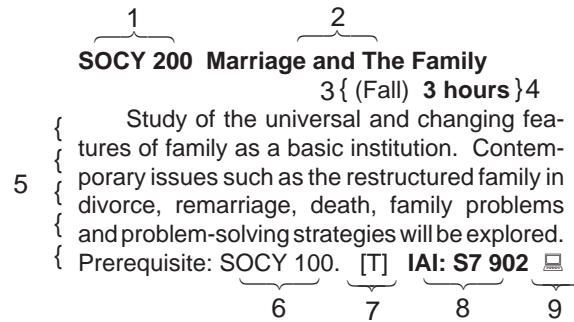


# Course Description Explanation



1—Course Prefix and Number

2—Course Title

3—Semester(s) the course is traditionally offered

4—Credit Hours

5—Course Description

6—Course Prerequisite

7—T = Transfer,\* C = Career

8—Illinois Articulation Initiative (IAI) Course Code.

A course that has a letter and number followed by another 3 digit number is considered an IAI General Education Core Curriculum course (ex.: S7 902). Courses with a letter abbreviation and 3 digit number are considered major specific IAI transfer courses (ex.: ART 912, NUR 903). Refer to [ltransfer.org](http://transfer.org). See page 71 for more information about IAI.

9—Online Course

\*Transfer Courses [T] can be counted towards a transfer degree.

Transferability for specific institutions and majors varies.

[Consult a counselor for this information.](#)

**Course descriptions are listed alphabetically by course prefixes.**

# Course Description Index

Subject .....	Prefix .....	Transfer* .....	Career .....	Page
Accounting, Vocational .....	BACC .....		X .....	170-171
Accounting, Transfer .....	CACC .....	X .....		179
Agriculture .....	AGRI .....	X .....	X .....	167
Anthropology .....	ANTH .....	X .....		167
Art .....	ARTS .....	X .....		168-169
Automotive .....	AUTO .....		X .....	169-170
Basic Skills, English .....	DEVE .....			181
Basic Skills, Math .....	DEVM .....			181
Basic Skills, Reading .....	DEV R .....			182
Biological Sciences .....	BIOL .....	X .....		171-172
Business General .....	CBUS .....	X .....		179
Business Marketing/Management .....	BMGT .....	X .....	X .....	172-176
Business Office Systems .....	BOFF .....	X .....	X .....	176-178
Chemistry .....	CHEM .....	X .....		180
Computer, Business .....	CBUS .....	X .....		179
Computer, Programming/Apps .....	INFO .....	X .....	X .....	194-197
Computer Science .....	MATH .....	X .....		199-201
Criminal Justice .....	CRIM .....	X .....	X .....	180-181
Drafting/CAD .....	DRAF .....	X .....	X .....	182
Economics .....	CECN .....	X .....	X .....	179-180
Education .....	EDUC .....	X .....	X .....	182-184
Electronics .....	ELEC .....		X .....	184-186
English Composition .....	ENGL .....	X .....	X .....	186-187
Fire Science .....	FIRE .....		X .....	187-188
Floriculture .....	HORT .....	X .....	X .....	192-193
French .....	FREN .....	X .....		188
General Science .....	GSCI .....		X .....	188
Geography .....	GEOG .....	X .....		188
Health .....	HLTH .....	X .....		192
Health Information Technology .....	HITT .....		X .....	189-191
Heating, Ventilation & Air Cond. ....	HVAC .....		X .....	193-194
History .....	HIST .....	X .....		188-189
Horticulture .....	HORT .....	X .....	X .....	192-193
Humanities .....	HUMN .....	X .....		193
Information Systems .....	INFO .....	X .....	X .....	194-197
Instructional Studies .....	INST .....	X .....	X .....	197-198
Journalism .....	JRNM .....	X .....		198
Literature .....	LITR .....	X .....		198-199
Manufacturing Technology .....	MFRG .....		X .....	201-203
Mass Media .....	ENGL .....	X .....		186-187
Mathematics .....	MATH .....	X .....		199-201
Mathematics, Vocational .....	MATT .....		X .....	201
Music .....	MUSI .....	X .....		204
Nursing .....	NURS .....		X .....	205-206
Philosophy .....	PHIL .....	X .....		207
Physical Education .....	PEMW .....	X .....		206-207
Physics .....	PHYS .....	X .....		207-209
Political Science .....	POLI .....	X .....		209

**\*Some or all of the courses with these prefixes can be used towards a transfer degree: Associate of Arts or Associate of Science at DACC.**

**Transferability for specific institutions and majors varies.**

**Consult a counselor for this information.**

## Course Description Index

<b>Subject</b> .....	<b>Prefix</b> .....	<b>Transfer*</b> .....	<b>Career</b> .....	<b>Page</b>
Psychology .....	PSYC .....	X .....		210
Radiologic Technology .....	RDTC .....		X .....	210-211
Sociology .....	SOCY .....	X .....		212
Sonography .....	SONO .....		X .....	212-213
Spanish .....	SPAN .....	X .....	X .....	213
Speech .....	SPCH .....	X .....		213
Welding .....	WELD .....		X .....	214
Wind Technology .....	WIND .....		X .....	215

**\*Some or all of the courses with these prefixes can be used towards a transfer degree: Associate of Science and Arts or Associate of Engineering Science at DACC.  
Transferability for specific institutions and majors varies.  
Consult a counselor for this information.**

# Course Description Index

Subject .....	Prefix .....	Page
<b>Adult Basic Education</b>		
Adult Basic Education .....	ABED .....	218-219
Adult Secondary Ed., GED Review .....	ASED .....	218-219
English as a Second Language .....	AESL .....	220-221
Health Occupations: Dual Enrollment Program .....		220
High School Credit Courses .....		221-223
Biology/Health .....	ASEC .....	222
Economics/Government/History .....	ASES .....	222-223
Literature/Reading .....	ASEL .....	221
Math .....	ASEM .....	221-222
Life Skills Courses .....	ABED/ASED/VOCA .....	218-219
Nurse Assistant .....	NURS .....	219-220
<b>Corporate and Community Education</b>		
ACT Work Keys Service Center .....		227
Assessment Center .....		227
Cake Decorating .....		229
Certification/Occupational Skills .....		229
Certified Warehousing & Distribution Specialist .....		226-227
College For Kids .....		231
Community Education Programs .....		229-232
Computer Training .....		225, 231-232
Computer Training for Seniors .....		232
Cooking .....		229
Corporate Education Programs .....		225-228
Creative Arts & Crafts .....		229
Culinary Arts Program .....		227
Custom Training .....		225
DACC Community Training Center American Heart Assoc. ....		226
Defensive Driving .....		226
Driver Education .....		226
EMT-Basic Course/First Responder Course .....		226
Foreign Language/American Sign .....		230
Gardening, Floral Design & Landscaping .....		230
Industrial Training Center .....		228
Lift Truck Training .....		226
Literature & Writing .....		231
Medical Insurance Billing .....		226
Non-Credit Classes .....		229-232
Open-Enrollment Seminars .....		225
Pets .....		230
Pharmacy Technician/Pharmacology for Technicians .....		225
Phlebotomy Techniques .....		225
Photography .....		230
Recreation & Fitness .....		230-231
Sewing .....		231
Tractor/Trailer Driver Training .....		227

# AGRI

## AGRI101 Animal Science

(Spring 2011) **4 hours**

Survey of some fundamentals in all fields of animal science involving live animal evaluation, selection, genetics, meats technology, nutrition, and physiology of beef cattle, sheep, swine, poultry, and horses. 3 lecture hours, 2 lab hours. [T] **IAI: AG 902**

## AGRI102 Agriculture Economics

(Fall 2009) **3 hours**

Introduction and application of economic principles to the agriculture economy; principles of production, consumption, marketing, supply, and demand applied to the economic problems of agriculture. [T] **IAI: AG 901**

## AGRI103 Ag Mechanization

(Spring 2010) **3 hours**

Examples, problems, discussion, and laboratory exercises pointing to engineering applications in agriculture. Emphasis placed on farm power and machinery, soil and water control, farm electrification, and farm structures. 2 lecture hours, 2 lab hours. [T]

## AGRI121 Agronomy

(Fall 2009) **3 hours**

A general introductory course on kinds, botany, growth, reproduction, improvement, and utilization of farm crops; field hazards and environments, cropping and tillage practices and principles, including data collection by GIS/GPS systems, cereal, forage oils, fiber, drug, and miscellaneous field crops - their origins, growth, habits, and culture. 2 lecture hours, 2 lab hours. [T] **IAI: AG 903**

## AGRI180 Introductory Soil Science

(Fall 2010) **4 hours**

An introduction to the chemical, physical, and biological properties of soils; the origin, classification, and distribution of soils as mapped by GPS/GIS systems and their influence on people and food production; the management and conservation of soils; and the environmental impact of soil use. 3 lecture hours, 2 lab hours. **Prerequisites:** Completion of or current enrollment in CHEM100. [T] **IAI: AG 904**

## AGRI200 Agriculture Management

(Spring 2011) — **3 hours**

Study of agriculture management including economic principles, budgets, and planning of an agricultural business. [C]

## AGRI202 Supervised Occupation Experience

(Spring) — **3 hours**

On-the-job training in agricultural related areas during the second semester. **Prerequisites:** Must be enrolled in Agribusiness program. [C]

## AGRI205 Grain/Drying-Storage

(Fall 2010) — **3 hours**

Principles, practices, and techniques involved in the harvesting, storing, and drying of grain. 2 lecture hours, 2 lab hours. [C]

## AGRI206 Grain Marketing

(Spring 2011) **3 hours**

The marketing of grain crops with emphasis on futures and hedging. [C]

## AGRI207 Agriculture Pesticides

(Spring 2010) **4 hours**

Techniques of integrated pest management. 3 lecture hours, 2 lab hours. [C]

## AGRI290 Supervised Occupation Experience


(Spring) **3 hours**

On-the-job training in agricultural related areas during the fourth semester. Training includes on-site activities with industry, consultations with instructor, and preparing worklogs. **Prerequisites:** Must be enrolled in Agribusiness program. [C]

# ANTH

## ANTH 103 Anthropology

(Fall) **3 hours**

Introduction to the nature of the human race, its development and relationship to the physical and social environment today and in the past; a 4 fields survey of the universal and variable elements in biological and cultural anthropology, archaeology, and linguistics. **Prerequisite:** Place into ENGL 101. [T] **IAI: S1 900N** 


## ANTH 105 Introduction to Archaeology

(As Needed) **3 hours**

An introduction to the subfield of archaeology--the study of ancient cultures and how they evolved, based on their material remains. Theory in archaeological research, data collection, and analysis will be explained. **Prerequisite:** Place into ENGL 101. [T] **IAI: S1 903**

## ANTH 107 Cultural Anthropology

(Spring) **3 hours**

Survey of selected non-Western societies from around the world. Societies reviewed might include China, Japan, Yanomamo, Wamani, !Kung, Navajo, Apache, Inuit, Tlingit, South India, Papua New Guinea, and Morocco. Films will accompany ethnographies from each culture. The choices that people in cultures make to organize and solve problems, such as the definition of family relations and obligations, the distribution of goods and services, the administration of justice, the allocation of resources, the ways toward religiosity, and the relations of families and groups to the larger social networks will be examined. **Prerequisite:** Place into ENGL 101. [T] **IAI: S1 901N** 

# ARTS

## ARTS 105 Theater Appreciation

(As Needed) **3 hours**

Theater Appreciation offers students the opportunity to explore and appreciate the role of theater in society within its cultural, aesthetic, dramatic, economic, and political manifestations in selected plays. The main aspects of theater, theater personnel and script analysis, will be explored along with theatrical forms of cultural and social significance in a historical and contemporary issue context in America and world cultures. The primary goal of this course is to provide an understanding of the art of theater and the continuing role it plays in our society. Attendance and critiques of theater plays are required. Prerequisite: Place into ENGL 121. [T] **IAI: F1 907**

## ARTS 111 Art History I

(Fall) **3 hours**

Cave painting, Greek sculpture, the ancient ruins of Egypt, Medieval churches are all included in this survey course. Painting, sculpture, crafts, and architecture—from the dawn of man to the thirteenth century—are observed through slides and films. Credit will not be granted for ARTS 115 and ARTS 111 or 112. Prerequisite: Place into ENGL 121. [T] **IAI: F2 901**


## ARTS 112 Art History II

(Spring) **3 hours**

The study of the arts of the Renaissance in Italy which set the stage for the development of modern art. Masterpieces of art are shown through slides and films. In-depth discussions and readings probe artists and their ideas. Credit will not be granted for ARTS 115 and ARTS 111 or 112. Prerequisite: Place into ENGL 121. [T] **IAI: F2 902**

## ARTS 115 Art Appreciation

(Fall and Spring) **3 hours**

An introduction to the visual arts and their place in history and society. Students develop their critical powers by discussion, reading, and viewing masterpieces through slides and films. Prerequisite: Place into ENGL 121. [T] **IAI: F2 900** 

## ARTS 117 Drawing I

(Spring) **3 hours**

Theory and practice of the elements of drawing. Basic drawing techniques using pencils and experimental media with topics drawn from art principles. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

## ARTS 118 Drawing II

(Spring) **3 hours**

Theory and practice in the elements of drawing. Introduces principles of color, composition, and use of additional media. Emphasis is given to developing skills in a wider range of materials and techniques, visual inventiveness, self-direction, and individual expression. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

## ARTS 119 Basic Design 2-D

(Fall) **3 hours**

Fundamentals of two dimensional design. An introduction to theory and application of point, line, shape, tone, texture—principles of visual design involved in two dimensional surface. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

## ARTS 120 Basic Design 3-D I

(Spring) **3 hours.**

Fundamentals of three-dimensional design. Theory and studio practice covering principles of plane, form, mass, volume, space, light, and structure—clay, plaster, wood, metals, etc. are used in three-dimensional forming, building, and construction. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

## ARTS 121 Basic Design 3-D II

(Spring) **3 hours.**

Advanced study of 3-D concepts: Volume, Mass, Texture, Line, Positive-Negative Space, Modeling, Carving, Fabrication. Emphasizes student's personal involvement with sculptural materials. Prerequisite: ARTS 120 or consent of instructor. [T]

## ARTS 125 Ceramics I

(Fall and Spring) **3 hours.**

This course is an introduction to the theory and practice of the ceramic process. Through the planning and execution of a variety of projects, students will be introduced to the basics of hand-building and wheel-throwing techniques, the relationship between form and function, and the essentials of decoration and glazes. The history and styles of ceramics from other cultures will be explored. Class meets 6 hours per week. Prerequisite: College-level reading skills required. [T]

## ARTS 126 Ceramics II

(Fall and Spring) **3 hours.**

This course builds upon the theory and practice of the ceramic process acquired in Ceramics I. Students will develop further skills in hand-building and wheel throwing techniques. Along with analysis of historical and contemporary ceramics in a cross cultural context, students will experiment with diverse ceramic forms and styles, such as functional and non-functional pottery, sculptural uses of clay, and decorative techniques using slips and glazes on a variety of clay bodies. Class meets 6 hours per week. Prerequisite: ARTS 125. [T]

## ARTS 130 Sculpture I

(As Needed) **3 hours.**

A basic course for beginners in the study, methods, materials and techniques of sculpture. Includes concepts of volume and mass; positive and negative space; surface texture and line; modeling, carving, fabrication, mold-making and casting; and properties and techniques of clay, plaster, wood, metal, ceramics, and stone. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

**ARTS 141 Painting I**(Fall) **3 hours**

A basic course designed to sharpen skills in color theory, mixing, and understanding, brush-to-canvas techniques. Applied instruction will be geared towards the student's skill level. Class meets 5 hours per week. Prerequisite: College-level reading skills required. [T]

**ARTS 142 Painting II**(Fall) **3 hours**

Further development of basic skills, concepts, and techniques in painting media. "Heavy" paints used to compose and explore subjects drawn from environment and imagination. Emphasis placed on increasing proficiency, inventiveness, and individual expression. Class meets 5 hours per week. Prerequisite: ARTS 141 [T]

**ARTS 150 Computer Art I**(Fall) **3 hours**

An introduction to computer applications in the visual arts. A computer software-based approach to visual image manipulation and generation, including the integration of computer hardware, software, and peripheral devices as tools to understand, create and combine traditional and contemporary visual ideas as applied to art and design. Prerequisite: College-level reading skills required.

**ARTS 151 Graphic Design I**(Fall) **3 hours**

This course will instruct students in the fundamentals of two-dimensional design with a focus on graphic design as a process of visual communication. Areas of inquiry that will be covered in this course include: basic principles of design, a brief introduction to the theory and history of design, typography as a design element, photography and image manipulation, and several techniques of visual communication using traditional and digital media. Prerequisite: College-level reading skills required. [T]

**ARTS 190 Modern Dance I**(As Needed) **2 hours**

The achievement and development of technical skills in modern dance. Technique basic to this dance form plus motional properties as they relate to dance will be emphasized. [T]

**AUTO**

**\*\*All classes require safety glasses and a basic tool set.**

**AUTO 101 Fundamentals of Collision Repair****4 hours**

Examines the characteristics of body metals and includes the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety.\*\*

**AUTO 106 Engine Electrical Systems**(Fall) **5 hours**

Electrical theory, testing, and servicing of automotive starting, charging, and accessory components and wiring circuits; introduction to semiconductors and electronics.\*\*

**AUTO 111 Intro. to Engine Technology**(Fall) **3 hours**

The application, theory, and design of automotive engine operation. Emphasis given to development of the skills needed for testing, disassembly, precision measuring, machining, and re-assembly of spark ignition cylinder heads.\*\*

**AUTO 113 Drivetrain Systems**(Fall) **4 hours**

Theory, maintenance, and servicing of various drivetrain systems including belts and chains. The focus will be on driveshafts, axle shafts, U-joint, CV joints, transfer cases, differentials, and clutches.\*\*

**AUTO 121 Engine Overhaul**(Spring) **3 hours**

Application of maintenance and service procedures to diagnose and repair a "short block" with emphasis given to skills needed to overhaul and rebuild stock automotive engine. Discussion about blueprinting and performance enhancements will be minimal. Disassembly techniques, measuring, machining, and proper re-assembly practices will be stressed\*\*

**AUTO 128 Fuel Systems & Emission Controls**(Spring) **5 hours**

Emphasis on electronic fuel injection and emission components with discussion on carburetion, mechanical fuel injections, alternative fuels, and the environment. Injection system maintenance, testing, servicing, and repair will be stressed.\*\*

**AUTO 131 Collision Repair Electrical Analysis****3 hours**

Theory and repair of electrical and electronic systems related to the collision repair industry. Includes electrical theory, DVOM usage, wire and circuit repairs, electronic diagnosis of ABS and SIR systems and schematic usage.\*\*

**AUTO 134 Steering and Suspension Systems**(Fall) **3 hours**

Principles of operation, maintenance, and repair of automotive systems including electronic steering and suspension, steering columns, steering gears, and air bag safety. Emphasis given to front-wheel-drive and four-wheel drive systems.\*\*

**AUTO 135 Braking Systems**(Fall) **4 hours**

To inspect and service hydraulic disc/drum braking systems including two and four wheel ABS and traction control systems. Use of lathes and other special tools will be utilized.\*\*

**AUTO 147 Principles of Air Conditioning**(Spring) **4 hours**

Heating ventilating, and air-conditioning systems, both manual and electronic will be discussed. Students must pass a refrigerant handling certification exam.\*\*

**AUTO 151 Non-Structural Analysis and Damage Repair**  
**4 hours**

Introduces fundamentals of using hand and power tools in the repair of minor collision damage, with emphasis on safety.\*\*

**AUTO 201 Refinishing**  
**4 hours**

Introduces auto paint considerations with emphasis on the handling of materials and equipment in modern automotive technologies.

**AUTO 228 Diagnostic Engine Testing**  
**(Spring) 5 hours**

Advanced chassis electrical/electronic systems with emphasis towards diagnosis and service of distributor and electronic ignition systems with an introduction to fuel systems, computer control systems, and drivability problems. Prerequisite: AUTO 106.\*\*

**AUTO 231 Collision Repair Mechanical Analysis**  
**3 hours**

Upon completion of this course, the student will be expected to: 1) demonstrate proper safety practices while in labs; 2) identify tools used for steering and suspension repair; 3) diagnose steering and suspension components to determine need for replacement; 4) remove and replace steering and suspension components; 5) inspect, rotate, mount, and balance tires; 6) diagnose cooling system components need for replacement; 7) remove and replace cooling system components; and 8) diagnose air conditioning components to determine need for replacement.\*\*

**AUTO 236 Automotive Computer Controls**  
**(Fall) 4 hours**

Advanced theory and diagnostic procedures related to body, chassis, and power train control systems utilizing scan tools and labsopes to repair drivability concerns. Prerequisite: AUTO 228.\*\*

**AUTO 242 Automatic Transmissions**  
**(Spring) 3 hours**

Function, operation, maintenance, troubleshooting, and servicing of automatic transmissions/transaxles. Electrical and hydraulic diagnostics, repair, replacement, and adjustments will be stressed. Prerequisite: AUTO 113.\*\*

**AUTO 244 Alignment and Balance**  
**(Spring) 2 hours**

Two and four wheel alignment principles, wheel balancing, and tire service. Prerequisite: AUTO 134.\*\*

**AUTO 251 Structures Analysis & Damage Repair**  
**4 hours**

Provides instruction in analyzing extensive body damage and determining the tools and procedures needed to replace panels. Covers the use of tools, frame machines, and equipment for frame and chassis repair. Includes study of terms pertaining to front suspension and rear axle. Describes uses of frame gauges and other measuring devices.\*\*

**AUTO 253 Manual Transmissions**  
**(Fall) 4 hours**


The operation, maintenance, and service of manual transmissions/transaxles including bearing, seal, gear, and synchronizer analysis. Prerequisite: AUTO 113.\*\*

**AUTO 271 Custom Refinishing Techniques**  
**1 hour**


Advanced color theory, color evaluation and tinting, mica/pearl control techniques, wet bed blends, let down panels, tri coats, quad coats, advanced spot repair, paint defect, evaluation and repair.

