TIG Welding**

Concentrates on the processes of Gas Tungsten Arc welding. Emphasis on aluminum, stainless and low carbon steel in flat, horizontal, vertical positions. Pre-requisite: WELD 132 or instructor consent. (3 credit, 1 lecture, 4 lab)

## WELD 151 MIG Welding

Concentrates on processes of gas metal arc welding. Studies flat, horizontal, and vertical welding. Pre-requisite: WELD 133 or instructor consent. (3 credit, 1 lecture, 4 lab)

## **WELD 172**

## **Internship**

A work experience program in which the student is employed in a welding technology field for the summer months to acquire skills. This program will be coordinated with classwork through the summer. May be offered as variable credit and repeated three times. Five credits allowed towards degree (5 credit, 0 lecture, 25 lab).

#### **WELD 192**

## **Extended Welding Certification**

Preparation for American Welding Society certification exams under the AWS code D1.1 and AWS B2.1 welder performance testing. Prepares students for multiple AWS certifications. Variable credit and may be repeated three times. Pre-requisite: completion of Welding Technology Certificate or instructor consent. (3 credit, 1 lecture, 4 lab)

## **WELD 199**

## Welding Externship

Provides experience with the welding industry that brings the knowledge learned in the classroom to the field. This course may be offered as variable credit and repeatable three times. Pre-requisite: WELD 112, WELD 131, WELD 132, WELD 133. (4 credit, 0 lecture, 20 lab)

#### **WELD 290**

## **Special Topics in Welding**

An in-depth study of selected problems or topics in Welding. The exact content and instructional methodology will vary from semester to semester depending on the subject to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time the course is offered. This course may be offered as variable credit and repeated if different topics are considered, but cannot exceed a total of six (6) credits toward graduation. (3 credit, 3 lecture, 0 lab)