## BACC


**BACC 100 Introduction to Accounting**  
**(Fall & Spring) 3 hours**

This course is designed for career-oriented students needing an understanding of accounting for a successful business career. Fundamental concepts and principles are emphasized for managerial and financial applications. These disciplines are used to complete the accounting cycle for a service oriented business. This includes the preparation and analysis of journal and ledger entries, and financial statements which are the underlining units of this course. This course does not meet the transfer accounting principles requirements for business majors. This course will not count toward an associate degree in accounting. [C] 


**BACC 120 Principles of Finance**  
**(As Needed) 3 hours**

Principles of finance including instruments and procedures used for loans and investments to meet the demand for funds in the capital markets. Emphasis placed on business finance and financial management. Prerequisite: CACC 101 or consent of instructor. [C] 

**BACC 130 Payroll Accounting**  
**(Spring) 3 hours**

Details work involved from time of hiring employee, recording hours worked, to issuance of paychecks. Involves tax deductions, demonstrates complexity of accounting entries necessary in payroll accounting. Prerequisite: BACC 100 or CACC 101. [C] 

**BACC 220 Certification Exam Review**  
**(Spring) 3 hours**

The course is designed to strengthen students' knowledge of accounting in selected areas for ACAT certification. Study of the following areas: a) financial accounting; b) statement preparation; c) presentation and reporting; d) ethics; e) business law, consulting, and f) taxation. [C] 

**BACC 228 Computerized Accounting**  
**(Summer & Fall) 3 hours**

Emphasis placed on analysis and interpretation of accounting data. Study of techniques for evaluating and interpreting data as a means of solving business problems. Prerequisite: CACC 105 with a grade of "C" or better or consent of instructor. [C]

**BACC 229 Individual Income Tax Accounting**  
(Spring) **3 hours**  
General tax problems of individuals with emphasis on tax regulations and special filings. [C]

**BACC 230 Business Income Tax Accounting**  
(Fall) **3 hours**  
This course is designed to strengthen the accounting student's knowledge in the area of tax regulation and strategic tax planning concerning businesses, farms, corporations, and partnerships. [C]

**BACC 290 Accounting Seminar**  
(As Needed) **1 hour**  
The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]


**BACC 291 Accounting Seminar**  
(As Needed) **2 hours**  
The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BACC 292 Accounting Seminar**  
(As Needed) **3 hours**  
The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BACC 295 Accounting Internship**  
(As Needed) **3 hours**  
On-the-job training in accounting or business related areas. Prerequisite: Consent of instructor. [C]

**BACC 297 Accounting Internship**  
(As Needed) **3 hours**  
On-the-job training in Accounting or business related areas. Prerequisite: Consent of instructor. [C]

## BIOL

**BIOL100 Life Science I**  
(Fall) **4 hours**  
An introductory course in biological principles. Ecology, animal behavior, and cellular biology are covered. The course is designed for the non-science major and is less theoretical and more practical for this reason. 3 lecture hours, 2 lab hours. Prerequisites: Place into ENGL101 and MATH101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: L1 900L** 

**BIOL101 Human Biology**  
(Spring) **4 hours**  
An introductory course in human biology emphasizing organ systems, reproductive processes, genetics and current social problems having a biological basis. Not for biology majors. Class meets 3 hours of lecture and 2 hours of lab per week. Prerequisites: Place into ENGL101 and MATH101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: L1 904L**

**BIOL102 Principles of Biology**  
(Fall, Spring, and Summer) **4 hours**  
This is a one semester preparatory course for students planning to do further study in science. Fundamental biological concepts and principles relating to structure and functioning. Class meets 3 lecture hours per week, and 2 lab hours. Prerequisites: Placement into MATH101 and ENGL101 or grade of C or better in GSCI100. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: L1 900L**


**BIOL104 Zoology**  
(Spring) **4 hours**  
A survey of the animal kingdom with emphasis on taxonomy, structure, and function. Class meets for 3 hours of lecture and 2 hours of lab per week. Prerequisites: Place into ENGL101 and MATH101; BIOL102 with a grade of C or better or 2 years high school biology. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: L1 902L**

**BIOL105 Introduction to Environment**  
(Fall and Spring) **3 hours**  
An introductory course in the study of the biological aspects of population, pollution, other physical factors of eco-systems, both regional and global. **Prerequisites:** Place into ENGL101 and MATH101. [T] **IAI: L1 905**

**BIOL133 Field Studies in Biology**  
(Not offered every year) **4 hours**  
A field-oriented course designed to investigate the interrelationships of plants and animals in selected terrestrial and aquatic communities. Emphasis on relationships of communities to physical and climatic features of their environment. Special travel fees. [T] **IAI: L1 905L**

**BIOL136 Anatomy and Physiology I**  
(Fall, Spring and Summer) **4 hours**  
An introduction to anatomy and physiology with survey of the cell, tissues, introductory chemistry, and methods of transport across membranes. Systemic approach to anatomy and physiology with the skeletal as the first system followed by the muscular and nervous systems. Cadaver utilized for instruction. 3 lecture hours, 3 lab hours. Prerequisites: BIOL102 with a grade of C or better, or appropriate score on Biology Exemption Exam and placement into MATH101 and ENGL101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. Anyone taking BIOL136 with BIOL140 during the same semester should be a strong student with good study habits and adequate study time. [T] **IAI: L1 904L**

**BIOL137 Anatomy and Physiology II**  
(Fall, Spring and Summer) — **4 hours**  
A continuation of Part I of Anatomy and Physiology which includes the somatic and special senses; endocrine system; cardiovascular system; lymphatic system; digestive system; nutrition; respiratory system; urinary system; fluid, electrolyte, and pH balance; reproductive system. Human cadaver utilization in lab. Prerequisites:

BIOL136 with a grade of C or better. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. Anyone taking BIOL137 with BIOL140 during the same semester should be a strong student with good study habits and adequate study time.[T] 

### **BIOL138 Human Cadaver Anatomy I**

(Fall) **2 hours**

Supervised cadaver dissection using a regional anatomy approach, designed to improve students' competency in human gross anatomy. Dissections will be conducted by body region in the following sequence: Thorax, upper extremity, back, head and neck. Areas of study include regional surface anatomy, compartments, structures, anatomical and physiological relationships. Clinical applications will be emphasized. 1 lecture hour, 2 lab hours. Prerequisites: BIOL136 and BIOL137 with grades of C or better. Notes: This course is not available for web registration. [T]


### **BIOL139 Human Cadaver Anatomy II**

(Spring) **2 hours**

Supervised cadaver dissection using a regional anatomy approach, designed to improve students' competency in human gross anatomy. Dissections will be conducted by body region in the following sequence: Lower extremity, abdomen, pelvis and perineum. Areas of study include regional surface anatomy, compartments, structures, anatomical and physiological relationships. Clinical applications will be emphasized. 1 lecture hour, 2 lab hours. Prerequisites: BIOL136 and BIOL137. Notes: This course is not available for web registration. [T]

### **BIOL140 Microbiology**

(Fall, Spring and Summer) **4 hours**

Introductory principals of microbiology are explored through lecture, laboratory activities, and assignments. Morphology, metabolism, growth and control, antimicrobials, genetics, biotechnology, epidemiology, and the disease process are presented. Laboratory approach and medical application of material is emphasized. Prerequisites: BIOL102 with a grade of C or better, or appropriate score on Biology Exemption Exam and placement into MATH101 and ENGL101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. Anyone taking BIOL140 with BIOL136 or BIOL137 during the same semester should be a strong student with good study habits and adequate study time.[T] **IAI: L1 903L** 

### **BIOL150 Botany**


(Fall) **4 hours**

An introductory level course including labs designed around the basic principles of plant structure, growth, physiology, reproduction, evolution and genetics. The course will also investigate the economic and ecological importance of plants and the inter-relationship of plants and humans. Class meets for 3 hours of lecture and 2 hours of lab per week. Prerequisites: Place into ENGL101 and MATH101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: L1 901L**

## **BMGT**

### **BMGT 103 Customer Service**

**2 hours**

Customer Service will focus on developing appropriate skills, knowledge, attitudes needed to win customer satisfaction and loyalty. The importance of the relationship between the customer and the organization will be studied and related to the organizational purpose. Key business themes and concepts will include: a heightened awareness of the challenges and opportunities in customer service; the ability to lead, expand, and empower the service process; utilizing customer service strategies to exceed customer expectations and create customer loyalty; a clear understanding of the future directions of customer service and specific skills for professional success. [C] 

### **BMGT 104 Interpersonal Relationships in Business**

**3 hours**

Interpersonal relationships with employers, supervisors, co-workers, and subordinates. Emphasis placed on personal motivation, professional ethics, and emotional attitudes. [C]


### **BMGT 106 Supervisory Training**

**3 hours**

Emphasis given to the techniques and procedures regarding the control of human action. Employee-employer working relationship given special attention. [C]


### **BMGT 110 Taking Off in Travel**

**2 hours**

This course provides an overview of the basics of the travel industry and career opportunities available. Enjoy a fun, realistic presentation of: air travel, incentive travel, meetings and conventions, in-bound tourism, international travel and niche travel are also discussed. There will be opportunities for learning activities as well as exercises and thought-provoking case studies to aid in applying the principles presented. [C] 


### **BMGT 111 Air Reservations - U.S. Domestic**

(As Needed) **2 hours**

This course covers the product knowledge and skills (with the exception of automated reservations) needed to research, plan and book air travel. You will learn the terminology, the policies and the procedures of airline reservations. [C] 

### **BMGT 112 Air Fares - U. S. Domestic**

(As Needed) **2 hours**

Learn the air fare terms and fare construction principles necessary to find, interpret and apply the lowest applicable fare to your client's air itinerary. [C] 

**BMGT 113 Marketing for Hospitality and Tourism**  
(As Needed) **3 hours**

Hospitality and Tourism Marketing will explore the primary industries comprising the tourism industry: Hospitality and Travel. Marketing is a driving force in this high growth industry, which leads to business success in a highly competitive field. Class assignments will focus on identifying and responding to changing consumer needs and applying winning marketing strategies to achieve business survival and success. [C]

**BMGT 114 Principles of Management**  
**3 hours**

Principles of Management will focus on promoting learning through an integrated approach to the understanding of Management on today's business world. Learners will develop awareness, knowledge, understanding, and application of current and relevant management principles and practices. Topics discussed will include: functions of management; organizations and the role of management; current trends and issues in management; organizational culture; managing in a global environment; and human resources management. [T, C]

**BMGT 115 Trade Shows, Events and Meetings**  
**3 hours**

Trade Shows, Events and Meetings will explore the dynamic industry of trade shows, special events, and meeting planning. This industry has emerged as a separate business category that facilitates commerce in all arenas of the economy while opening new marketplaces at all levels; from manufacturer to wholesale, retail, and consumer. The course will examine each step in the development of a trade shows, special events, and meetings that will highlight the many aspects of this growing industry. [C]

**BMGT 117 Principles of Marketing**  
**4 hours**

Principles of Marketing will explore various marketing processes, concepts, practices and trends relevant in today's business world. Primary marketing themes will include: the marketing environment; understanding buyer's and marketing's customer value, the impact of technology; ethics and social responsibility, global perspectives and managing the marketing process. [T, C]

**BMGT 118 Professional Selling**  
**3 hours**

This course emphasizes professional selling as a professional marketing activity that is coordinated with an organization's promotional activities. Principles of planning and communication strategies will be discussed throughout the course. [C]

**BMGT 120 Travel Sales and Trends**  
**2 hours**

Expected as well as surprising sales techniques and new approaches are explored and practiced in this introductory course. This includes telephone business manners and listening skills as required by any sales person. You will analyze today's travelers and practice successful sales steps, for telephone reservations agents as well as for the travel professional working with clients one on one. You will also explore and evaluate a variety of travel related Web sites providing valuable resources to the travel professional.

**BMGT 121 ARC Documents**  
**2 hours**

The airline ticket used for air travel in the United States are issued, controlled and processed through a Bank Settlement Plan administered by the Airline Reporting Corporation (ARC). This course covers the ticketing types, forms, policies and procedures per the ARC as well as forms of payment, refunds and exchanges.

**BMGT 122 Ground Transportation**  
(Car Rental and Rail Travel)  
**2 hours**

Car Rental is a relatively simple product to sell and book and commissions are reasonable. Some seventy percent of North Americans travel by car while vacationing. Learn the basics of the product, policies, procedure, codes, pricing and distribution. Rail Travel recaptures the image of a different time and appeals to many leisure travelers. This study focuses on Amtrak, Via Rail, BritRail and Eurail, the types of trains accommodations, services and fare structure. [C]

**BMGT 123 Hospitality**  
**2 hours**

Hotel accommodations offer good commissions. Learn the basics of the hotel product, rate structure, property and room classifications, codes, published and automated resources and non-automated reservations procedures. Identify your guest's preferences, learn the variables that affect prices, select the right hotel for any given client. In addition, enjoy the hotel sales training program developed by Marriot, entitled Hotel Excellence! Ask your instructor via e-mail about Marriott certification. [C]


**BMGT 124 Automated Air Reservations**  
Available is a Canadian Version and a United States Version  
**2 hours**

You will learn to book air reservations using RTS, a hands-on CRS simulation of Sabre in conjunction with the online tutorial. Each lesson combines selections from a proven Sabre text with helpful hints and instruction to most effectively use the realistic simulator, RTS-Sabre. You will learn and practice the basic functions of Sabre as used by travel professionals planning and booking air travel. Exercises and drills will improve your proficiency and speed. You will master the skills necessary to make, maintain, change, and cancel automated travel reservations. [C]

**BMGT 125 Automated Air Fares & Tickets**

Available is a Canadian Version and a United States Version

**2 hours**

You will learn to find the lowest applicable fare for your client as you utilize the Computer Reservation System (CRS) Sabre to display fares between city pairs and the Sabre pricing system to calculate the total fare, including fees and taxes for the simplest and most complex domestic air itineraries. You will be using RTS, a hands-on CRS simulation of Sabre in conjunction with the online tutorial. Each lesson in the tutorial combines selections from a proven Sabre text with helpful hints and instruction to most effectively use the realistic simulator, RTS-Sabre. You will learn and practice the basic functions of Sabre as used by travel professionals planning, booking, and pricing air travel. Exercises and drills will improve your proficiency speed as you master the skills necessary to make, maintain, change, and cancel travel reservations. 

**BMGT 126 Transportation and Traffic Management I****(As Needed) 3 hours**

Introduction to transportation economics, governmental policy and regulation, public transport, and in-depth look at each transportation mode. Case study reference and transport terminology will be examined with a continual review of current events in the field of traffic and transportation. [C]

**BMGT 127 Transportation and Traffic Management II****(As Needed) 3 hours**

An examination and in-depth review of the facets of traffic management such as buying and selling of transportation services, responsibilities and duties of a traffic manager, the decision variables considered, organizational position of traffic management, freight classifications and tariff interpretations and current topics within the transportation and traffic management field. [C]

**BMGT 128 Real Estate Transactions****(Fall and Spring) 3 hours**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. Approved Curriculum for School Rule IX(B)(1). Course required to obtain salesperson's license. Must be 21 years old to obtain a sales license. [C]

**BMGT 129 Contracts and Conveyancing****(As Needed) 1.5 hours**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Contracts and Conveyancing, Approved Curriculum IX(B)(4). Course required for the broker's examination. Prerequisite: BMGT 128 or hold a valid license. [C]

**BMGT 130 Advanced Real Estate Principles****(As Needed) 1.5 hours**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Advanced Real Estate Principles, Approved Curriculum IX(B)(9). Course required for the broker's examination. Prerequisite: BMGT 128 or hold a valid license. [C]

**BMGT 131 Property Management****(As Needed) 1 hour**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Property Management, Approved Curriculum IX(B)(3). Prerequisite: BMGT 128 or hold a valid license. [C]

**BMGT 132 Financing****(As Needed) 2 hours**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Financing, Approved Curriculum IX(B)(5). Prerequisite: BMGT 128 or hold a valid salesperson's license. [C]

**BMGT 133 Property Appraisal****(As Needed) 2 hours**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Real Estate Appraisal IX(B)(2). Prerequisite: BMGT 128 or hold a valid salesperson's license. [C]


**BMGT 134 Sales Brokerage****(As Needed) 1 hour**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Sales and Brokerage IX(B)(6). Prerequisite: BMGT 128 or hold a valid salesperson's license. [C]

**BMGT 135 License Reinstatement****(As Needed) 1 hour**

Course meets the requirements in class hours and content as prescribed by Office of Banks & Real Estate. See course outline requirements. Refresher course for License Reinstatement IX(B)(10). Prerequisite: See School Rule VII, Educational Requirements for Reinstatement of License, Illinois Real Estate Brokers and Salespersons Act of 2000. [C]

**BMGT 150 Introductory Cosmetology****12 hours**

Examination of the properties of hair and scalp with an introduction to hairshaping. Fundamentals of developing a professional image as well as an emphasis on the importance of "people skills". The introduction of sanitation and microbial concerns are developed at this point. The course consists of both theory and practice in a lecture and laboratory setting. The course consists of 4 lecture hours and 26 lab hours. 

**BMGT 152 Intermediate Cosmetology****12 hours**

Introduces the management and care of artificial hair, electricity and lights, thermal hairstraightening, and hair color. Hair relaxing and the chemistry involved are also topics covered during this time frame. Special consideration is given to Illinois Law/Salon Management as well as resume and job interviewing. The course consists of both theory and practice in a lecture and laboratory setting. The course consists of 4 lecture hours and 26 lab hours.

**BMGT 153 Intermediate Cosmetology II****12 hours**

Studies the anatomy of related structures as well as an investigation of the skin and disorders pertinent to the study of cosmetology. Significant time is devoted to the theory of massage and facials as well as facial make-up Nail care and disorders of the nails are studied as part of the manicuring section. Superfluous hair removal is also part of the study. Final portion is devoted to theory review as a primer for licensure examinations. The course consists of both theory and practice in a lecture and laboratory setting. The course consists of 4 lecture hours and 26 lab hours.

**BMGT 160 Entrepreneurial Skills****3 hours**

Entrepreneurial Skills will focus on developing student awareness, knowledge, understanding, and application of Entrepreneurship and Small Business Ownership/Management. Key business themes and concepts will include: global perspective and the growth of international business opportunities; role of ethics in business; role of small business in the economy; small business management and operations; entrepreneurs as the energizers of small business; the role and impact of technology and focus on quality. [C]

**BMGT 201 Promotional Strategy****3 hours**

This course focuses on an integrated approach to an organization's promotional strategy. Application of promotion planning, design, and implementation stages coordinated with advertising, professional selling and publicity will be emphasized. Prerequisite: BOFF 180 or instructor approval. [C]

**BMGT 211 Total Quality Management****(As Needed) 3 hours**

Examines total quality management and how it is utilized by organizations. Includes the management of total quality, quality tools and processes, criteria for quality programs, and case studies. Includes statistical process control, ISO 9000, Malcolm Baldrige Award, and other quality standards. [C]

**BMGT 212 Human Resource Management****3 hours**

Human Resources Management will focus on increasing student understanding of how organizations can gain sustainable competitive advantage through their employees. Also, the course will feature relevant topics in HRM including: developing flexible and skilled workers/training/performance appreciate; international business and issues in HRM; HR planning recruitment and selection; employee relations and compensation/benefits/safety. [C]

**BMGT 213 Principles of Advertising****3 hours**

Advertising and Sales Promotions will explore advertising as a business and the voice of marketing. Current advertising concepts, practices, and trends will be discussed. Primary course themes will include: the art and science of advertising; scope of advertising; integrated marketing communication; and effectiveness of advertising. Prerequisite: BOFF 180 or instructor approval. [C]

**BMGT 217 Principles of Retail Merchandising****(3 hours)**

Basic retail management functions with emphasis on the role of the manager. Retailing and Merchandising will focus on relevant topics and issues in the field of retailing through discussion, case studies, and projects. Topics include: consumer behavior; store location and operations; service retailing; franchising; and retailing in a changing environment. [C]

**BMGT 218 Purchasing Management****(As Needed) 3 hours**

The nature, role procedures, and organization of the purchasing function in business, industry, and government. Covers policies, ethics and law, sources, quality, inventory management, pricing, negotiations and other aspects of the procurement of materials, supplies and equipment. Prerequisite: Intro. to Marketing (BMGT 117) or the consent of instructor. [C]

**BMGT 219 Professional Purchasing****(As Needed) 3 hours**

An in-depth study of the more advanced areas involved in the purchase of material, supplies, and equipment. Emphasis will be placed on relationships with suppliers and the cause and effects of other industrial departments on the modern purchasing department. Prerequisite: BMGT 218 or consent of instructor. [C]

**BMGT 226 Transportation and Traffic Management III****(As Needed) 3 hours**

A practical study of transportation pricing covering freight classification and rate structures. Actual freight rate problems are introduced acquainting the student with the use of classifications and tariffs in determining freight rates. Prerequisite: BMGT 126 or equivalent experience. [C]

**BMGT 227 Transportation and Traffic Management IV****(As Needed) 3 hours**

Legal basis for regulation of transportation, origin of the Interstate Commerce Act and a study of the rules of practice before the Interstate Commerce Commission. Utilizes case studies to provide a foundation for understanding transportation regulation. [C]

**BMGT 244 Direct Marketing****2 hours**

Direct Marketing will explore the information driven marketing process between the buyer and seller utilizing various direct marketing and database marketing techniques and strategies. Topics include: nature and scope of direct marketing; difference between direct marketing and traditional mass media advertising; direct marketing media and direct marketing strategies and techniques. Prerequisite: BOFF 180 or consent of instructor. [C]

**BMGT 290 Management Seminar****(As Needed) 1 hour**

The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BMGT 291 Management Seminar**(As Needed) **2 hours**

The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BMGT 292 Management Seminar**(As Needed) **3 hours**

The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BMGT 295 Management Internship**(As Needed) **3 hours**

On-the-job training in Management or business related areas. Prerequisite: Consent of instructor. [C]

**BMGT 297 Management Internship**(As Needed) **3 hours**

On-the-job training in Management or business related areas. Prerequisite: Consent of instructor. [C]

**BOFF****BOFF 100 Notetaking**(Spring) **3 hours**

Technique, skill, and accuracy training in dictation and note taking skills. Prerequisite: Enrollment in or completion of BOFF 121 or consent of instructor. [C]

**BOFF 108 Ethics in the Workplace**(Fall) **1 hour**

Covers an awareness of ethics and professional conduct. Topics include identifying values, attitudes, resolving people problems and conflicts, confidentiality, time management skills, and employer and peer expectations. Emphasis in this course will focus on identifying ethical values and resolving ethical dilemmas.

**BOFF 114 Keyboarding**(Fall, Spring and Summer) **2 hours**

Learn to operate an alphabetic keyboard by the touch system. Open to all students except Office Systems majors. Course length 8 weeks. Outside lab work required. [C]

**BOFF 117 Keyboarding Speed Development I**(Fall and Spring) **1 hour**

This course is a satisfactory/unsatisfactory course for the student who has not met the timed writing speed requirement to enter Intermediate Computer Typing. This course will help students develop proper techniques and increase speed to 40 wpm with a minimum of 6 errors on a 3-minute timed writing and develop speed of at least 35 wpm with 10 errors or less on 5-minute timed writings. This course will not count toward the requirements for an Associate of Applied Science degree for Office Systems majors. (Non Degree Credit)

**BOFF 118 Keyboarding Speed Development II**(Fall and Spring) **1 hour**

This course is a satisfactory/unsatisfactory course for the student who has not met the timed writing speed requirement to enter Advanced Computer Typing. This course will help students develop proper techniques and

increase speed to 50 wpm with 10 errors or less on 5-minute timed writings. This course will not count toward the requirements for an Associate of Applied Science degree for Office Systems majors. (Non Degree Credit)

**BOFF 121 Typing & Document Processing**(Fall and Spring) **3 hours**

Keyboarding mastery, techniques, speed and accuracy development, introduction of letters, tables, reports and memos. Upon completion of the course a minimum speed of 30 words per minute with 6 errors or less on a 3-minute timing is required. Class meets 4 hours per week. Class is taught on microcomputers. Outside lab work is required. [T, C]

**BOFF 122 Document Processing II**(Fall and Spring) **3 hours**

Speed and accuracy development. Business letters, reports, tables, and business forms. Developing proofreading skills. Upon completion of the course a minimum speed requirement of 40 words per minutes (10 error maximum) on a 5-minute test. Prerequisite: BOFF 121 with a grade of "C" or better and a minimum of 38 words a minute with 6 errors or less on a 3-minute timing or pass placement test or consent of instructor. Class is taught on microcomputers. Outside lab work required. [T, C]


**BOFF 125 Business Communication**(Fall & Spring) **3 hours**

Theory and practical application of business letter and memo writing including inquiries, acknowledgments, orders, adjustment, and requests. E-mail, reports, and meeting correspondence included. Dictating techniques. Work on the computer required. Prerequisite: BOFF 114 and BOFF 228; or BOFF 121; or consent. [T, C]

**BOFF 127 Intro to PowerPoint (Non-Majors)**(Spring) **2 hours**

An introductory course to develop skills in preparing and using this presentation graphics software. Topics include: creating, formatting, and enhancing presentations with various graphic forms. File management techniques will be reviewed. Prerequisite: BOFF 130. [C]

**BOFF 130 Windows**(Fall, Spring & Summer) **2 hours**

This course introduces Microsoft Windows and teaches basic terminology, mouse techniques, and keyboard shortcuts. Learn Windows skills such as Explorer, Clipboard, Paint, and Word Pad. Recommended Prerequisite: BOFF 114 or BOFF 121 or consent of instructor. Course length 8 weeks. [C] 

**BOFF 135 Intro. to the Office**(Fall and Spring) **3 hours**

Familiarizes students with the changing business world, types of organizations, office competencies, teamwork, communication, office financial information, the internet and 10-key instruction. Prerequisite: Enrollment in or completion of BOFF 121 or consent of instructor. [C]

**BOFF 140 Medical Terminology**(Fall and Spring) **3 hours**

Familiarizes the para-medical student with the medical language used in health professions. Emphasis in this course is placed on the precise meaning, exact spelling, and correct pronunciation of medical terms. [T, C]


**BOFF 141 Intro. to Medical Transcription**(Spring) **3 hours**

Explore the medical transcriptionist career. Learn the types of medical reports, proper report form, typing rules, and ethical and legal aspects of the medical record. Medical terminology review. Learn the operation of a transcription machine and some transcription. Prerequisite: BOFF 121, BOFF 140, or consent of instructor. [C]

**BOFF 145 Voice Recognition Software**(Fall & Spring) **2 hours**

Develop a basic skill using speech-recognition software to prepare business documents. Emphasis is placed on using speech-recognition voice commands, dictating documents into the speech-recognition document screen, transferring documents from the speech-recognition document screen to a word processor, and dictating into Microsoft Word. [C]

**BOFF 151 Records Management**(Fall & Spring) **3 hours**

Practical application and overview of alphabetic, subject, geographic, and numerical filing systems with emphasis on basic principles and procedures of record storage, control, selection, and retrieval. [C] 

**BOFF 171 Basic Coding**(Spring) **2 hours**

Students will learn the basic coding ground rules and the appropriate way to find CPT and ICD-9-CM codes for classifying diagnoses and procedures, as well as becoming familiar with key terms and utilizing resources to increase coding accuracy. Prerequisite: BOFF 242. Course length 8 weeks. [C]

**BOFF 180 Layout & Design Principles**(Spring) **2 hours**

Graphic Design fundamentals including graphic design techniques for publications such as newsletters, brochures, pamphlets, fliers and other business forms. [C]

**BOFF 215 QuarkXPress**(Spring) **3 hours**

QuarkXPress software on the microcomputer. Students will use the tools of Quark to mix text and graphics to produce camera-ready publications such as fliers, invitations, business cards, newsletters, etc. Prerequisite: BOFF 130, BOFF 180; or consent. [C]

**BOFF 217 InDesign**(Fall) **3 hours**

An introductory course in Adobe InDesign. Students will learn to use the tools of InDesign; combining text and graphics to create fliers, newsletters, brochures, invitations, and other business forms. Prerequisite: BOFF 130, BOFF 180, or consent. [C]

**BOFF 219 Publisher**(Spring) **2 hours**

This course is an introductory course to develop skills in the use of Microsoft Publisher; a desktop publishing software program. Students will create a variety of documents utilizing and/or modifying Publisher's predefined templates, as well as designing their own layouts. Use of the many editing features of Publisher will be covered. Prerequisite: BOFF 130. [C]

**BOFF 220 Photoshop**(As Needed) **2 hours**

This course is an introductory course to develop skills in the use of this graphics editing software program. Basics of image enhancement and modification will be covered. Students will create presentation quality images that can be subsequently used in other application software publications. Prerequisite: BOFF 130. [C]


**BOFF 221 Machine Transcription**(Fall) **3 hours**

Development of skills in the use of the Lanier cassette transcriber to produce mailable correspondence. Review of English transcription skills and spelling. Prerequisite: Completion of or enrollment in BOFF 122. [C]

**BOFF 224 Document Processing III**(Fall) **3 hours**

Speed and accuracy development. Advanced work on business letters, reports, tables, and memos. Minimum speed requirement: 50 words per minute (10 errors maximum) on 5-minute test. Outside lab work is required. Class is taught on microcomputers using Word. Prerequisite: BOFF 122 with a grade of "C" or better and a minimum of 48 words a minute with 10 errors or less on a five-minute timing or consent of instructor. [T, C]

**BOFF 225 Excel I**(Fall, Spring & Summer) **3 hours**

An introductory course to develop skills in creating, revising, and printing spreadsheets and charts. File management techniques will also be reviewed. Prerequisite: BOFF 130. [C] 

**BOFF 226 Access I**(Fall & Spring) **3 hours**

An introductory course in database concepts including the skills to create tables; add, edit and delete records. The creation of forms, queries, and reports will be introduced. File management techniques will also be reviewed. Prerequisite: BOFF 130. [C]

**BOFF 227 PowerPoint**(Spring) **3 hours**

A course to develop skills in preparing and using this presentation graphics software. Topics include: creating, formatting, and enhancing presentations with various graphic forms. Linking and embedding objects and files, and sharing data and presentations will be covered. File management techniques will be reviewed. Prerequisite: BOFF 130. [C]

**BOFF 228 Intro to Word (Non-Majors)**(Fall & Spring) **3 hours**

An introduction of basic word processing skills for non Office Systems majors using Microsoft Word. The instruction includes entering, editing, enhancing, and printing text documents. Prerequisite: BOFF 114 or ability to keyboard at least 25 wpm or consent of instructor and BOFF 130. Course length 8 weeks. [C]

**BOFF 229 Microsoft Office**(Spring) **2 hours**

An advanced course to explore the various integration processes of the Microsoft Office Suite (Word, Excel, Access, and PowerPoint). Prerequisites: BOFF 225, BOFF 226, BOFF 227 or BOFF 127, BOFF 238. [C]

**BOFF 230 Excel II**(Spring) **3 hours**

An advanced course in Microsoft Excel features including formatting techniques, templates, advanced functions, and lists. Interpreting and integrating data will be done using analysis tools, macros, auditing features, protecting worksheets/workbooks, tracking changes, importing and exporting files, XML. Prerequisite: BOFF 225 or consent. [C]

**BOFF 235 Access II**(Fall) **3 hours**

An advanced course in maintaining and using Microsoft Access. Topics include: different types of queries, reports with subreports, Access tools, macros, data access pages, PivotTables and charts, XML. Prerequisite: BOFF 226 or consent. [C]

**BOFF 237 Word I**(Fall & Spring) **3 hours**

A beginning word processing course using Microsoft Word. Instruction includes creating, formatting, enhancing, and printing text documents. Headers and footers, styles, templates, columns, tables, charts, and sharing documents will also be introduced. Skills required for the Microsoft Office Specialist certification exam will be covered. Prerequisite: BOFF 114 or ability to keyboard at least 25 wpm or consent of instructor and BOFF 130. [C]

**BOFF 238 Word II**(Fall & Spring) **3 hours**

An advanced course using Microsoft Word. Skills required for the Microsoft Office Expert certification exam will be covered. These include: footnotes, mail merge, sorting, customizing objects, WordArt, macros, tables and indexes, forms, and an introduction to using XML. Prerequisite: BOFF 237 or consent. [C]

**BOFF 242 - Intermediate Medical Transcription and Terminology**(Fall) **3 hours**

Covers medical letters, consultations, chart notes, and reports in several medical specialties. Also H & P, Radiology, Surgical, Pathology and Discharge Reports. Medical accounting and scheduling procedures for the medical assistant are also covered. Prerequisite: BOFF 122, BOFF 140, BOFF 141.

**BOFF 245 Advanced Medical Transcription**(Spring) **2 hours**

Covers advanced transcription of medical reports in specialized areas of medicine such as Gynecology, Neurology, Pediatrics, and Cardiovascular. Actual doctor dictation is used as well as dictation featuring foreign accents. Prerequisite: BOFF 242, GSCI 105. [C]

**BOFF 250 Administrative Systems and Procedures**(Spring) **2 hours**

A capstone course which encompasses techniques and skills needed in today's business office. Prerequisite: BOFF 122; completion of 20 semester hours in office systems courses, or consent. [C]

**BOFF 255 Digital Presentations**(Fall) **3 hours**

Digital Presentations integrates Microsoft Office PowerPoint, Live Meeting and OneNote software to enable students to develop the core presentation skills utilizing digital technology. The course emphasizes the key tools business professionals utilize in today's digital world. Prerequisite: BOFF 127 or 227.

**BOFF 260 Job Search Seminar**(Spring) **2 hours**

This course will introduce students to concepts and strategies for the development of life-long skills in the areas of job search, job survival, and careering in a new economy. Prerequisite: BOFF 125. Completion of 40 semester hours. [C]

**BOFF 265 E-Communications**(Spring) **3 hours**

This course will provide a hands-on understanding of how to manage time more effectively, define tasks more accurately, and process incoming information more efficiently using wireless connectivity, PDA's, handheld computers, cell phones, and Microsoft Outlook.

**BOFF 290 Office Systems Seminar**(As Needed) **1 hour**

The study of contemporary problems in business. Prerequisite: Consent of the Division Chairperson. [C]

**BOFF 291 Office Systems Seminar**(As Needed) **2 hours**

The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BOFF 292 Office Systems Seminar**(As Needed) **3 hours**

The study of contemporary problems in business. Prerequisite: Consent of the Division Dean. [C]

**BOFF 295 Office Systems Internship**(As Needed) **3 hours**

On-the-job training in Office Systems or business related areas. Prerequisite: Consent of the Division Dean. [C]

**BOFF 297 Office Internship**(As Needed) **3 hours**


On-the-job training in Office Systems or business related areas. Prerequisite: Consent of the Division Dean. [C]

## CACC

### CACC 101 Financial Accounting


(Fall, Spring and Summer) **3 hours**

An introduction to Financial Accounting provides both the theoretical foundation and applications of accounting logic.

The accounting model and information processing cycle are developed. The content of the income statement, balance sheet, and statement of cash flow are studied and analyzed in detail. [T] **IAI: BUS 903** 


### CACC 105 Managerial Accounting

(Fall, Spring and Summer) **3 hours**

Managerial Accounting provides a preview of accounting as related to making business decisions internally. The relations of business documents, business forms and records, cost accounting, income taxes, and budget accounting as a means to manage the separate components of a business. The ability to analyze and control costs in producing goods and services play a critical role in this course. Decision models utilized within businesses long and short term will be reviewed. Prerequisite: CACC 101 with grade of "C" or better. [T] **IAI: BUS 904** 

### CACC 108 Intermediate Accounting I

(Fall) **3 hours**

Studies in accounting principles and applications at an intermediate level pertaining to the income statement, balance sheet, and financial reporting for interested external parties. Emphasis on asset valuation, income measurement, and preparation of financial statements. Prerequisite: CACC 105 or consent of the instructor. [C] 

### CACC 109 Intermediate Accounting II


(Spring) **3 hours**

Continuation of Intermediate Accounting I. An examination of additional problems in financial reporting, long-term investments, current and contingent liabilities, special accounting problems and analysis, statement of cash flows and financial statement analysis. Prerequisite: CACC 108 or consent of instructor. [C]

**Student should verify transferability of CACC 108 and CACC 109 with specific college or university for acceptance with their third and fourth year requirements.**

### CACC 166 Cost Accounting

(Spring) **3 hours**


Use of costs for control and decision making with emphasis on standard costs, relevant costs, direct costing, non-manufacturing costs, and responsibility accounting. For students who have already studied the basic elements of job order and process costs and budgeting. Prerequisite: CACC 105 with a grade of "C" or better or consent of instructor. [T, C] 

**Student should verify transferability of CACC 166 with specific college or university for acceptance with their third and fourth year requirements.**

## CBUS


### CBUS 104 Introduction to Business

(Fall, Spring & Summer) **3 hours**

A study of U.S. business systems and diverse components that provide the foundation of U.S. Businesses. Introduction to Business will focus on developing student awareness, knowledge, and understanding of today's business world. Key business themes and concepts will include: growth of international business; role of ethics and social responsibility; the significance of small business; the need to manage information and communication technologies; the growth of the service sector and focus on quality. [T] 


### CBUS 150 Business Computer Systems

(Fall, Spring & Summer) **3 hours**

This course covers the role of computing in our society today. Emphasis is placed on how computers are used in business and industry. Basic systems analysis and design techniques, and file processing and database concepts are covered. Students are introduced to and trained in business software packages, including word processing, spreadsheet, database, presentation, and Internet access applications. All of the above are accessed in the current Windows environment. Other operating systems are discussed as well. A special fee is assessed. Class meets 4 hours per week. [T] **IAI: BUS 902** 


### CBUS 203 Business Law I

(Fall) **3 hours**

A study of the legal system, torts, contract law, the uniform commercial code, concepts of property, and commercial paper. [T] 

### CBUS 204 Business Law II


(Spring) **3 hours**

A study of secured transactions, debtor and creditor rights, sales, bankruptcy, bailment law, agency and employment, and business organizations. [T] 

## CECN

### CECN 102 Microeconomic Principles


(Fall, Spring and Summer) **3 hours**

An introduction to the principles of microeconomic theory. Units of study will include scarcity, opportunity cost, supply, demand and elasticity. The four types of market structure will be covered in respect to pricing and output decisions: perfect competition, monopoly, monopolistic competition and oligopoly. A required course for Business and Accounting majors. [T] **IAI: S3 902** 

### CECN 103 Macroeconomic Principles

(Fall, Spring and Summer) **3 hours**

An introduction to the principles of macroeconomic theory. Units of study will include unemployment, inflation, GDP and national income accounting, economic growth, aggregate demand and aggregate supply. Additional units of coverage will include the Keynesian--

Classical model debate as well as fiscal and monetary policy. A required course for Business and Accounting majors. Prerequisite: CECN 102 or consent. [T] IAI: **S3 901** 

### CECN 108 Elements of Economics

(Spring) **3 hours.**

This is an introductory survey of the major elements of economics. This one semester course is considered to be a social science course for those students not majoring in commerce or business administration. This course examines aspects of both microeconomics and macroeconomics. Emphasis will be placed upon students gaining a general knowledge of economic principles which apply to our economic system. Special attention will be given on how to apply these principles to improve upon the economic plight of humans in addition to addressing various issues related to improving human relations among the different economic role players. **Not open to students who have had Economics 102 and 103.** [T] IAI: **S3 900**

### CECN 150 Money and Banking

(As Needed) **3 hours.**

A study of monetary and banking systems and the impact of monetary policy on employment, prices, economic growth, and international trade. Prerequisite: CECN 103 or 108. [C]

## CHEM

### CHEM100 General Chemistry

(Fall, Spring & Summer) **4 hours**

A one-semester introductory course in basic concepts and language of chemistry for the non-science major. Fundamentals of inorganic and organic chemistry with applications to everyday life. Class meets for 3 hours of lecture and 2 hours of lab per week. Prerequisites: Place into MATH105. [T] IAI: **P1 902L**

### CHEM101 Chemistry I

(Fall & Spring) **4 hours**

The first semester of a two semester sequence in College Chemistry for students in science and engineering. The topics include principles of atomic structure, bonding, stoichiometry, chemical equations, ideal gas laws, solutions and colloids, and oxidation-reduction. Class meets for 3 hours of lecture and 3 hours of lab per week. Prerequisites: Place into MATH111; CHEM100 or its equivalent is recommended. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] IAI: **P1 902L EGR 961 CLS 906 CHM 911**

### CHEM102 Chemistry II

(Spring) **4 hours**

This is the second semester of a two semester sequence in College Chemistry for students in science and engineering. The topics include descriptive chemistry of the metals and nonmetals, coordination complexes, qualitative analysis, kinetics, ionic equilibrium, solubility product and organic chemistry. Class meets for 3 hours lecture and 3 hours lab per week. Prerequisites: CHEM101.

Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] IAI: **EGR 962 CHM 912**

### CHEM105 Introduction to Forensic Chemistry

(Spring) **4 hours**

Students will examine the influence of chemistry on society through the study of contemporary issues, with an emphasis on forensic chemistry. Students will be introduced to chemical, biochemical, and microscopy principles associated with analyzing organic and inorganic substances including soil, blood, DNA, hair, drugs, toxins, fibers, and glass. **Prerequisites:** Placement into ENGL101 and MATH101. **Notes:** A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] IAI: **P1 903L**

### CHEM133 Chemistry (Organic)


(Fall) **5 hours**

Elementary organic chemistry of key functional groups. Presents elementary structural and synthetic chemistry. Reaction mechanisms are emphasized. Laboratory includes use of infrared and ultraviolet spectroscopy and gas chromatography. For students in engineering, pre-medical, agriculture and home economics. Can be used as the first semester of a two semester sequence in organic chemistry. 3 lecture hours, 4 lab hours. **Prerequisites:** CHEM102 **Notes:** A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] IAI: **EGR 963 CHM 913**

## CRIM


### CRIM 100 Introduction to Criminal Justice

(Fall) **3 hours**

Traces the historical development of the relationship between law enforcement and society; examines the functions and jurisdictions of various agencies. Prerequisite: Place into ENGL. [T, C] IAI: **CRJ 901** 


### CRIM 101 Criminal Law

(Spring) **5 hours**

Examines crimes against persons, property, and state, including the elements of crimes, criminal law procedures in Illinois, and federal agency jurisdiction. Prerequisite: Place into ENGL 121. [T, C] 

### CRIM 103 Patrol Techniques

(Fall) **3 hours**

Students will learn the organization and function of patrols and their methods, skills, and equipment. Prerequisite: Place into ENGL 121. [T, C] 

### CRIM 105 Introduction to Corrections

(Fall) **3 hours**

An introduction to official ways in which society reacts to persons who have been accused and convicted of committing offenses, including theories of punishment, concepts of probation and parole, the prison community, and rehabilitative and treatment programs. Prerequisite: Place into ENGL 121. [T, C] IAI: **CRJ 911**

**CRIM 170 Community Based Corrections**

(Spring) **3 hours**

Examination of the need for and the use of corrections in the community as alternatives to imprisonment. Topics include: bail and jail issues, family intervention, halfway houses, and treatment for chemical dependence. Prerequisite: Place into ENGL 121. [T, C]

**CRIM 180 Probation & Parole**

(Fall) **3 hours**

This course gives the student a basic understanding of probation and parole, their theoretical bases, and their impact on the criminal justice process and society. The student will achieve an understanding of what effects these unique areas have on the rehabilitation of the offender. Prerequisite: Place into ENGL 121. [T, C]

**CRIM 200 Criminalistics**

(Spring) **4 hours**

Emphasizes methods and procedures; crime scene protection and search; collection, preservation, and use of evidence. Prerequisite: Place into ENGL 121. [C]


**CRIM 201 Criminal Investigation**

(Fall) **4 hours**

Continuation of Criminalistics. Students will gain exposure to report writing, interrogation, interviews, presentation of evidence in court, and court procedure. Prerequisite: Place into ENGL 121. [C]


**CRIM 202 Laws of Evidence**

(Fall) **4 hours**

Review of rules, constitutional provisions, and court decisions relating to admissibility of evidence. Prerequisite: Place into ENGL 121. [C] 

**CRIM 204 Criminology**

(Spring) **3 hours**

Provides a basic examination of the theories of criminal behavior, the problems of treatment, and corrections and social control of crime. Prerequisite: Place into ENGL 121. [T, C] **IAI: CRJ 912** 

**CRIM 206 Defensive Tactics**

(As Needed) **2 hours**

An introduction to physical conditioning and drill in defense techniques, including arrest and custody of offenders. Waiver of liability required. Prerequisite: Place into ENGL 121. [C]

**CRIM 208 Criminal Justice Internship**


(Fall, Spring & Summer) **3 hours**

On-the-job training in law enforcement. Students receive 160 hours of practical experience at an approved criminal justice site. Prerequisite: Consent of instructor. Prerequisite: Place into ENGL 121. [C]

# DEVE


**DEVE 098, 981, 982, 983 English**

(Fall, Spring, Summer & Winter) **1-4 hours**  
**Available On Line**

A review of English for written communication. Students who (1) complete the requirements for the course, (2) demonstrate proficiency on a Mastery Test, (3) have an approved writing sample and (4) receive an appropriate score on the ASSET Language Usage Skills Placement Test will be placed in Rhetoric 101 or Communication Skills 121 or 130. Students who do not meet these requirements will be placed in English 099 or be reassigned to English 098. (Non Degree Credit.) 

**DEVE 099, 991, 992, 993 English**


(Fall, Spring, Summer & Winter) **1-4 hours**  
**Available On Line**

A continuation of English 098. Students who (1) complete the requirements for the course and (2) demonstrate proficiency on the ASSET Language Usage Skills Placement Test will be placed in Rhetoric 101 or Communication Skills 121 or 130. Students who do not meet both of these requirements will be reassigned to English 099. (Non Degree Credit.) Prerequisite: English 098. 

# DEVM


**DEVM 098, 981, 982, 983 Mathematics**

(Fall, Spring, Summer & Winter) **1-4 hours**  
**Available On Line**

This course is the first of a two semester sequence of courses which provides a systematic review of mathematics with utilization of programmed materials so that each student progresses at his/her own rate. Those students who are progressing satisfactorily, but who are unable to complete the course the first semester will be required to take DEVM 099. (Non Degree Credit) 


**DEVM 099, 991, 992, 993 Mathematics**

(Fall, Spring, Summer & Winter) **1-4 hours**  
**Available On Line**

A continuation of Math 098 for those students needing more time for mastery of basic math skills. Prerequisite: DEVM 098. (Non Degree Credit) 

**DEVM 100 Mathematics**

(Fall, Spring, Summer & Winter) **1-4 hours**  
**Available On Line**

This course provides a systematic review and basics of algebra with the utilization of programmed materials so that each student progresses at his/her own rate. It is designed for those students who have completed DEVM 098-099 satisfactorily but are not ready to go on to MATH 101 based on their ASSET test score. Placement as deemed necessary by DEVM 098/99 instructor or academic counselor. 

**Course Descriptions**

## DEVR

### DEVR 098, 981, 982, 983 Study & Reading Skills (Fall, Spring & Winter) 1-4 hours Available On Line

Instruction in study skills, techniques for improving reading comprehension, and strategies for developing vocabulary. Formal classroom instruction is utilized as well as individualized print and computer materials to aid the student in attaining a higher level or achievement. (Non Degree Credit.)

### DEVR 099, 991, 992, 993 Reading Skills (Fall, Spring & Winter) 1-4 hours Available On Line

A continuation of Reading 098 for those students who need additional practice on basic reading skills, including vocabulary, comprehension, flexibility, and rate. Individualized instructional materials, including computer assisted instruction programs, are utilized to allow students to progress at their own rate. (Non Degree Credit.) Prerequisite: DEVR 098.

### DEVR 101 Critical Reading (As Needed) 3 hours

Theory and application of the techniques of reading. Designed to teach the student to study, analyze, and interpret college reading materials critically and creatively at an optimum and flexible rate of speed. (Non Degree Credit)

## DRAF

### DRAF 160 Machining Graphics (Fall & Spring) 2 hours

This course is intended to provide the student with the knowledge and skills necessary to read and interpret mechanical production drawings and assemblies. The student will complete extensive drawing analysis and create 2-D orthographic multi-view sketches of simple shop projects. [C]

### DRAF 161 Engineering Graphics (Fall) 3 hours

Required of engineering students. Introduction to design concepts used on production drawings with emphasis on the design process, current engineering standards, descriptive geometry, and finite element analysis. Free-hand sketching and Inventor software is utilized for creating and modifying 3-D solid models, orthographic multi-view drawings, dimensions, section and auxiliary views. [T] IAI: EGR 941

### DRAF 166 Intro to AutoCAD (Fall & Spring) 3 hours

A study of two-dimensional computer-aided drafting using AutoCAD software. This course is designed to instruct the student in creating and modifying technical manufacturing drawings. Students will implement current industry standards as they become familiar with the drawing, editing, dimensioning, plotting, blocks, and attribute commands. Prerequisite: DRAF 160 or concurrent enrollment. [T, C] IAI: EGR 941

### DRAF 266 Applied AutoCAD (Fall & Spring) 3 hours

The student will continue the study of mechanical design, implementing three-dimensional concepts using AutoCAD software. Study will focus on manipulating three-dimensional coordinate system, viewing methods, and solid modeling. The course also introduces external references, raster images and object linking and embedding. Prerequisite: DRAF 166 [C]

### DRAF 276 Advanced AutoCAD Applications (Fall & Spring) 3 hours

A continuation of the study of mechanical design using Inventor software. This course will familiarize the student with the concept of parametric solid modeling. Students will create, modify and analyze solid models and assemblies. Prerequisite: DRAF 266 [C]

## EDUC

### EDUC 101 Nature of the Teaching Profession (Fall and Spring) 3 hours

An introduction to educational problems and a general study of the nature of teaching, its opportunities and responsibilities. Individual work to aid the student's evaluation of potentialities for teaching. Baccalaureate course. (15 hours observation required.) Criminal background check. Prerequisite: Place into ENGL 121 [T] IAI: SED 901, EED 901, SPE 911

### EDUC 102 Introduction to Bilingual Education (Spring every other year) 3 hours

Study of problems facing students, teachers, and educational institutions in multicultural communities. Includes discussion of the role of bilingual education, linguistically and culturally effective teaching strategies, and resources for multicultural teaching. Prerequisite: Place into ENGL 121. [C]

### EDUC 103 Intro. Early Childhood Education (Fall) 3 hours

Course to acquaint the student with the facets of early childhood education pertinent to the total overview. (16 hours observation required.) Criminal background check. Prerequisite: Place into ENGL 121. [C]

### EDUC 104 Creative Learning Experiences (Spring) 4 hours

Provides experiences in creative activities (music, art, and language) for young children and integrates these activities in program planning. [C]

### EDUC 159 Issues in Exceptionalities (As Needed) 3 hours

A survey of special needs issues including: managing disruptive behavior, communicating with and helping the individual learn to communicate, choosing and implementing specialized teaching strategies, positioning and handling techniques, and collaborating with the family and professionals in social service agencies. Prerequisite: Place into ENGL 121. [C]

**EDUC 160 Guiding Children**(Fall) **2 hours**

Theory and practice of effective methods for guiding children's behavior using guidance techniques and classroom management principles and skills. Problem areas such as aggression, passivity, and over-activity will be addressed. The relationship between emotional growth, self-concept, and behavior will be explored. Prerequisite: College-level reading skills required. [C]

**EDUC 162 Curriculum Planning: Creative**(As Needed) **1 hour**

Scheduling and planning a learning environment including themes, projects, and activities. Curriculum areas of art, gross and fine motor, movement and music, dramatic play and group time will be addressed. Practice teaching activities, generate ideas for other activities, and identify sources for future ideas. Prerequisite: College-level reading skills required. [C]

**EDUC 163 Curriculum Planning: Cognitive**(As Needed) **1 hour**

Scheduling and planning a learning environment including themes, projects and activities. Curriculum areas of math, science, social studies, language, literature, and health and safety will be addressed. Practice teaching activities, generate ideas for other activities, and identify sources for futures ideas. Prerequisite: College-level reading skills required. [C]

**EDUC 164 Parent-Teacher-Child Relations I**(As Needed) **1 hour**

Theory and practice of developing a teacher/parent partnership. Effective communication skills are emphasized. The role of the teacher as a provider of information about child development and community resources for young children will be emphasized. Prerequisite: College-level reading skills required. [C]

**EDUC 170 Infant/Toddler Curriculum**(Spring) **3 hour**

Provides a guide through areas and issues necessary to plan and implement a quality program for infants and toddlers including: creating environments, ensuring children's safety, promoting children's health, and guiding children's behavior. Attention also is given to planning for routines and activities which will enable children to explore and discover their world. 16 hours of observation required. Criminal background check. Prerequisite: EDUC 230. [C]

**EDUC 171 Infant/Toddler Curriculum II**(Spring) **1 hour**

Provides a comprehensive framework for planning and implementing a developmentally appropriate program for infants and toddlers. Emphasizes caregivers building responsive relationships with children and their families, creating environments that offer a variety of experiences that interest and engage children, carefully observing children before deciding whether and how to intervene, and planning and implementing a quality program both in center-based and family child care settings. 6 hours of observation required. Prerequisite: EDUC 230 and EDUC 170 or concurrent enrollment in EDUC 170. Note: This course is not available for web registration. [C]

**EDUC 201 Early Childhood Education Practicum**(Fall and Spring) **5 hours**

On-the-job-training in early childhood education in a child care or public school setting practicing the principles, skills, and techniques developed in previous courses. Prerequisite: Consent of instructor. Criminal background check. (200 hours observation/participation required.) Prerequisite: Placement into ENGL 121. [C] **IAI ECE 914**

**EDUC 206 Cultural Effects on Child Development**(Fall) **3 hours**

Study of the growth and development of the child and the significance of the culture as it relates to the physical, emotional, social, and intellectual changes in the young child and the school aged child. Criminal background check. (7 hours observation required.) Prerequisite: Placement into ENGL 121. [C]


**EDUC 207 Children's Literature**(Fall) **3 hours**

Introductory survey of children's literature. Includes teaching methods; criteria for selection, evaluation, and presentation of books and related materials; and community resources. Course Placement Prerequisite: Placement into ENGL 121. [C]

**EDUC 208 Language Development**(Spring) **3 hours**

Study of how language develops from prelingual to productive language with stress on the effect of the culture and the ramifications for learning. Prerequisite: PSYC 101 or consent of instructor and criminal background check. (8 hours observation required.) Prerequisite: Placement into ENGL 121. [C]

**EDUC 211 Educational Psychology**(As Needed) **3 hours**

This basic course in psychology of education for prospective teachers explores materials and principles from the various fields of psychology applied to the practical problems of teaching. Baccalaureate course. Prerequisite: Placement into ENGL 101. [T] 

**EDUC 220 Day Care Administration**(Spring) **3 hours**

This course is designed to develop skills in administration and supervision for students who desire to work in early childhood education centers. Included will be 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. Emphasis will be placed upon social problems, their causes, and ways of alleviating, preventing, or handling them. Criminal background check. (6 hours observation required.) Prerequisite: Placement into ENGL 121. [C]

**EDUC 225 Internship in Education**(As Needed) **4 hours**

Work experience in a school or educational agency under supervision of both the college/agency, practicing the principles, skills, and techniques developed in previous courses. Prerequisite: consent of instructor. (200 hours observation/participation required.) Prerequisite: Placement into ENGL 121. Must be taken concurrent with EDUC 226. [C]

**EDUC 226 Internship Seminar**(As Needed) **1 hour**

Study of teacher responsibilities, classroom and school procedures, lesson planning, learning styles, educational resources, classroom management, and evaluation procedures. Must be taken concurrently with EDUC 225. Criminal background check. Prerequisite: Placement into ENGL 121. [C]

**EDUC 230 Infant & Toddler Development**(Fall) **3 hours**

Comprehensive treatment of all facets of growth and development in the first three years. The exploration moves through the realms of infant physical growth, cognition, perception, and emotional-social development. It includes the study of language development as it influences all other areas. It will attempt to reveal how the infant's psychological world differs from that of older children and adults. Application of learning through 16 lab hours of observation required. Prerequisite: Placement into ENGL 121. Criminal background check. [C]

**EDUC 240 Program Planning/Young Children**(Fall) **3 hours**

Designed to explore concrete curriculum areas which are developmentally appropriate for the young child between two and six years of age. Examines how children learn and what they can learn and suggests specific curriculum ideas and activities to stimulate and transmit learning. Prerequisite: Placement into ENGL 121. [C]

**EDUC 250 Math/Science for Young Children**(Spring) **3 hours**

Students will become acquainted with basic mathematics and science concepts and will learn how to introduce them to young children through innovative methods, including songs, games, and flannel boards. Prerequisite: Placement into ENGL 121. [C]

**EDUC 260 Health/Nutrition Young Children**(Fall) **2 hours**

In this course an overview of the many factors that affect a child's state of health will be given. Included in this study will be proper nutrition for the young, environmental conditions which may influence children's health, identification and control of communicable illnesses, general good health and hygiene practices, and the development of a health and nutrition education curriculum for young children. Prerequisite: Placement into ENGL 121. [C]

**EDUC 270 Education/Exceptional Child**(Fall) **3 hours**

An introduction to the study of the identification, psychology, teaching methods, and programs for the individual at home, school, and community. These studies will deal with characteristics in the following areas of exceptionalities: learning disabilities, mentally retarded, gifted, sensory impaired, emotionally disabled, socially deviant, physically handicapped, and culturally disadvantaged. Baccalaureate course. Criminal background check. (6 hours observation required.) Prerequisite: Placement into ENGL 121. [T] **IAI: SED 904, ECE 913**


**ELEC****ELEC 104 Industrial Safety**(Fall & Spring) **3 hours**

An explanation of requirements and recommended programs for improvement of job safety and health under current Federal and State mandates. Emphasis given to preventive program procedures. [C]

**ELEC 150 Electricity for HVAC**(Fall) **2 hours**

This course will cover electrical safety, reading wiring diagrams, basic electrical circuits, electrical meters, components, symbols and circuitry of common to HVAC systems. [C]


**ELEC 160 Intro to Electricity/Electronics**(Fall, Spring and Internet) **5 hours**

Introduction to fundamental concepts of the nature, production, and usage of electricity. Study of circuits with emphasis on problem solving and component identification. [C] 

**ELEC 161 Residential Wiring**(As Needed) **4 hours**

This course will teach the student the principles of AC electricity, the techniques utilized in home wiring, and the code and safety requirements involved in residential electricity. Students will receive hands-on practice and should finish the course with the knowledge necessary to safely perform most electrical tasks around the home. [C]

**ELEC 167 Electronic Circuits I**(Fall, Spring and Internet) **4 hours**

Circuits I is an introduction to solid state devices. Diodes, LEDs, Zener Diodes, and Transistors are studied. Construction and analysis of power supplies, and amplifiers is part of the course as well as the calculation of transistor parameters. Prerequisite: ELEC 160. [C] 

**ELEC 168 Industrial Electricity**(Fall and Spring) **4 hours**

A study of 3 phase electrical power as applied to power sources, distribution, and usage. Motors, generators, transformers, and other heavy power units stressed. Wiring of industrial 3 phase control circuits included. [C]

**ELEC 175 PC Applications in Electronics**(Fall and Spring) **2 hours**

This course will introduce the student to a variety of skills and applications of personal computers used by the contemporary electronics technician. First, the student will be given a general overview of disk operating fundamentals, the Windows environment, the internet, and world wide web. Second, students will also be taught the basics of computer aided design as it applies to printed circuit board design and construction. Third, the student will become familiar with the use of various software packages developed for the electronics industry such as Workbench, ETCAI, and others. Finally, the student will learn the BASIC programming language and its use in controlling electronic circuits in robotics and other automated devices. [C]

**ELEC 180 Circuit Design & Fabrication**(As Needed) **4 hours**

This course will teach students the complete process from design to production of an electrical device. Students will utilize AutoCAD to create a schematic design and an actual circuit board design which they will produce in an etching room. Then the students will attach the required components and test the created device. This course will enable the student to understand the electronics manufacturing industry and experience many of the job skills that the industry needs. Prerequisite: ELEC 160, ELEC 167, ELEC 175, ELEC 273, or consent of instructor. [C]

**ELEC 199 Apprenticeship Worksite Experience**(Fall or Spring) **1 hour**

Students who are participating in an apprenticeship program started at the secondary level are the only ones eligible to enroll in this class. Depending upon the design of the individual apprenticeship program the student may be required to participate in worksite activities during the Summer semester prior to the regular Fall semester as a Freshman at Danville Area Community College. Additionally, some apprenticeships require worksite activities during the Fall and Spring semesters. Apprenticeship students can enroll in this class a maximum of 4 times to cover worksite activities during their program of study. This class requires a minimum of 75 hours at the worksite during the semester of enrollment. For those students who know that they will be working more than 150 hours at the worksite during the semester, they should enroll in ELEC 299. Enrollment is contingent upon approval from Division Chair.


**ELEC 220 Opto-Electronics**(Fall) **4 hours**

Application of CMOS/TTL integrated circuits in audio, oscillator, fiber optics circuit. Fiber optics will cover optical coupling, optical isolation, optical drivers and fiber cable. Transmitting, and receiving, digital and analog information using fiber optic cable will be presented. Prerequisite: ELEC 167. [C]

**ELEC 250 Pneumatics & Controls**(Spring) **4 hours**

This course is designed to familiarize the student with the principles, operation, and utilization of pneumatics in industrial operations. Students will learn the theory and operational characteristics of pneumatic circuits and components. Relation and control of pneumatics by electrical devices is also introduced. [C]

**ELEC 255 Service Electronics****2 hours**

This course will cover Troubleshooting Electronic control devices, air conditioning control systems. Systematic diagnosis and troubleshooting methods and procedures will be stressed. Prerequisite: ELEC 150. [C] 


**ELEC 260 Computer Aided Circuit Analysis**(As Needed) **4 hours**

This course will combine the traditional circuit analysis course of the past with the computer to solve problems that are difficult or impossible to solve using Ohm's Law alone. The course will use Basic Language Programs to solve the tedious parts of circuit analysis problems. Modern software will be used to solve more complex problems. Prerequisite: ELEC 160, MATT 133 and ELEC 175. [C]


**ELEC 269 Programmable Controllers**(Spring) **3 hours**

Introduction to Programmable Controllers using modern programming terminals operating in Windows 98 environment. New software: RSlinx and RSLogix are combined for application to PLC-5, SLC 500 and Micro-Logic controllers. Prerequisite: ELEC 160. [C]

**ELEC 273 Digital Electronics 1**(Fall, Spring and Internet) **4 hours**

Digital 1 is a study of the fundamentals of Digital Electronics as used in modern electronic systems. Boolean Algebra is used to minimize circuitry and solve logic problems. The connections of AND, Or, NAND, NOR, INVERTORS, and flip-flops is studied. Prerequisite: ELEC 160. [C] 

**ELEC 274 Digital Electronics 2**(Fall and Internet) **4 hours**

Digital Electronics 2 concentrates on programmable chips or PICs. The "Basic Stamp" is programmed to complete control applications. Interfacing the PIC to the outside world is studied. Prerequisite: ELEC 175 & 273 or consent of instructor. [C] 

**ELEC 275 Industrial Automation**(Spring) **5 hours**

Application of the Programmable Controller (see ELEC 269) to machine and process problems. An introduction of programmable controllers using application to industrial process and material handling. Prerequisite: ELEC 269 or consent. [C]

**ELEC 276 Advanced Automation**(Spring) **5 hours**

Programming, Set-Up and Troubleshooting program files. PID, Indirect Addressing, Batch Mixing, Induction Heating and other industrial processes. Attention to program analysis, Input/Output and file control is stressed. Prerequisite: ELEC 275. [C]

**ELEC 277 Siemens Programmable Controllers****3 hours**

This course will introduce the student to the hardware, setup, and basic Simatic S7 software. Basic programming, rack addressing, using slots and input/output addresses will be explored. Basic troubleshooting using VAT tables will help determine conditions of inputs and outputs. Prerequisite: ELEC 275. [C]

**ELEC 290 Supervised Occupational Experience**(Spring) **3 hours**

On-the-job training in an Electronics related area during the fourth semester. Prerequisite: consent of the instructor. [C]


**ELEC 299 Apprenticeship Worksite Experience**(Fall or Spring) **2 hours**

Students who are participating in an apprenticeship program started at the secondary level are the only ones eligible to enroll in this class. Depending upon the design of the individual apprenticeship program the student may be required to participate in worksite activities during the Summer semester prior to the regular Fall semester as a Sophomore at Danville Area Community College. Additionally, some apprenticeships require worksite activities during the Fall and Spring semesters. Apprenticeship students can enroll in this class a maximum of 4 times to cover worksite activities during their program of study. This class requires a minimum of 150 hours at the worksite during the semester of enrollment. For those students who know that they will be working less than 150 hours at the worksite during the semester, they should enroll in ELEC 199. Enrollment is contingent upon approval from Division Chair.


**ENGL****ENGL 100 Rhetoric and Composition for Non-Native Speakers**(As Needed) **3 hours**

Required of all transfer students. Training and practice in comprehension and expression of written English with an English as a second language focus. An alternative to ENGL 101 to meet the needs of non-native speakers of English. Credit is not given for both ENGL 101 and ENGL 100. A grade of "C" or higher is required in ENGL 100 to fulfill IAI General Education Core Curriculum requirements for transfer programs. Student must pass the Exit Exam to pass the course. Prerequisite: Place into ENGL 101 with appropriate test scores or by completing ENGL 120 with a grade of C or better. [T]

**ENGL 101 Rhetoric and Composition I**(Fall and Spring) **3 hours**

Required of all transfer students. Training and practice in comprehension and expression of written English. Placement is determined by ASSET score, grade in DEVE 098/099, or grade of "C" in ENGL 121 and is still preliminary until a writing sample has been examined by the instructor the first week of class. Keyboarding required for placement in sections using computer aided instruction. Student must pass the Exit Exam to pass the course. Prerequisite: Place into ENGL 101 with approved and documented writing and reading test scores or by completing ENGL 121 with a grade of C or better. [T] **IAI: C1 900** 

**ENGL 102 Rhetoric and Composition II**(Fall and Spring) **3 hours**

Required of all transfer students. Continued training and practice in the comprehension and expression of written English, with emphasis on the research process. Prerequisite: Grade of "C" or better in ENGL 101. Keyboarding required for placement in sections using computer aided instruction. A "C" or better is required in this course for degree and/or transfer credit to be issued beginning summer, 1999. [T] **IAI: C1 901 R** 

**ENGL 105 Creative Writing**(Spring) **3 hours**

An introduction to the principles, problems, and processes involved in creative expression in fiction and/or poetry. Prerequisite: ENGL 101 or consent of instructor. [T]

**ENGL 119 Writing Skills for Non-Native Speakers**(As Needed) **3 hours**

Writing practice with emphasis on organizing and developing essays. Review of writing basics with special emphasis on ESL written language development. Prerequisite: Placement by writing sample. Consent of Division Dean required. (Non-degree credit).

**ENGL 120 Communications Skills for Non-Native Speakers**(As Needed) **3 hours**

Improvement of writing skills, emphasizing both composition and review of grammar and ESL written language development with an English as a second language focus. Placement is preliminary until a writing sample has been examined by the instructor during the first week of class. Career credit cannot be used to fulfill the Communications requirement for the transfer Associate degree. Keyboarding required for placement in sections using computer aided instruction. Prerequisite: Placement by a writing sample and placement into ENGL 121 required. [C]

**ENGL 121 Communication Skills**(Fall and Spring) **3 hours**

Improvement of writing skills, emphasizing both composition and review of grammar. Placement is preliminary until a writing sample has been examined by the instructor during the first week of class. Vocational credit cannot be used to fulfill the Communications requirement for the transfer Associate degree. Keyboarding required for placement in sections using computer aided instruction. Prerequisite: Place into ENGL 121. [C]

**ENGL 122 Technical Communication**(Fall) **3 hours**

Techniques of collecting and presenting technical data through the use of research, forms, and procedures. Both oral and written presentations are emphasized. This is a computer-aided class; consequently, keyboarding skills are required. Prerequisite: ENGL 121 or ENGL 101 with "C" or better. Computer experience or prior computer class taken. [C]

**FIRE****FIRE 100 Techniques of Fire Fighting Module A**(Fall) **3 Hours**

This course will provide the basic knowledge of the organization of fire departments, basic equipment and its use as well as fire behavior and safety. Practical evaluations included. [C]

**FIRE 101 Techniques of Fire Fighting Module B**(Spring) **3 Hours**

This course will provide the basic knowledge of emergency medical care, building construction, forcible entry and the rescue process. Practical evaluations included. [C]

**FIRE 102 Techniques of Fire Fighting Module C**(Fall) **3 Hours**

This course will provide the basic knowledge of fire detection and prevention as well as survival (terrorism awareness and hazardous materials). Practical evaluations included. [C]

**FIRE 110 Fire Prevention Principles I/Fire Service Laws and Regulations**(Spring) **3 Hours**

This course provides the student with an overview and understanding of the field of fire prevention including history of fire prevention, code development and enforcement, inspection principles, public fire safety education, and arson suppression. This course follows objectives outlined in the National Fire Protection Association Standards 1031, Fire Inspector I. This course also provides the basic knowledge and skills through which to locate and comprehend the various statutes, regulations, codes, and cases, federal, state, and local that form the framework governing the fire service. [C]

**FIRE 120 Tactics and Strategy I**(Spring) **3 Hours**

This course reviews special methods of teaching tactical concepts relative to extinguishing all classes of fire. Extinguishing equipment and compounds along with fire development are covered. [C]

**FIRE 130 EMT-Basic**(Spring) **5 hours**

This course is designed to prepare the student for licensure at EMT-Basic level. The history of EMS, patient assessment, medical and trauma emergencies, and ambulance operations will be discussed. Meets state requirement of 120 hours of instructions for certification, 10 hours of clinical experience outside the classroom is required and coordinated by instructor. Prerequisites: 18 years old, High School diploma equivalent, Healthcare Provider or equivalent CPR card.

**FIRE 140 Fire Management I**(Fall) **3 Hours**

This course will acquaint the student with the role of the company officer and provides an introduction to basic management theories practices and functions. [C]

**FIRE 142 Fire Management II**(Spring) **3 Hours**

This course will acquaint the student with the principles of communication and group dynamics as they relate to the company officer. This course is a requirement for Fire Officer I. [C]

**FIRE 151 Fire Apparatus Engineer**(Fall) **4 Hours**

This course will train the student to be a fire apparatus engineer: preventative maintenance, pumps and controls, water supply and water systems, specialized equipment, general operations and the responsibilities of a fire apparatus engineer. Practical evaluations included. [C]

**FIRE 161 Hazardous Materials Operations**(Spring or As Needed) **3 Hours**

This course will train students to respond to releases or potential releases of hazardous materials and have the training to respond defensively without trying to stop their release. Practical evaluations included. Prerequisite: FIRE 160 [C]

**FIRE 170 Fire Instructor I**(Fall) **3 Hours**

This course will train fire fighters the basics of teaching fire subjects, and is structured to provide information about human relations in the teaching-learning environment, methods of teaching and proper method of writing lesson plans. [C]

**FIRE 180 Technical Rescue Awareness**(As Needed) **1 Hour**

This course will meet the needs of those individuals desiring to increase their knowledge in the area of technical rescue. Structured to provide information about technical terms, equipment and various types of technical rescue (rope rescue, water rescue, confined space rescue, etc.) used in the fire service. [C]

**FIRE 181 Vehicle and Machinery Operations**(Spring) **3 Hours**

This class is designed to develop student skills in the use of extrication techniques needed to perform rescue (patient and rescuer protection and consequences of not using protection), extrication (securing vehicle, environmental hazards, correct tool usage), and hazardous control functions (traffic control, containing/stopping fuel/fluid or vapor release, apparatus placement) and appropriate techniques for removing debris, preserving evidence and transferring control of the scene. Practical evaluations included in course. Prerequisite: FIRE 180 [C]

**FIRE 195 Fire Science Practicum**(Fall & Spring) **1 hour**

Repeatable up to 4 hours. Students receive credit for service on a volunteer fire department. Documentation required.

**FREN****FREN 101 Elementary French I**(Fall) **4 hours**

A class designed for beginners. Emphasis on the total language learning process: speaking, writing, learning, listening, and cultural discussions. DACC adopts the communicative approach in foreign language instruction. Much of the class is conducted in French. Prerequisite: Place into ENGL 101. [T]

**FREN 102 Elementary French II**(Spring) **4 hours**

Continuation of FREN 101. Course Placement Prerequisite: FREN 101 or equivalent. [T]


**FREN 103 Intermediate French I**(Fall) **4 hours**

Practice in conversation and composition, review of grammar, reading in French life. Course Placement Prerequisite: FREN 102 or equivalent. [T]

**FREN 104 Intermediate French II**(Spring) **4 hours**

Conversation and composition, reading of French authors. Course Placement Prerequisite: FREN 103 or equivalent. [T] **IAI: H1 900**

**GEOG****GEOG 134 World Regional Geography**(Fall & Spring) **3 hours**

The study of cultural man in regional environmental patterns, with emphasis on interrelationships of cultures and distribution of resources. Prerequisite: Place into ENGL 101. [T] **IAI: S4 900N** 


**GSCI****GSCI100 Simply Science**(Fall, Summer & Spring) **4 hours**

This introductory general science class focuses on the scientific thought process (scientific method) and basic science concepts to build a solid foundation of science knowledge in preparation for transfer-level science courses. Students will attain effective learning strategies and study skills as they gain scientific confidence. Individual responsibility and accountability are emphasized through homework, in-class assignments, teamwork, and class participation. Topics covered include an overview of science disciplines, scientific method and experimental design, metric system and measurements, matter, basic chemistry, movement processes, cells, energy, metabolism, natural selection and evolution, and ecology. Labs provide hands-on practice of the scientific method, data gathering, experimental design, and analysis. Class size is limited to guarantee individual attention and to promote active participation. **Notes:** With grade of C or better, students are next required to take BIOL102.


**GSCI105 Human Body Structure and Function**(Spring) **3 hours**

Basic study of the Anatomy and Physiology of the human body with survey of cells and tissue. Systemic approach to Anatomy and Physiology of the body systems. [C]

**HIST****HIST 111 Western Civilization I**(Fall) **3 hours**

Examination of Western Civilization from its Middle Eastern tradition to the scientific and political revolutions of the 17th, 18th, and 19th centuries, with emphasis on cultural crisis, conflict, and change. Prerequisite: Place into ENGL 101. [T] **IAI: S2 902, HST 913** 

**HIST 112 Western Civilization II**(Spring) **3 hours**

Examination of national states to international society including globalism, planned societies, and nuclear technology. Prerequisite: Place into ENGL 101. [T] **IAI: S2 903, HST 914** 

**HIST 121 Latin America - Colonial Period**(As Needed) **3 hours**

An appraisal of the Native American, European, and African roots of societies of Latin America and the Caribbean from the beginning of their human history to the independence movements of the early 1800s. Prerequisite: Place into ENGL 101. [T] **IAI: S2 910N**

**HIST 122 Modern Latin America**(As Needed) **3 hours**

An analysis of economic, political, and cultural changes in Latin America from the national period to the present, with emphasis on its status as a developing region. Prerequisite: Place into ENGL 101. [T] **IAI: S2 911N**

**HIST 131 History England I**(As Needed) **3 hours**

A survey of the social, economic, political, religious, and cultural beginnings of the British peoples. Prerequisite: Place into ENGL 101. [T]

**HIST 132 History England II**(As Needed) **3 hours**

An appraisal of the crossbonds of English culture, the Commonwealth, and the impact of empire on other regions of the contemporary world. Prerequisite: Place into ENGL 101. [T]


**HIST 141 Early Asian History**(As Needed) **3 hours**

Asia from prehistory to the Eighteenth Century, with emphasis on aspects of cultural development in the humanities and in government and society. Prerequisite: Place into ENGL 101. [T] **IAI: S2 908N**


**HIST 142 Modern Asian History**(As Needed) **3 hours**

A detailed study of the political, economic, and social changes in Asia during the Nineteenth and Twentieth centuries, including contemporary problems of nationalism and communism. Prerequisite: Place into ENGL 101. [T] **IAI: S2 909N**

**HIST 151 History of U.S. to 1865**(Fall & Spring) **3 hours**

Examination of American society from its colonial and indigenous foundations through the Civil War era, with emphasis on periods of conflict and change. Prerequisite: Place into ENGL 101. [T] **IAI: S2 900, HST 911** 

**HIST 152 History of U.S. Since 1865**(Fall and Spring) **3 hours**

An appraisal of American society in a world context from the post-Civil War era to the present. Emphasis on topical and thematic analysis in a chronological framework. Prerequisite: Place into ENGL 101. [T] **IAI: S2 901, HST 912** 

**HIST 160 History of Illinois**(As Needed) **3 hours**

Examination of the development of Illinois as a modern midwestern state in its national and international context. An opportunity to develop research skills in history in connection with local history. Prerequisite: Place into ENGL 101. [T]

**HIST 170 Women in America**(As Needed) **3 hours**

Study of the status and contributions of women in America, change and continuity in the American family, sex roles, attitudes, and movements that have most affected the lives of American women. Prerequisite: Place into ENGL 101. [T]

**HIST 181 Ancient World I**(As Needed) **3 hours**

An appraisal of the contributions of ancient societies to contemporary times with emphasis on Egypt, Greece, and the minor civilizations. Prerequisite: Place into ENGL 101. [T]


**HIST 182 Ancient World II**(As Needed) **3 hours**

Change and continuity of cultural heritage as illustrated through ancient Roman civilization and its impact on other areas of the world. Prerequisite: Place into ENGL 101. [T]

**HIST 190 African-American History**(As Needed) **3 hours**

Events and concepts which most shaped the black experience in America from its African backgrounds to the present. Prerequisite: Place into ENGL 101. [T]

**HIST 215 History: Special Topics**(As Needed) **3 hours**

An in-depth study of a specific historical topic presented by discussion, individual research, and readings. Topics will vary each semester. The course may be taken more than once if different topics are considered. Prerequisite: Place into ENGL 101. [T] 

**HITT****HITT 101 Introduction to Health Information**(Fall) **4 hours**

The history of health care in the United States, organizational structures, regulatory agencies, accreditation and licensure of health care agencies, the role of a health information technologist, and the function of a health information department will be studied. The content and structure of the health record, techniques employed to assure adequate documentation of health care in an acute care setting, computerized patient records, secondary data sources and form design are also introduced. Additionally, students gain experience in a virtual health information department. Prerequisites: Completion of or current enrollment in BIOL136 Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 105 ICD-9-CM Coding**(Spring) **3 hours**

The course introduces medical nomenclatures and classification systems, and professional standards in the assignment of codes to diagnoses and procedures using International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). The student is introduced to diagnosis related groups (DRGs) and their relationship to coding. ICD-O and DSM-IV coding classification systems will be discussed. Prerequisites: Completion of HITT101, BIOL136, BOFF140. Completion or current enrollment in BIOL137. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 110 Coding in Ambulatory Care Settings**(Fall) **4 hours**

The course introduces coding and reporting diagnostic and therapeutic procedures in the ambulatory care setting. Students will learn to read and interpret ambulatory health care documentation to code services and procedures using CPT. Students will code from workbooks, and non-acute care cases using CPT-4. Students will operate encoder and APC grouper software programs in the lab. Prerequisites: Completion of HITT101, BIOL136, BOFF140. Completion or current enrollment in BIOL137. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 115 Patho-Physiology and Pharmacology**(Spring) **4 hours**

The mechanism of disease and its effect on the human body will be studied, with emphasis on etiology, symptoms, signs, diagnostic findings and treatment. Special topics in pharmacology will be introduced, including terminology, drug category, uses, side effects, contraindications, interactions of each body system in relation to the most common diseases, and common dosage ranges and routes. Prerequisites: Completion of HITT101, BIOL136, BOFF140. Completion or current enrollment in BIOL137. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 125 Clinical Practicum I**(Spring and Summer) **2 hours**


Students are assigned to carry out routine functions in Health Information and related departments in an acute health care setting. The purpose of the experience is to practice the skills learned in courses, to expose the student to an actual professional setting, and to gain the entry level competencies required. The student will gain practice in the filing room, chart analysis and deficiencies, secondary records, release of information and be introduced to the Admissions and Discharge Office. Students will work under the supervision of a qualified Registered Health Information Administrator, Registered Health Information Technician or other qualified personnel to whom they are assigned. In addition, students will gain experience in a simulated laboratory situation. Prerequisites: Completion of HITT101 and HITT205, BIOL136. Completion or current enrollment in BIOL137, HITT105, HITT115. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 150 Clinical Coding**(Summer) **3 hours**

Students are assigned to health information management and related departments in both acute and non-acute healthcare settings. The purpose of the experience is to practice the skills learned in courses, to expose the students to actual professional settings and to gain the entry-level competencies required. The students will spend at least four or more days in one or of the following: doctor's offices, clinics, hospitals. Students will work under the supervision of a qualified Registered Health Information Administrator/Registered Health Information

Technician or other qualified personnel to whom they are assigned. The students will be assigned to the Danville Area Community College Health Information Technology Program Laboratory for simulated experiences. Prerequisites: Completion or current enrollment in HITT 101, HITT 105, HITT 110, HITT 215, and HITT 220. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]


**HITT 205 Legal Aspects of Health Information Management and Ethics**(Fall) **2 hours**

The course will examine our court systems and the legal and ethical issues related to the health care field. An emphasis will be placed on the Health Information Management Department. Specific federal and state laws as they relate to the health information department will be covered. HIPAA rules and regulations and their influence on the health care field will also be studied. Prerequisites: Completion or concurrent enrollment in HITT101. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C] 

**HITT 210 Health Statistics and Registries**(Fall) **3 hours**

The course focuses on the collection, interpretation, presentation, and reporting of medical statistics with emphasis on reliability and validity of data. The importance of healthcare statistics in relation to management, decision-making, governmental agencies, quality assessment, and research will be stressed. Vital and public health reporting and statutory and regulatory requirements are identified. Cancer and other specialized registries are also covered. The use of computerization will be stressed throughout the course. Prerequisites: Placement out of MATH101. Completion of HITT125. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

**HITT 215 Alternative Health Care Settings**(Fall) **2 hours**

This course addresses medical services, health record systems, regulatory agencies, and controls in non-acute care settings. Topics include the activities of the front office and their relationship to the health information department. The role of a health information management consultant will be discussed. Prerequisites: Completion of HITT125. Completion or current enrollment in HITT220. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C] 

**HITT 220 Insurance Procedures**(Fall & Summer) **2 hours**

The terminology, rationale and methodology (RUG III, RVU, RBRVs, DRGs, APCs, IVCD, LMPR, ABN, EOB) used by third-party payers to determine the reimbursement for health care providers will be examined. Proper completion of the 1500 billing form and legal issues related to reimbursement will be discussed, as well as the role HIM plays in the Chargemaster maintenance, reim-

bursement monitoring, and revenue cycle. An overview of hospital and nursing home billing systems including proper submission of UB-92 billing forms will also be covered. Prerequisites: Completion of HITT125. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]"

### **HITT 225 Clinical Practicum II**

(Fall) **3 hours**

Students are assigned to health information management and related departments in both acute and non-acute healthcare settings. The purpose of the experience is to practice the skills learned in courses, to expose the students to actual professional settings and to gain the entry-level competencies required. The students will spend at least one day in one or more of the following non-acute healthcare settings: doctor's offices, clinics, homecare/hospice organizations, long term care facilities, insurance companies, cancer registry and statistics. Students will work under the supervision of a qualified Registered Health Information Administrator/Registered Health Information Technician or other qualified personnel to whom they are assigned. The students will be assigned to the Danville Area Community College Health Information Technology Program Laboratory for simulated experiences. Prerequisites: Completion of HITT125. Completion or current enrollment in HITT110, HITT210, HITT215, and HITT220. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

### **HITT 230 Quality Assurance**

(Spring) **3 hours**

The course focuses on the theoretical and methodology issues related to quality assurance (utilization risk management, quality assessment, and staff credentialing), accreditation and regulatory agencies. The tools of quality improvement will be discussed. The responsibility of the Health Information Department in relation to other departments is stressed throughout the course. Prerequisites: Completion of HITT225. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

### **HITT 235 Advanced Coding**

(Spring & Summer) **3 hours**

The course will examine the coding of actual charts utilizing ICD-9-CM, HCPCS level II, and CPT-4, with emphasis on official coding guidelines, and sequencing.. Special emphasis is placed on validation of coded clinical information in relation to DRGs, APGs, and APCs, as well as the purpose of case mix and severity of illness. Particular class attention will be given to practice profiling that is carried out to assess practice performance. Prerequisites: Completion of HITT225 Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

### **HITT 240 Supervision for Health Information Technologists**

(Spring) **3 hours**

The course includes a study of the management theories and practices essential to efficient management of a health information management department. The following will be covered: organizational processes, human resources, financial and physical resources, management principles, productivity, budget preparation, budget controls, development of goals, objectives, policies and procedures, job descriptions, performance evaluations, in-service, team leadership, communication, problem solving, and cultural diversity in the workplace. Prerequisites: Completion of HITT225. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

### **HITT 245 Current Trends in Health Information Technology**

(Spring) **3 hours**

The course examines information technology (IT) and its application to the healthcare delivery systems. The role of the health information management department in the development of IT will be reviewed. Discussion of current issues relating to health care and health information management will be discussed. Review of topics relating to the accredited Record Technician Examination will be reviewed. Prerequisites: Completion of HITT225. Completion or current enrollment in HITT230, HITT235, HITT240. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

### **HITT 250 Clinical Practicum III**

(Spring) **3 hours**

Students are assigned to health information management departments with special emphasis on supervisory functions. The students shall rotate through a business office to become familiar with the interaction between health information departments and business offices. They will spend time in Utilization, Quality Assessment, Risk Management, Compliance, and Privacy Office departments. Students will work under the supervision of a qualified Registered Health Information Administrator/Registered Health Information Technician or other qualified personnel to whom they are assigned. The students will also be assigned to the Danville Area Community College Health Information Technology Program Laboratory for simulated expenses as required. Prerequisites: Completion of HITT225. Completion or current enrollment in HITT230, HITT235, HITT240, and HITT245. Notes: The expanded version of the objectives is available from the HITT director. This course is not available for web registration. [C]

## HLTH

### HLTH101 Contemporary Health

(Fall, Spring & Summer) **3 hours**

Emphasis in this course is on a proactive wellness approach to decision-making and healthy behavior. Course requirements include several writing projects involving library/internet research, and include two 3 page papers. Short assignments with each unit of study allow students to apply course content to their personal situation. Prerequisites: Place into ENGL101. [T] IAI: ECE 901

### HLTH102 First Aid and Personal Safety

(Fall, Spring, Summer) **2 hours**

An introduction to basic principles and practices involved in effectively recognizing, responding to, and giving care in an emergency or medical situation. American Heart Association (AHA) Heartsaver First Aid & Healthcare Provider BLS (basic life support) CPR (cardiopulmonary resuscitation) cards will be issued upon successful completion of the class. Student projects include an oral presentation on a First Aid topic and/or related papers. [T]

### HLTH103 Safety, First Aid and CPR/Children

(Fall) **2 hours**

An introduction to basic principles and practices involved in emergency or medical situations prepares students to respond effectively when emergency care is needed for young children. American Heart Association CPR/AED and First Aid certification may be issued if qualifying criteria is met. [T]

### HLTH130 Nutrition

(Fall, Spring, & Summer) **3 hours**

A study of essential nutrients with regard to food sources, functions, digestion, absorption, and metabolism. Weight control, food labels, food safety and special nutritional requirements for age groups will also be considered. A primary objective of this course will be to assist the learner in becoming a sophisticated consumer with regard to new nutrition information. [T]

## HORT

### HORT 101 Intro to Horticulture Science

**3 hours**

An introduction to the principles and practices involved in the development, production, and use of horticultural crops (fruits, vegetables, greenhouse, turf, nursery, floral, and landscape). This class is a Transfer Ag. course. [T] IAI: AG 905

### HORT 102 Floriculture Internship

(Spring) **3 hours**

On-the-job training in Floriculture related areas during the second semester. Prerequisite: Must meet Department requirements and/or consent of instructor. [C]

### HORT 160 Intro to Floral Design

**4 hours**

Instruction in and application of principles in the art of floral design as to form, styles, and composition. [T, C] IAI: AG 912

### HORT 161 Floral Design I

**3 hours**

Basic decorative design in the use of flowers, foliage, and accessories. Prerequisite: HORT 160. [C]

### HORT 176 Landscape Principles

**3 hours**

Basic design principles, site analysis, and layout techniques in landscaping. Prerequisite: HORT 284. [C]

### HORT 187 Horticulture Mechanics

**2 hours**

Selection and use of hand and portable tools, small engine maintenance, and the principles of other major shop practices. [C]

### HORT 189 Turfgrass Culture

**3 hours**

Elements of maintenance, construction, and renovation of turf plots, golf courses, athletic fields, and park turf areas. [C]

### HORT 191 Turf Pest Control

**3 hours**

Prevention and control techniques of major weeds, insects, and diseases of ornamental turf. Prerequisite: HORT 189. [C]

### HORT 192 Tree and Shrub Maintenance

**3 hours**

Disease and insect control, pruning and tree surgery, and soil and nutrition as applied to ornamental trees and shrubs. [C]

### HORT 193 Garden Center Management

**3 hours**

A study in the management and operation of commercial garden centers. Focus will include independent shops as well as departmental operation within retail stores. [C]

### HORT 200 Interiorscape Technology

**3 hours**

Installation, maintenance and management of interior plantscapes. Emphasis on plant identification and cultural requirements as needed in an interior plantscape. [C]

### HORT 202 Golf Course Internship

(Spring) **3 hours**

On-the-job training in Horticulture related areas during the second semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

### HORT 204 Floriculture Internship

(Spring) **3 hours**

On-the-job training in Floriculture related areas during the fourth semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HORT 205 Landscape Internship**(Spring) **3 hours**

On-the-job training in Horticulture related areas during the second semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HORT 250 Golf Course Internship**(Spring) **3 hours**

On-the-job training in Horticulture related areas during the summer semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HORT 255 Landscape Internship**(Spring) **3 hours**

On-the-job training in Horticulture related areas during the summer semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HORT 270 Turf Equipment****3 hours**

On-the-job experience at a golf course maintenance department. The employer will supervise the student while on the job. [C]

**HORT 280 Turf Irrigation****3 hours**

Irrigation principles applied to the design and installation of golf courses and home lawn irrigation systems. [C]

**HORT 282 Landscape Design/Construction****4 hours**

Study in preliminary sketching and final layout plans. Principles of landscape design are applied to selected problems. Prerequisite HORT 176. [C]

**HORT 284 Woody Plant Identification****3 hours**

Identification and use of ornamental evergreens and deciduous plants in the landscape. [C]

**HORT 287 Floral Design II****3 hours**

Continuation of Silk & Dry Flowers with emphasis on planning and placement of wedding floral arrangements. A special fee will be assessed due to materials consumed. Prerequisite: HORT 160. [C]

**HORT 288 Greenhouse Culture****4 hours**

Commercial production and cut flower crops in the greenhouse. Work in the greenhouse will be the responsibility of the students as it pertains to all phases of crop production. [C]

**HORT 290 Golf Course Internship**(Fall) **3 hours**

On-the-job training in Horticulture related areas during the third semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HORT 292 Floral Design III****3 hours**

The art of making floral pieces for funerals and special holidays. A special fee will be assessed due to materials consumed. Prerequisite: HORT 160. [C]

**HORT 295 Landscape Internship**(Fall) **3 hours**

On-the-job training in Horticulture related areas during the third semester. Prerequisite: Must meet the Department requirements and/or consent of instructor. [C]

**HUMN****HUMN 101 Introduction to Humanities**(Fall and Spring) **3 hours**

A genre-based interdisciplinary study of selected works of art, music, literature, and philosophy. Prerequisite: Place into ENGL 121. [T] IAI: HF 900

**HUMN 102 Chinese Humanities**(As Needed) **3 hours**

Chinese values, traditions, and ways of thought, along with their implications for social action, will be studied through religion, philosophy, literature, and the arts. Cultural adaptation throughout Chinese history will be examined, focusing on change and continuity in form and practice. Prerequisite: Place into ENGL 101. [T]

**HUMN 103 Fantasy and Mythology**(Fall & Spring) **3 hours**

A study of the nature of mythology through study of folklore and legendary narratives, themes, archetypal figures/situations, symbolism and figurative language. Prerequisite: Place into ENGL 101. [T] IAI: H9 901


**HUMN 110 Japanese Culture**(As Needed) **3 hours**

Japanese values, traditions, and ways of thought, along with their implications for social action, will be studied through religion, philosophy, literature, and the arts. Cultural adaptation throughout Japanese history will be examined, focusing on change and continuity in form and practice. Prerequisite: Place into ENGL 101. [T]


**HVAC****HVAC 147 Principles of Air Conditioning****3 hours**

The student will describe the fundamentals of refrigeration and refrigeration theory which will include various condensers, evaporators, compressors, and related components. He or she will use basic hand tools to replace and repair copper tubing, iron pipe, brass and copper fittings. The student will become familiar with, and will demonstrate, minor installation procedures, refrigerant control and metering of refrigerant for absorbing heat, tool care, and handling of tubing and fittings. [C]

**HVAC 150 Heating Plants****3 hours**

The student will describe forced air, hot water, steam, reverse cycle, heat pump, gas radiant, electronic, and hydronic heating plants. He or she will become familiar with the control of the above equipment, how it is applied, and how it is serviced. He or she will become familiar with installation and maintenance of this equipment, heat loss, and how heat loss is controlled. Prerequisite: HVAC 147. [C] 


**HVAC 200 Advanced Air Conditioning****3 hours**

The student will analyze and service air conditioning and refrigeration equipment with emphasis on the electrical components used in air conditioning and refrigeration equipment. He or she will be able to describe the operation of electrical components and troubleshoot these components in the system. Prerequisite: HVAC 147. [C] 


**HVAC 220 Domestic Refrigeration****3 hours**

The student will identify and describe the design, construction, and controls of home-type refrigeration units. He or she will test and service these units, with emphasis on reoperation of motor compressors, cabinet care and handling, design, and airflow. Prerequisite: HVAC 147. [C]

**HVAC 240 Commercial Refrigeration****3 hours**


The student will describe the various systems components and their uses. He or she will explain the function of flow controls, defrost systems, receivers, water and electric valves, and related controls and will apply this information to analyze and service commercial equipment. This will include complete installation procedures, insulation of fixtures, thermal conductivity of heat, and insulation vs. temperature. Prerequisite: HVAC 147. [C] 

**HVAC 260 Air Handling****3 hours**


The student will estimate "load" and design duct installations for residential and commercial systems. He or she will identify efficient control units and properly balance these systems; calculate proper sizing, velocity, pressure, and loss; and describe the use of tempering and humidity controls in air-handling design. He or she will learn maintenance in relation to proper control and design and master the use of available instruments. Prerequisite: HVAC 147. [C] 

**INFO****INFO 105 Introduction to Computer Workstations****(Fall, Spring & Summer) 2 hours**

Excellent course for the novice student offering hands-on introduction to the hardware and software located in the lab rooms on the DACC campus. Experience gained in this course will prepare the student to become a productive user of the equipment and prepare them to manage the files they will be using for much of their coursework at DACC. Problem solving logic will also be

introduced. This topic will benefit Information Technology majors as they study the use of computer technology and programming procedures for the design and maintenance of new and legacy Information Systems. [C] 


**INFO 110 Internet & Telecommunications****(Fall, Spring & Summer) 3 hours**

This is an introductory course in Telecommunications and Internet usage. The focus of the course is on data communications. Topics to be emphasized include the hardware, software and media that are required for local and/or wide area networks. The lab portion of class will cover the basics of communicating over the Internet, Internet searches, e-mail, file transfer protocol, browsers, teleconferencing and other data transmission technologies. Labs and student projects provide practical experience. [C] 

**INFO 133 Cisco Network Academy I****(Fall) 3 hours**

This is the first course in the Cisco Networking Academies, designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction includes, but is not limited to, safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI models, cabling, cabling tools, router, router programming, topologies, and IP addressing. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and local, state, and federal safety, building, and environmental codes and regulations.

**INFO 135 Concepts in Programming: C++****(Fall & Spring) 3 hours**

Introductory course in computer programming for all business related majors, providing a basic knowledge of the fundamentals of programming. Program files will be compiled and executed. Emphasis is on common applications using the C++ language and a user approach. Basic topics in C++ are covered, including functions, preprocessor directives, looping operations, and conditions. Prerequisite: INFO 105 or current enrollment. [T, C] 

**INFO 153 A+ Software Preparation****(Spring) 3 hours**

This course provides students with the knowledge and skills necessary to provide a thorough, step-by-step process for supporting and troubleshooting computer operating systems. The course provides a general overview of how software and hardware actually relate to each other on a computer. The course takes a hands-on approach to learning the steps to installing, troubleshooting and supporting the most common operating systems in use on the personal computer. Prerequisite: INFO 110 or consent of instructor. [C]

**INFO 154 C++ Programming**(Spring) **3 hours**

This hands-on course teaches the student C++ emphasizing object oriented programming as it is used in C++. Topics include writing and using objects, inheritance, polymorphism, classes and virtual functions. Prepares the student for application programming in C++. Topics covered include value and reference parameters, array processing, and file handling. Prerequisite: INFO 135. [C]

**INFO 163 Client Operating Systems**(Fall & Spring) **3 hours**

This course provides students with the knowledge and skills necessary to implement, administer, and troubleshoot client operating systems. Students will learn about and use the various tools for installing, administering, and configuring task scheduling, Control Panel, and Registry Editor. Students will also learn about and manage print devices, shared and file system permissions, data storage and disk-quotas, EFS, remote access, and troubleshooting hardware devices and drivers. Prerequisites: INFO 110, concurrent enrollment, or consent of instructor.

**INFO 164 Visual Basic Programming**(Spring) **3 hours**

This course is designed to introduce the students to the Visual Basic application development environment. It provides instruction on the Visual Basic language with the hands-on experience and development skills necessary to build applications. It will also offer an understanding of what features are essential for OOPS programming. Topics covered include the IDE for Visual Basic, conditional processing, looping and classes. Prerequisite: INFO 135. [C]

**INFO 173 LINUX Operating System**(Fall) **3 hours**

This course gives a basic introduction to working with the LINUX operating system. Topics include a brief history of the development of LINUX and an explanation of how it has been designed to satisfy the requirements of a multi-user computer system. The essential components of LINUX, as well as the concept of a shell, are covered in the context of the overall structure of the operating system. Prerequisite: INFO 163 or concurrent enrollment. [C]

**INFO 174 Internet Development Tools**(Spring) **3 hours**

Students in this course will design and code World Wide Web pages using HTML (Hypertext Markup Language), XHTML (Extensible Hypertext Markup Language), and CSS (Cascading Style Sheets). We will create code which can be interpreted by Web Browser software. Projects will entail creating web pages that are informative, manageable and user friendly. Topics for discussion will include HTML editors, converters and generators. Labs and student projects provide practical experience. Prerequisite: INFO 135 or consent of instructor. [C]

**INFO 183 Cisco Network Academy II**(Spring) **3 hours**

This is the second course in the Cisco Networking Academies. Instruction includes, but is not limited to, network terminology and protocols, network standards organizations and specifications, LANs, WANs, OSI models, Ethernet, Token Ring, Fiber Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing and the network administrator's role and function. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and local, state, and federal safety, building, and environmental codes and regulations. Prerequisite: INFO 133. [C]

**INFO 190 Worksite Seminar**(Spring) **1 hour**

The student has the opportunity to tour and observe professionals in the information systems area. This provides valuable exposure to business and industry as students continue in their planned curriculum. Prerequisite: Must have 15 hours towards an INFO degree. [C]

**INFO 199 Apprenticeship Worksite Experience**(As Needed) **1 hour**

Students who are participating in an apprenticeship program started at the secondary or postsecondary level are the only ones eligible to enroll in this class. Depending on the design of the apprenticeship program, the student may be required to participate in worksite activities during the summer or regular semesters. Apprenticeships students can enroll in this class a maximum of 4 times to cover worksite activities. This class requires a minimum of 75 hours at the worksite during the semester of enrollment. Students who know that they will be working more than 150 hours at the worksite during the semester should enroll in INFO 299. Enrollment is contingent upon approval of Division Dean. Prerequisite: Consent of Division Dean is required. Notes: This course is not available for web registration. [C]

**INFO 203 Cisco Network Academy III**(Fall) **3 hours**

This is the third course in the Cisco Networking Academies. Instruction includes, but is not limited to, Novell IPX protocol configuration on routers, Fast Ethernet, LAN switching methods, LAN segmentation with bridges, routers, and switches. In addition, instruction and training are provided in the operation and benefits of Spanning Tree protocol and virtual LANs. Prerequisite: INFO 183. [C]

**INFO 213 Server Operating Systems**(Fall & Spring) **3 hours**

This course provides students with the knowledge and skills necessary to implement, administer, and troubleshoot Server operating systems. Students will learn how to install and administer Active Directory services and how to manage Active Directory objects. Students will also use Microsoft Management Console to monitor system performance, to administer Internet Information

Services, and to administer accounts and policies. In addition, students will learn how to administer print services, network protocols and services, and disaster protection. Prerequisites: INFO163 or consent of instructor. [C]

**INFO 224 Advanced Internet Development**  
(Fall) 3 hours

Students in this course will expand on their knowledge of Website design and implementation using Web Authoring Software. The focus on using Macromedia Dreamweaver will allow students to add interactivity and professional style to commercial and/or personal Web sites. Topics include creating a Dreamweaver local site, adding Web pages, links and images. Table and page layout, page layout with frames, forms, and templates and style sheets will also be covered. Labs and student projects provide practical experience. Prerequisite: INFO 174. [C]

**INFO 230 Web Programming**  
(Spring) 3 hours

Students will learn how to create motion graphics and learn about the aesthetics of design, motion, and sound. This class will use a hands on approach covering drawing tools, animations, glow buttons, graphic morphing, graphic layering, and produce and deliver high-impact Web sites. Students will create resizable, small, and compact navigation interfaces, technical illustrations, long-form animations, and special effects for Web sites or Web-enabled devices. Prerequisite: INFO 224.

**INFO 244 Advanced Windows Programming**  
(Spring) 3 hours

This course will cover techniques and strategies for developing professional programs using Visual software and graphical user interfaces. Students will learn to develop efficient, responsive applications that feature the latest Windows GUIs, working with users' criteria, databases and files. Prerequisite: INFO 164. [C]

**INFO 245 Employment Seminar**  
(Fall) 1 hour

This course involves a study of contemporary problems in the general field of employment. Future graduates are counseled in career search and development techniques as well as employment opportunities. Students are urged to share their concerns and experiences encountered while preparing for employment. Prerequisite: consent of instructor. [C]

**INFO 249 Help Desk Skills**  
(Fall) 3 hours

This course is designed to provide the student with a guide to the "soft skills" and the "self-management skills" needed to deliver excellent customer support at the help desk. It provides the student with a better understanding of what a career in customer support would entail with

strong real-world computer support examples, case studies, and exercises. This course will also focus on the technology, tools, and techniques involved in how to run an effective help desk. Prerequisites: INFO 110 or consent of instructor. [C] ☐

**INFO 253 Managing a Network Environment**  
(Spring) 3 hours

This course provides students with the knowledge and skills necessary to install, manage, monitor, configure, and troubleshoot Domain Name Systems, Dynamic Host Configuration Protocol, Remote Access, Network Protocols, IP Routing, and WINS in a network infrastructure. In addition, students will learn the skills required to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. Students will also discuss network and server management. Prerequisites: INFO 213. [C]

**INFO 263 Network Security**  
(Spring) 3 hours

This course provides students with a comprehensive overview of computer and network security issues including the numerous types of attacks computers are vulnerable to, the types of attacker profiles, and the hardware and software defense solutions available. The course begins with an overview of the subject including security goals, the importance of security, intruder profiles, and defense mechanisms. The topics subsequently covered include security and the individual personal computer in both the home and corporate environments. This includes protecting the single device from the threats of data theft, viruses and spyware, techniques of authentication and security patch management. Next, corporate security is presented including policy issues involving e-mail, Internet access, passwords, Incident Response and Disaster Recovery. Internet Security and Network Security are addressed focusing on the threats to WIN and LAN networks and methods of protecting each type of network. Finally, the class pulls all of the concepts together, presenting a picture of "Total Security". Prerequisites: INFO 253. [C]

**INFO 273 Cisco Network Academy IV**  
(Spring) 3 hours

This is the fourth course in the Cisco Networking Academies. Instruction includes, but is not limited to, WAN services, LAPB, Frame Relay terms and features, Integrated Services Digital Network, router commands to monitor and configure Frame Relay LMIs, maps, and subinterfaces, Novell IPX protocol configuration on routers, Fast Ethernet, LAN switching methods, LAN segmentation with bridges, routers, and switches. Prerequisite: INFO 203. [C]

**INFO 283 A+ Hardware Preparation**(Fall & Spring) **3 hours**

This course provides students with the knowledge and skills necessary to service microcomputer hardware, supported peripherals, and build a computer from parts. The course takes a hands-on approach to learning the steps to identifying all parts of a PC, identifying and troubleshooting common PC hardware problems, selecting quality PCs and components based on performance and cost, installing, replacing, and upgrading PC hardware components, and installing and troubleshooting PC peripherals. Prerequisite: INFO 110 or consent of instructor. [C]

**INFO 284 Java Programming**(Spring) **3 hours**

This course introduces the Java language. Learn how to develop Java applications using control structures, and object-oriented analysis and design skills. Graphics, animation and other features will also be introduced. Special features will be added to web pages. Topics include understanding the basic commands and structure and working with properties and methods. Prerequisite: INFO 224, INFO 244 or consent of instructor. [C]

**INFO 285 Database Concepts: SQL**(Spring) **3 hours**

Database models, using a database system, commercial databases, database processing and procedures, and integration of database systems will be discussed. File processing techniques, administration of database structures, backup and recovery, queries, and database analysis and design will also be covered. Labs, working with SQL, will be assigned to emphasize these topics. Prerequisite: INFO 224 or INFO 244. [C]

**INFO 289 Implementing Information Technologies**(Spring) **3 hours**

A team concept course, planning and writing web sites and associated pages across various platforms. Different applications are used, such as selling services, selling physical goods, sites for Internet payment mechanisms, or financial services. Several software tools may be utilized emphasizing the various benefits. Prerequisite: INFO 249. [C]

**INFO 290 Supervised Occupational Experience**(Fall & Spring) **3 hours**

Student field assignments are made in local information systems installations. At least 225 hours of worksite training will provide the student with information systems experience prior to entering the job market. This course is usually taken during the student's final semester at DACC. Prerequisite: Sophomore standing or consent of instructor. [C]

**INFO 293 Wireless Networking**(Spring) **3 hours**

This course provides a hands-on guide to planning, designing, installing and configuring wireless LANs. This course covers wireless networks with extensive coverage of IEEE 802.11b/a/g/pre-n implementation, design, security, and troubleshooting. Prerequisites: INFO253 or consent of instructor. [C]

**INFO 295 Special Topics in Information Systems**(As needed) **1-3 hours**

This course will address new programming and hardware issues and developments. It will concentrate on state-of-the-art technologies of direct benefit to the Information Systems student. Prerequisite: consent of the instructor. [C]

**INFO 299 Apprenticeship Worksite Experience**(As needed) **2 hours**

Students who are participating in an apprenticeship program started at the secondary or postsecondary level are the only ones eligible to enroll in this class. Depending on the design of the apprenticeship program, the student may be required to participate in worksite activities during the Summer or regular semesters. Apprenticeship students can enroll in this class a maximum of 4 times to cover worksite activities. This class requires a minimum of 150 hours at the worksite during the semester of enrollment. For those students who know that they will be working less than 150 hours at the worksite during the semester, they should enroll in INFO 199. Enrollment is contingent upon approval of Division Dean. [C]

**INST****INST 101 Success In College**(Fall and Spring) **1 hour**

An orientation course aimed at providing students with basics in study skills, time management, computer literacy, and critical thinking. Taught in various delivery methods. This is a valuable course for students wishing to learn more about the college experience. Required for graduation. [T]

**INST 105 Library Research Skills (Independent Study)****2 hours**

Student receive practical experience in the research process, from selecting a topic through locating and assessing materials. They will familiarize themselves with traditional library-based information resources and reference materials, and they will develop strategies for applying research methods to electronic databases and the internet. Students will develop skills to select, assess, and critically evaluate various types of information resources.

Library Research Skills will be conducted as an 8-week independent study, with two mandatory-attendance class sessions. This first class will present an introductory overview to research and will cover assignment expectations. The second required class will give students guided experience using electronic resources in a hands-on environment. [T]

**INST 199 Independent Study**(As Needed) **Variable to 4 hours**

Designed to permit qualified students to pursue study in areas of special interest through outside readings, research, field study, or other projects. A final paper, or other appropriate evidence of meaningful accomplishment, must be submitted for evaluation. Prerequisites: Completion of appropriate Independent Study Proposal form by the student in consultation with the supervising instructor. Approval of appropriate Division Chairperson and the Vice-President of Instruction and Student Services. Credit: Variable and repeatable to a maximum of four credit hours applied to Associate Degrees. [T]

**JRNM****JRNM 109 Journalism**(As Needed) **3 hours**

A survey of the techniques and skills needed to produce a newspaper, including style, editing, reporting, layout, and headlines. News writing instruction and experience are emphasized. Credit does not fulfill the Communications requirement for Associate degree. Prerequisite: Place into ENGL 101. [T]

**JRNM 110 Introduction to Television Production**(Spring) **3 hours**

An introduction to television production, including terminology, basic script writing, direction, audio, lighting, camera operation, and video editing. Prerequisite: Place into ENGL 101. [T] **IAI: MC 916**

**JRNM 111 Newswriting**(As Needed) **3 hours**

The course is designed specifically to acquaint the student with all the skills and requirements necessary to successfully complete the writing of any news story for newspaper publication.

Intensive instruction and practice in the writing of the news story form and related areas of journalistic writing. Both theoretical and practical story forms are examined. Credit does not fulfill the Communications requirement for the Associate degree. Prerequisite: JRNM 101. Prerequisite: Place into ENGL 101. [T] **IAI: MC 919**

**JRNM 112 Introduction to Mass Media**(Spring) **3 hours**

An introduction to mass communication by examining the nature, history, functions and responsibilities of the mass media industries in a global environment. The course surveys the impact of radio, TV, books, newspapers, film, advertising and journalism in our culture and critically analyzes legal and ethical media issues. Prerequisite: Place into ENGL 101. [T] **IAI: MC 911**

**LITR****LITR 101 Introduction to Poetry**(As Needed) **3 hours**

Reading and analysis of various types of poetry from different historical periods. Development of critical judgment and of analysis is expected as the student confronts literary meaning, form, value, terms, and characteristics. Prerequisite: Place into ENGL 101. [T] **IAI: H3 903**

**LITR 102 Introduction to Drama**(Fall) **3 hours**

Understanding drama by reading, discussing, and writing about representative plays from Greek, Elizabethan and modern playwrights. Prerequisite: Place into ENGL 101. [T] **IAI: H3 902**

**LITR 103 Introduction to Fiction**(Fall and Spring) **3 hours**

Reading and analysis of short stories and novels from different historical periods and cultures. Development of critical judgment and of analysis is expected as the student confronts literary meaning, form, value, characteristics, and terms. Prerequisite: Place into ENGL 101. [T] **IAI: H3 901, EGL 917**

**LITR 104 Afro-American Literature**(Fall, every other year) **3 hours**

An introduction to poetry, drama, fiction, and essays of Black American writers of the 19th and 20th centuries. Prerequisite: Place into ENGL 101. [T] **IAI: H3 910D**

**LITR 105 Introduction to Film**(Fall and Spring) **3 hours**

Students are expected to develop a cinematic vocabulary and to be able to distinguish between realistic and expressionistic styles of directing and editing. Feature length films, mostly current and some foreign, are viewed and discussed. Prerequisite: Place into ENGL 101. [T]

**LITR 106 Women in Literature**(Fall, every other year) **3 hours**

A survey of the literature by and about women from its beginnings to the present, with emphasis on the recent reawakening of women's consciousness, sex-role stereotyping, and similar literary and artistic issues. Prerequisite: Place into ENGL 101. [T] **IAI: H3 911D**

**LITR 107 Introduction to Midwestern Literature**(As Needed) **3 hours**

An introduction to Midwestern literature through poetry, drama, essays, and fiction. Prerequisite: Place into ENGL 101. [T]

**LITR 109 The Bible as Literature**(As Needed) **3 hours**

The purpose of this course is to discover the manifold literary values of the Bible's various parts and to relate them as such. Prerequisite: Place into ENGL 101. [T]

**LITR 110 Science Fiction**(Spring) **3 hours**

To examine the science fiction genre, including its literary history and prevalent themes, and to read significant examples of the genre and view some representative science fiction films. Students are expected to demonstrate knowledge of basic literary techniques in their writing and discussion, and will develop critical thinking skills by writing analytic/comparative papers. Prerequisite: Place into ENGL 121. [T]

**LITR 111 Non-Western Literature**(Spring) **3 hours**

An introduction to literature in English by writers from non-western cultures, including Asian, South Asian, African, Caribbean, and Middle Eastern, with an emphasis on the intellectual, social, and political contexts of their works. Prerequisite: Place into ENGL 101. [T] **IAI: H3 908N, EGL 919**

**LITR 113 American Literature I**(Fall) **3 hours**

A study of classic American authors to the Civil War. An introduction to Franklin, Poe, Emerson, Hawthorne, Melville, and others. Prerequisite: Place into ENGL 101. [T] **IAI: H3 914 Recommended IAI English major core.**

**LITR 114 American Literature II**(Spring) **3 hours**

A study of the classic American authors since the Civil War. An introduction to Dickinson, Hemingway, Faulkner, Frost, Walker, Morison and others. Prerequisite: Place into ENGL 101. [T] **IAI: H3 915 Recommended IAI English major core.**

**LITR 121 Chief English Writers I**(As Needed) **3 hours**

Chaucer, Shakespeare, Swift, and other authors. Emphasis on the importance of such authors to the present day, both artistically and socially. Prerequisite: Place into ENGL 101. [T] **IAI: H3 912 Recommended IAI English major core.**

**LITR 122 Chief English Writers II**(As Needed) **3 hours**

Wordsworth, Byron, Shelley, Keats, Browning, Tennyson, Arnold, Shaw, Yeats, Dickens, Eliot, and a selection of representative 19th and 20th century prose. Prerequisite: Place into ENGL 101. [T] **IAI: H3 913 Recommended IAI English major core.**

**LITR 131 Introduction to Shakespeare**(As Needed) **3 hours**

The study of Shakespeare through eight of his dramas—tragedies, histories, and comedies. A brief acquaintance with his life and times also included, as well as an introduction to his Sonnets. Prerequisite: Place into ENGL 101. [T] **IAI: H3 905**

**MATH****MATH 101 Basic Algebra**(Fall, Spring, & Summer) **4 hours**

An introductory study of real numbers, polynomials, rational expressions, first and second degree equations, first degree inequalities, integer exponents, radicals and systems of linear equations. Course offered for S/U grade only. Prerequisites: Place into MATH101 with approved and documented math placement test scores or by completing DEVM099 with a grade of C or S or by completing DEVM100 with a grade of C or S (or better). Notes: Course offered for S/U Grade Only. ☒

**MATH 102 Basic Geometry**(As Needed) **3 hours**

This course is an introduction to plane Euclidean geometry consisting of constructions, proofs, and problem solving associated with points, lines, planes, angles, triangles, quadrilaterals, congruence, similarity, area and circles and the definitions, postulates, theorems, corollaries and relationships, associated with them. Prerequisites: Place into MATH105 with approved and documented math placement test scores or by completing MATH101 with a grade of C or S (or better). Notes: This course is equivalent to one year of high school geometry. [C]

**MATH 105 Intermediate Algebra**(Fall, Spring & Summer) **3 hours**

A study of the properties of real numbers, the properties of exponents and radicals, the arithmetic of polynomial and rational expressions, linear and quadratic equations and inequalities, systems of linear equations, and an introduction to functions. Problem solving skills and critical thinking skills are emphasized. Meets 4 hours per week. 3 lecture hours, 1 lab hour. Prerequisites: Place into MATH105 with approved and documented math placement test scores or by completing MATH101 with a grade of S. [C] ☒

**MATH 110 Computer Science**(Fall) — **3 hours**

This course is an introduction to the basic techniques of numerical analysis and programming using **C++** on the microcomputers. It includes a discussion of computer history, algorithms, flow charts, and the structure and design of software, including debugging. Students get actual experience operating a computer and peripheral equipment. The course is designed for business and engineering students. Class meets 4 hours per week. 3 lecture hours, 1 lab hour. Prerequisites: MATH120 or MATH125 with a grade of C or better. [T] **IAI: EGR 922 MTH 922**

**MATH 111 College Algebra**(Fall, Spring & Summer) **5 hours**

A review of the fundamental topics of algebra, including the real and complex number systems, simplification and manipulation of algebraic expressions involving polynomials, rational exponents, radicals, and fractions, and the solution of polynomial equations and inequalities. Emphasis is placed on the study of the following functions: polynomial, rational, exponential, and logarithmic and their applications. These will be explored using traditional graphing techniques and also using the graphing utility Mathematica. Credit is not given for both MATH 111 and MATH 112. Prerequisites: Place into MATH111 with approved and documented math placement test scores or by completing MATH105 with a grade of C or better. [T]

**MATH 114 Trigonometry**(Fall and Summer) — **3 hours**

The study of the six trigonometric and circular functions, their inverses, the identities associated with these functions, and their application to problem solving. A graphing calculator is recommended. Prerequisites: Place into MATH114 with approved and documented math placement test scores or by completing MATH111 with a grade of C or better. [T] **IAI: MTM 901**

**MATH 115 Survey of Statistics  
(Statistics for non-math majors)**(Fall, Spring & Summer) **3 hours**

The study of basic statistical techniques. Topics include the nature of data, graphical representations of data, descriptive measures of centrality, dispersion, and position; probability concepts, binomial and normal distributions; sampling concepts, inferential statistics and hypothesis testing; analysis of linear regression concepts such as correlation coefficient and slope of the regression line; instruction on the writing of statistical reports and drawing conclusions from data analysis; use of standard statistical software packages. Knowledge of computers is helpful, but not required. Access to Excel required for online class. A TI-83 graphing calculator is required. Prerequisites: Place into MATH115 with approved and documented math placement test scores or by completing MATH105 with a grade of C or better; credit in high school geometry or MATH102 is required. [T] **IAI: M1 902**

**MATH 118 Introduction to Mathematics**(Fall & Spring) **4 hours**

An overview of ideas and concepts in mathematics. Topics from algebra, geometry, theory of numbers, mathematical logic, probability, statistics, as well as instructional techniques used in the classroom. Prerequisites: Place into MATH118 with approved and documented math placement test scores or by completing MATH101 with a grade of S. [T]

**MATH 120 Calculus & Analytic Geometry I**(Fall and Spring) **5 hours**

First course in calculus and analytic geometry. Basic techniques of differentiation and integration with applications. A TI-86 calculator or equivalent is recommended. Prerequisites: Place into MATH120 with approved and documented math placement test scores or by completing both MATH111 and MATH114 with a grade of C or better. [T] **IAI: M1 900 MTH 901**

**MATH 125 Introductory Analysis I  
(Calculus for Business & Sciences)**(Fall and Spring) **4 hours**

A study of advanced concepts of functions and graphs. Basic techniques of differentiation and integration of linear, polynomial, rational, exponential, and logarithmic functions with applications to business and social sciences. Not for Math and Science Majors. Prerequisites: Place into MATH125 with approved and documented math placement test scores or by completing MATH111 with a grade of C or better. Notes: Credit not given for MATH125 and MATH120. [T] **IAI: M1 900**

**MATH 130 Calculus & Analytic Geometry II**(Spring) **5 hours**

Second course in calculus and analytic geometry. Techniques of integration and differentiation of exponential, logarithmic, trigonometric, and hyperbolic functions; limit of indeterminate forms; polar coordinates; parametric equations; conic sections; infinite series. A TI-83 or better calculator is recommended. Prerequisites: Completion of MATH120 with a grade of C or better. [T] **IAI: M1 900 EGR 902 MTH 902**

**MATH 135 Intro. Analysis II (Finite Math)**(Fall and Spring) **3 hours**

An introduction to finite mathematics for students in the social sciences and business. Basic ideas of logic, set theory, probabilities, vectors, and matrices with applications. Instruction on computer based solution techniques using the Mathematica program. Not for Math or Science majors. May be taken before MATH 125. Prerequisites: Place into MATH135 with approved and documented math placement test scores or by completing MATH111 with a grade of C or better. Notes: May be taken before MATH125. [T] **IAI: M1 906**


**MATH 137 Introduction to Linear Algebra**(Spring) — **4 hours**

This course is a study of introductory linear algebra. Basic techniques are introduced involving vectors and matrices; vector spaces and subspaces; linear dependence, independence, and transformations and dimension; determinants; and orthogonality. Prerequisites: Place into MATH137 with approved and documented math placement test scores or by completing MATH111 with a grade of C or better. [T] **IAI: MTH 911**

**MATH 140 Calculus & Analytic Geometry III**(Fall) — **3 hours**

A third course of integrated calculus and analytic geometry; topics include vectors in 2 and 3 dimensions, vector operations, lines and planes in space, quadric surfaces, cylindrical and spherical coordinates, partial derivatives, directional derivatives, gradients, double and triple integrals and their applications. Both the understanding of theoretical concepts and the ability to use manipulative techniques are considered of prime importance. A TI-83 or better calculator is recommended. Prerequisites: Completion of MATH130 with a grade of C or better. [T] **IAI: M1 900 MTH 903**


**MATH 161 Statistics**(Fall, Spring & Summer) **3 hours**

MATH 161 is an introductory course in statistics at the non-calculus level. Topics include Graphical Inference, Numerical Descriptive Inference, Probability, Binomial Distribution, Poisson Distribution, Hypergeometric Distribution, Normal Distribution, Students' t-Distribution, Testing of Hypothesis, Estimations, Comparisons, Small Samples, Inference and Linear Regression with a focus on Correlation Analysis. The course is integrated with a statistical computer package (Microsoft Excel), allowing for hands-on computations for most of the areas listed above. No computer experience required. A TI 83 calculator is recommended. Access to Excel required for online class. Prerequisites: Place into MATH161 with approved and documented math placement test scores or by completing MATH111 with a grade of C or better; credit in high school geometry or MATH102 required. [T] **IAI: M1 902 BUS 901** 

**MATH 211 Differential Equations**(Spring) **3 hours**

The theory and application of differential equations including techniques for their solutions. Topics include first-order, second-order and higher-order differential equations; linear systems of differential equations, Laplace transforms, series solutions, and numerical methods. Prerequisites: MATH140. [T] **IAI: EGR 904 MTH 912**

**MATT****MATT 104 Business Mathematics**(Fall, Spring & Summer) **3 hours**

Business mathematical exercises and problems. Units of study will include decimals, fractions, banking, payroll records, taxes, percents in business, commission, discounts and markup. Other areas of study will include credit interest, installment buying, and depreciation. [C] 

**MATT 132 Elementary Technical Math**(Fall & Spring) **4 hours**

Review of arithmetical processes with special topics in measurement, formula usage, solution of simple equations, applied geometry, and ratio and proportion. [C]

**MATT 133 Technical Mathematics**(Fall & Spring) **4 hours**

A review of fundamental concepts and operations and study of functions, ratio-proportion, graphs, right angle trigonometry, linear equations, factoring, fractions, quadratic equations, and exponents. Prerequisite: MATT 132 or placement exam. [C]

**MATT 134 Technical Mathematics II**(Fall & Spring) **3 hours**

A review of right angle trigonometry and study of trig functions of any angle or number, vectors, oblique triangles, graphs of trig functions, logarithms, identities, and plane analytic geometry. Use of personal electronic calculator required. Prerequisite: MATT 133 or Mathematical Placement exam. [C]

**MFRG****MFRG 105 Introduction to Maintenance**(Fall) **3 hours**

This introductory course will provide the student with an overall perspective and foundation for the industrial maintenance field. The student will be taught the fundamentals of machine operations commonly utilized in the manufacturing industry. Topics such as general maintenance procedures, consumable supplies, fasteners, and machine operating specifications will be covered. In addition, high emphasis will be placed upon the understanding of machine blueprints which detail all the systems which are part of a functioning machine. Students will also be exposed to parts and specification manuals utilized in the repair of industrial machinery. Finally, students will begin to learn the logical process utilized in the diagnosis of broken, worn, and defective machinery. Safety will be stressed throughout the course. [C]

**MFRG 110 Maintenance Tools and Procedures**(Spring) **3 hours**

This course will describe the tools and procedures typically utilized in the diagnosis, repair, installation, and set-up of industrial machinery. Through extensive hands-on exercises, students will learn the proper and accurate use of all types of precision measuring tools and equipment. In addition, the safe and proper use of hand tools, power tools, lifting equipment, rigging, and other maintenance equipment is covered. Finally, students will get extensive practice in the disassembly of industrial machinery and the procedures followed for accurate diagnosis of worn parts and components. This class will further develop logical diagnostic skills introduced in MFRG 105. [C]

**MFRG 160 Basic Machining I**(Fall and Spring) **3 hours**

This course is an introduction to machine tools and processes associated with the machine trade. Students are taught the fundamentals of shop safety, the use of metal hand tool, bench and layout work and the skills needed for the preparation for metal removal processes. Machine shop measurements using precision measuring devices are stressed in the course. [C]

**MFRG 161 Machining II**(Spring) **3 hours**

This course is an introduction to the lathe engine. Students are taught the fundamentals of shop safety and skills associated with the operation of the lathe engine for metal removal processes. Prerequisite: MFRG 160. [C]

**MFRG 162 Machine Tools III**(Fall) **3 hours**

This course is an introduction to the mill and surface grinder. Students are taught the fundamentals of shop safety and skills associated with the operation of the mill and surface grinder for metal removal processes. Prerequisite: MFRG 161. [C] **IAI: MTM 923**

**MFRG 163 Machine Tools IV**(Spring) **3 hours**

This course will allow the student to demonstrate and advance the skills acquired in Machining I, II and III through the development of an independent project. Students are further prepared for NIMS testing. Prerequisite: MFRG 162. [C]

**MFRG 164 Machining IV**(As Needed) **3 hours**

This course will allow the student to demonstrate and advance the skills acquired in Machining I, II, and III through the development of an independent project. Students are further prepared for NIMS testing. Prerequisite: MFRG 163.

**MFRG 168 CNC Setup & Operations**(Spring) **4 hours**

Introduction to the fundamentals of programming and operating computerized numerically controlled machining equipment. Emphasis on set up, tooling, operation, and basic program development. Prerequisite: MFRG 160. [C]

**MFRG 169 Intro to CNC Programming**(Fall) **4 hours**

Continuation of CNC I with emphasis on advanced programming, debugging, and operation techniques. Prerequisite: MFRG 168. [C]

**MFRG 170 Applied CNC Programming**(Spring) **4 hours**

This course will continue the study of Computer Numerical Control programming started in MFRG 169. Students will learn more advanced techniques which is required in the production of complex items on a CNC machine. Particular advanced features of the specific controllers will also be explored. Prerequisite: MFRG 169. [C]

**MFRG 185 Supervised Occupational Experience**(As Needed) **3 hours**

On-the-job training in an Industrial or related area during the second semester. Prerequisite: Consent of the instructor and Division Chairperson. [C]

**MFRG 199 Apprenticeship Worksite Experience**(Fall or Spring) **1 hour**

Students who are participating in an apprenticeship program started at the secondary level are the only ones eligible to enroll in this class. Depending upon the design of the individual apprenticeship program the student may be required to participate in worksite activities during the Summer semester prior to the regular Fall semester as a Freshman at Danville Area Community College. Additionally, some apprenticeships require worksite activities during the Fall and Spring semesters. Apprenticeship students can enroll in this class a maximum of 4 times to cover worksite activities during their program of study. This class requires a minimum of 75 hours at the worksite during the semester of enrollment. For those students who know that they will be working more than 150 hours at the worksite during the semester, they should enroll in MFRG 299. Enrollment is contingent upon approval from Division Chair.

**MFRG 200 Mfg Management & Quality**(Spring) **3 hours**

This course will introduce to the student the types of management often utilized in the manufacturing industry. It will discuss leadership, ethics, and conflict resolution. Students will also learn about quality control strategies such as TQM, SPC, and other efforts. [C] **IAI: MTM 914**

**MFRG 220 Mechanical Diagnosis and Repair**(Spring) **4 hours**

This course will provide the student a comprehensive exposure to the mechanical operating principles, systems, and components of industrial machinery. Emphasis will be placed on mechanical wear, vibration, and metal characteristics. Students will get extensive instruction in the removal and installation of gaskets and seals, bearings, couplings, gearing, clutches and brakes, belt drives, chain drives, and shafting. Hands-on experience with the operation, disassembly, and reassembly of these mechanical units will be a large portion of this class. Heavy emphasis will be placed on diagnostic and troubleshooting skills utilized throughout the disassembly and reassembly process. Prerequisite: MFRG 110 or MFRG 160. [C]

**MFRG 230 Electrical Diagnosis and Repair**(Spring) **4 hours**

This course will provide the student a comprehensive exposure to the electrical system and components utilized on typical industrial machinery. Emphasis will be placed on the understanding of electrical schematics, location and testing of electrical components, and the overall analysis of the electrical system. Students will get extensive instruction on the removal and installation of electrical components following proper safety procedures. Hands-on experience with the use of electrical testing equipment in concert with machine specifications and blueprints will be a large portion of this class. Heavy emphasis will be placed on diagnostic and troubleshooting skills utilized throughout the disassembly and reassembly of the electrical system. Prerequisite: ELEC 160. [C]

**MFRG 231 Hydraulic Diagnosis and Repair**(Fall or Spring) **4 hours**

This course will provide the student a comprehensive exposure to the hydraulic system and components utilized on typical industrial machinery. Emphasis will be placed on the understanding of hydraulic schematics, location and testing of hydraulic components, and the overall analysis of the hydraulic system. Students will get extensive instruction on the removal and installation of hydraulic components following proper safety procedures. Hands-on experience with the use of hydraulic testing equipment in concert with machine specifications and blueprints will be a large portion of this class. Heavy emphasis will be placed on diagnostic and troubleshooting skills utilized throughout the disassembly and reassembly of the hydraulic system. Prerequisite: MATT 133 and MFRG 110 or MFRG 160. [C]

**MFRG 245 Applied Problem Solving**(As Needed) **3 hours**

Creative approach to the recognition, analysis, and resolution of basic engineering problems. Emphasis on the solution to abstract problems. Prerequisite: 4th semester enrollment or consent of Division Chairperson. [C]

**MFRG 250 Pneumatic Diagnosis and Repair**(Fall or Spring) **4 hours**

This course will provide the student a comprehensive exposure to the pneumatic system and components utilized on typical industrial machinery. Emphasis will be placed on the understanding of pneumatic schematics, location and testing of pneumatic components, and the overall analysis of the pneumatic system. Students will get extensive instruction on the removal and installation of pneumatic components following proper safety procedures. Hands-on experience with the use of pneumatic testing equipment in concert with machine specifications and blueprints will be a large portion of this class. Heavy emphasis will be placed on diagnostic and troubleshooting skills utilized throughout the disassembly and reassembly of the pneumatic system. Prerequisite: MFRG 110 or MATT 133. [C]

**MFRG 260 Machine Rebuilding & Setup I**(As Needed) **4 hours**

This course will expose the student to the complete diagnose and repair process for an industrial production machine. The project will involve mechanical, electrical, hydraulic, and pneumatic systems which will have to be analyzed and repaired. The student will have the opportunity to perform a complete machine disassembly, repair, and reassembly using proper tools and techniques learned in earlier classes. Heavy emphasis will be placed on shop work, blueprint reading, machine specifications, and diagnostic and troubleshooting skills. Prerequisite: MFRG 105, 110, 220, 230, 231, 250. [C]

**MFRG 265 Machine Rebuilding & Setup II**(As Needed) **4 hours**

This course will build on the student's knowledge and skills acquired through successful completion of MFRG 260 but will place emphasis on the operation and repair of advanced control systems. Programmable logic controllers (PLC) will be covered to the extent that the maintenance person can still be effective in the diagnosis and repair of machines that incorporate the use of PLC control systems. In addition, computer numerical control (CNC) will be covered to the extent that the maintenance person can still be effective in the diagnosis and repair of machines that incorporate the use of CNC technology. Prerequisite: MFRG 260, 168, 169, ELEC 269. [C]

**MFRG 280 CAD/CAM**(Spring) **3 hours**

Theory and laboratory experience in the fundamentals of programming a CAD based system to generate numerical control programs for production machinery. Creation of tool data bases, machining curves, tool paths for lathes and mills are covered. In addition, tool and turret statements, machine characteristics, post processors are covered. Prerequisites: DRAF 266 & MFRG 169. [C]

**MFRG 285 S.O.E. Industrial**(Spring) **3 hours**

On-the-job training in an Industrial or related area during the fourth semester. Prerequisite: Consent of the instructor and Division Chairperson. [C]

**MFRG 290 Special Project**(As Needed) **2 hours**

Individual study for Sophomore students in Manufacturing Technology Field. [C]

**MFRG 299 Apprenticeship Worksite Experience**(Fall or Spring) **2 hours**

Students who are participating in an apprenticeship program started at the secondary level are the only ones eligible to enroll in this class. Depending upon the design of the individual apprenticeship program the student may be required to participate in worksite activities during the Summer semester prior to the regular Fall semester as a Sophomore at Danville Area Community College. Additionally, some apprenticeships require worksite activities during the Fall and Spring semesters. Apprenticeship students can enroll in this class a maximum of 4 times to cover worksite activities during their program of study. This class requires a minimum of 150 hours at the worksite during the semester of enrollment. For those students who know that they will be working less than 150 hours at the worksite during the semester, they should enroll in MFRG 199. Enrollment is contingent upon approval from Division Chair.

# MUSI


## MUSI 100 Rudiments of Music

(As Needed) **3 hours**

A study of the notation, scales, intervals, chords, terminology, and other concepts of music theory. No previous experience in music or music theory is assumed. Open to all students. Prerequisite: Place into ENGL 121. [T]

## MUSI 115 Music Appreciation

(Fall and Spring) **3 hours**

The historical-cultural aspects of music from medieval to modern times as an art; its development in the great style periods; its relationship to the other arts, along with the lives of its leading figures and the world they inhabited; the learning of technical aspects of the art; the materials and structural elements by which a musical work is fashioned; and the techniques which enable the students to listen to music more intelligently. Prerequisite: Place into ENGL 101. [T] **IAI: F1 900** 

## MUSI 120 Introduction to American Music

(Fall and Spring) **3 hours**

Historical survey of the development and major cultural contributions of American music and composers, including symphonic, religious, folk, jazz, and popular forms, within the context of the American culture of the time. Prerequisite: Place into ENGL 101. [T] **IAI: F1 904**

## MUSI 121 Ethnic Traditions in American Music

(As Needed) **3 hours**

A survey of various ethnic musical traditions as threads of influence on contemporary American musical culture. Selected African-American, Asian-American, and European-American music is traced from its origins through its continuing role in shaping a pluralistic American culture. Prerequisite: Place into ENGL 101. [T] **IAI: F1 905D**

## MUSI 122 History of Rock and Roll

(As Needed) **3 hours**

A survey of styles and personalities in American and British popular music from 1950 to the present. A study of the historical and cultural development of Rock music, its multi-cultural roots, and its relationship with the other arts. Includes discussions of concepts and aesthetics of popular music, as well as comparisons of Rock styles, genres, and stylistic traits with other selected musical styles. Prerequisite: Place into ENGL 101. [T]

## MUSI 123 Intro. Electronic/Computer Music

(As Needed) **3 hours**

Introduction to electronic music on digital synthesis, microcomputer applications, and musical instrument digital interface standard (MIDI). Includes principles of sound synthesis, operations, and programming of digital synthesizers, and use of specially designed computer software. Prerequisite: Place into ENGL 101. [T]

## MUSI 124 Music History I

(As Needed) **3 hours**

The historical development of Western music, including various musical styles and periods and the contributions of key composers, conductors, and performers in shaping the Western musical tradition. Emphasizes concepts, structure, musical idioms, and aesthetics. Prerequisite: Place into ENGL 101. [T] **IAI: F1 901, MUS 905**

## MUSI 125 Music History II

(As Needed) **3 hours**

The historical development of Western music, including various musical styles and periods and the contributions of key composers, conductors, and performers in shaping the Western musical tradition. Emphasizes concepts, structure, musical idioms, and aesthetics. Prerequisite: Place into ENGL 101. [T] **IAI: F1 902, MUS 905**

## MUSI 126 Non-Western Music

(Spring) **3 hours**

A study of representative music of the non-Western world, with an emphasis on its function within the culture of which it is a part. Prerequisite: Place into ENGL 101. [T] **IAI: F1 903N**

## MUSI 150 Vermilion Festival Chorus

(Fall & Spring) **1 hour**

Students may earn credit for participation in the Vermilion Festival Chorus. Class meets two hours per week. May be repeated for a maximum of four hours credit. [T] **IAI: MUS 908**

## MUSI 151 Orchestra

(Fall and Spring) **1 hour**

Students may earn credit for participation in the Danville Symphony. Admission by consent of conductor. Audition required. May be repeated for a maximum of four hours credit. [T] **IAI: MUS 908**

## MUSI 152 College Singers

(Fall and Spring) **1 hour**

Students may earn humanities credit for participation in College Singers, a choral ensemble for mixed voices. May be repeated for a maximum of four (4) credit hours. [T] **IAI: MUS 908**

## MUSI 153 Pep Band

(Fall and Spring) **1 hour**

Students may earn humanities credit for participating in Pep Band. May be repeated for a maximum of four (4) credit hours.

# NURS

## **NURS 108 Employment Skills for CNA**

**1 hour**

This course is designed to provide practical information to students concerning the career of the Certified Nurse Assistant profession and to determine if this is the career path they wish to take. Note: This course is not eligible for web registration.

## **NURS 109 Employment Skills for CNA**

**1 hour**

This course is designed to provide practical information to students concerning the career of the Certified Nurse Assistant profession and to determine if this is the career path they wish to take. Note: This course is not eligible for web registration.

## **NURS 110 Role of Nurse Assistant**

**5 hours**

Role of the Nurse Assistant covers the classroom theory instructional portion (90 of 139 clock hours) of a seven week program designed to prepare students to provide basic health care in hospitals and nursing homes. Note: This course is not eligible for web registration.

## **NURS 111 Basic Nursing Procedures**

**2 hours**

Final two weeks of a seven week program designed to prepare students to provide basic health care in hospitals and nursing homes. This course, the clinical portion of the curriculum, is a continuation of NURS 110. Prerequisite: successful completion of NURS 110. Note: This course is not eligible for web registration.

## **NURS190 Concepts of Nursing I (ADN Level I, First Semester)**

**4 hours**

Foundational preparation for nursing care based on the philosophy and science of nursing with content drawn from the physical, social, biological, and nutritional sciences. Emphasis placed on the identification of individual needs for life and health as a vital dimension of nursing care. Prerequisites: Consent from Nursing Director. Students must apply to the DACC Nursing Program. [C]

## **NURS191 Concepts of Nursing II (ADN Level I, First Semester)**

**8 hours**

Further preparation in the study of principles of nursing care. Emphasis on the application of knowledge and the development of assessment skills for the individual's needs in health or illness. Focuses on the development of skills related to the nursing process, communication, and interactions with the environment. Clinical experience is provided in hospital or environments. (Course includes theoretical and clinical components.) Prerequisites: NURS190. Consent from Nursing Director. [C]

## **NURS194 Adult Nursing (Level I, Second Semester)**

**8 hours**

Application of the nursing process to concepts of health and illness related to adult needs in a healthcare environment. Expands the focus to enhance the student's understanding of pharmacological needs as well as personal, interpersonal, and social needs and interactions of the individual. Clinical and observational experiences are provided in the hospital and community environments. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190 and NURS191. [C]

## **NURS195 Maternal-Child Health Nursing (ADN Level I, Second Semester)**

**4 hours**

Foundational preparation for the provision of nursing care to the individual with maternal-child health needs. Instruction and supervised clinical experience provide understanding of the ways in which to implement nursing interactions with the family during peri-natal periods as well as those of the child from birth through adolescence. Emphasis is on maternal health and normal growth and development of children and adolescence in the hospital and community environments. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190, NURS191, and NURS194.

## **NURS296 Advanced Nursing I (ADN Level II, First Semester)**

**6 hours**

Advanced preparation for the facilitation of nursing care to individuals with complex health needs. Focuses on the nurse's unique role to design and manage care for individuals from birth to older adulthood in a variety of acute care environments. Emphasizes the nurse's collaborative communications with other health care professionals for health teaching and advocacy. Synthesizes theory and clinical experiences in the transition from the LPN to the RN role. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190, NURS191, NURS194, and NURS195. [C]

## **NURS297 Advanced Nursing II (ADN Level II, First Semester)**

**6 hours**

Emphasizes the significance of nursing care in relation to complex health needs of the individual from birth to older adulthood. Focuses on the collaborative communication with other members of the health care team and with the individual and family in the hospital environment for health teaching and client advocacy. Theory and clinical experience enhance the integration of principles of advanced nursing. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190, NURS191, NURS194, NURS195, and NURS296. [C]

**NURS298 Advanced Nursing III  
(ADN Level II, Second Semester)****8 hours**

Formulates nursing care and communication for the individual and family with complex physical/psychological health needs. Emphasizes the role of the community relative to nursing care of the individual from birth to older adulthood. Theory and clinical experience create the opportunity for integration of principles of advanced nursing, health teaching, and client advocacy in the hospital and community environments. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190, NURS191, NURS194, NURS195, NURS296, and NURS297. [C]

**NURS299 Advanced Nursing IV  
(ADN Level II, Second Semester)****4 hours**

Discriminates principles of advanced nursing for the complex health needs of the individual from birth to older adulthood with a focus on health teaching and client advocacy. Compares health and illness, addressing issues related to professionalism, management, nursing power and politics, and career planning. Clinical experience is provided in a variety of environments in the hospital and community, and supports the transition of student nurse to professional nurse. (Course includes theoretical and clinical components.) Prerequisites: Consent from Nursing Director and NURS190, NURS191, NURS194, NURS195, NURS296, NURS297, and NURS298. [C]

**PEMW**

All professional courses are coeducational.

**PEMW103 Volleyball****(Fall) 1 hour**

Basic skills, rules, and strategy. [T]

**PEMW106 Golf****(Spring) 1 hour**

Basic skills, rules, and etiquette. [T]

**PEMW109 Physical Fitness****(Fall) 1 hour**

Introduction to various types of physical fitness programs, including the fundamentals of physiology of exercise for the purpose of improving the student's physical fitness. [T]

**PEMW113 Weight Training****(Fall and Spring) 1 hour**

Basic skills, safety in use of equipment, improvement of strength, endurance, flexibility. Specific training techniques for such sports as basketball, baseball, volleyball, etc. May be repeated twice.[T]

**PEMW116 Intermediate Golf****(As Needed) 1 hour**

Review basic rules and regulations as well as an analysis of the basic fundamentals. Evaluate the basic golf swing and cover different phases of the game such as bunker, chipping, pitching, and putting. [T]

**PEMW120 Racquetball****(Fall and Spring) 1 hour**

Provides instruction and practice in the basic skills and playing strategies in both singles and doubles play in racquetball. [T]

**PEMW135 Fitness Center I****(Fall, Spring & Summer) 1 hour**

This purpose of this course is to help students develop a personal fitness and exercise program consistent with a healthy lifestyle. The course is taught in the Fitness Center and utilizes treadmills, stair machines, recumbent bikes, a series of resistance exercise stations and stationary exercise bikes. Instruction is provided on general fitness, safety, and proper use of the fitness equipment. General fitness testing and development of individualized fitness programs are provided for each student. Prerequisites: Must take PEMW134 Fitness Center Orientation in same semester. [T]

**PEMW136 Fitness Center II****(Fall, Spring & Summer) 1 hour**

This is the second course in a series. The course continues to provide opportunities to develop and improve personal fitness and exercise programs consistent with a healthy lifestyle. The course is taught in the fitness center and utilizes treadmills, stair machines, recumbent bikes and a series of resistance exercise stations and stationary exercise bikes. Prerequisites: PEMW135 with a D or better. [T]

**PEMW137 Fitness Center III****(Fall, Spring & Summer) 1 hour**

This is the third course in the series. The course continues to provide opportunities to develop and improve personal fitness and exercise programs consistent with a healthy lifestyle. The course is taught in the fitness center and utilizes treadmills, stair machines, recumbent bikes and a series of resistance exercise stations and stationary exercise bikes. Prerequisites: PEMW136 with a D or better. [T]

**PEMW138 Fitness Center IV****(Fall, Spring & Summer) 1 hour**

This is the fourth course in a series. The course continues to provide opportunities to develop and improve personal fitness and exercise programs consistent with a healthy lifestyle. The course is taught in the fitness center and utilizes treadmills, stair machines, recumbent bikes and a series of resistance exercise stations and stationary exercise bikes. Prerequisites: PEMW137 with a D or better. [T]

**PEMW150 Teaching Elementary Games**(Fall, Spring & Summer) **2 hours**

Characteristics and needs of the elementary school child in terms of growth, development, and adjustment. Planning, organizing, and teaching activities which fulfill the needs of children from early childhood to 6th grade. Activities for the mainstreaming of children with disabilities are included. [T]


**PEMW153 Introduction to Sports Psychology**(Spring) **3 hours**

This course will cover various psychological principles associated with sport. Discussions will consist of the psychological variables which can hinder athletic performance as well as the variables which can enhance performance. Class content will also illustrate numerous psychological techniques which can enhance sport performance. The overall goal of this class is to bridge the gap between theory and real world situations. At the conclusion of the class, the student should gain a better understanding as to why athletes succeed or fail based upon theoretical principles. Students should also gain a better understanding as to which psychological techniques may help their own performance, not only in sport settings but in all performance situations (e.g., public speaking, academics). [T]


**PHIL****PHIL 101 Introduction to Philosophy**(Fall & Spring) **3 hours**

A critical examination of problems of Western philosophy: freedom of will, morality, relation between mental and bodily states, etc. Readings on important philosophers. Prerequisite: Place into ENGL 121. [T] **IAI: H4 900**


**PHIL 102 Logic**(Fall & Spring) **3 hours**

An introduction to the principles of sound reasoning. Verbal logic, induction, deduction, the detection of fallacies. Prerequisite: Place into ENGL 121. [T] **IAI: H4 906** 

**PHIL 103 Ethics**(Fall and Spring) **3 hours**

An examination of the major moral issues of our time, the approaches to these and related issues in the past, the results obtained, and their implications for moral conduct in the present. Prerequisite: Place into ENGL 121. [T] **IAI: H4 904** 

**PHIL 104 World Religions**(Spring) **3 hours**

An introduction to the study of selected major religions including Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam. Aspects of their teachings and historical development. Prerequisite: Place into ENGL 121. [T] **IAI: H5 904N** 

**PHIL 105 Death and Dying**(As Needed) **3 hours**

A philosophical investigation of the general subject of death and dying, involving both logical and conceptual analyses of terms such as "death," "grief," and "immortality." Draws on literature and the other fine arts, psychology, sociology, law, and the healing arts. Prerequisite: Place into ENGL 121. [T]

**PHIL 106 Black Churches in America**(As Needed) **3 hours**

This course will examine the relationship between social problems and the Christian faith in regards to the African-American Churches. Attention is placed on the historical, political, and socio-cultural aspects of churches in their communities. Prerequisite: Place into ENGL 121. [T]

**PHYS****PHYS100 Conceptual Physics**(Spring) **4 hours**

This course examines selected concepts and methods from the following topics related to physical phenomena encountered in the natural world and in human society: mechanics, heat, electromagnetism, wave, optics, modern physics. PHYS 100 is a laboratory-based course. Students will be expected to purchase a lab kit and study guide as well as normal supplies. 3 lecture hours, 2 lab hours. Prerequisites: Place into MATH105. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. **IAI: P1 901L**

**PHYS101 Physics-Mechanics/Heat**(Fall) **5 hours**

PHYS 101 is the first semester of a two semester course in introductory physics for science majors/health career students which discusses kinematics, forces, energy and heat. The class meets for four one-hour lecture/discussion periods each week. Also, students are required to do a two-hour lab each week. Prerequisites: Placement into MATH120 with approved and documented math placement test scores or by completing MATH111 and MATH114 with a grade of C or better. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: P1 900L**

**PHYS102 Physics-Wave Motion/Electricity/Optics**(Spring) **5 hours**

PHYS 102 is the second semester of a two semester course in introductory physics for science majors/health career students. The topics covered are: Wave Motion, Electric Charge, Electric Current, Magnetism, Optics, the Nucleus and Quantum Physics. The class meets for four one-hour lecture/discussion periods each week. Also, students are required to do a two-hour lab each week. Prerequisites: PHYS101. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: MTM 902**

**PHYS106 Physics-Mechanics**(Spring) **4 hours**

An introduction for engineering, physics, and chemistry students to kinematics, forces, energy, and circular motion. The class consists of lecture, demonstrations, and laboratory. Class meets for 4 hours of lecture and 2 hours of lab per week. Prerequisites: MATH120 or consent of instructor. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: P2 900L EGR 911 MTH 921, PHY 911**

**PHYS107 Physics-Heat/Magnetism**(Fall) **4 hours**

PHYS 107 is the second course in a three semester introductory physics sequence for the engineering and science student. The typical student enrolling in this course will later transfer to a four-year college or university to continue their studies toward a baccalaureate degree in a scientific field. Prerequisites: PHYS106 and MATH130. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: EGR 912, PHY 912**

**PHYS108 Physics-Wave Motion/Optics/Modern Physics**(Spring) **4 hours**

The third semester of the three semester introductory physics sequence for the engineering and science students. The typical student in this course will transfer to a four year university for a degree in engineering or technology. 3 lecture hours, 2 lab hours. Prerequisites: PHYS107 [T] **IAI: EGR 914, PHY 914**

**PHYS114 Physical Geology**(Spring) **4 hours**

An introduction to basic geologic principles from a physical perspective. Includes coverage of minerals and rocks, Earth's surface processes and landform development, and Earth's internal processes. Designed for non-science majors and recommended for education majors. Integrated lab and lecture. Prerequisites: Place into ENGL101 and MATH105. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: P1 907L**


**PHYS141 Physical Science I**(Fall & Spring) **4 hours**

This course emphasizes fundamental principles in the fields of physics and chemistry, the importance of these principles, and their influence on modern life. PHYS 141 is for the non-science major. Class meets 5 hours per week and is primarily a lecture based course with 1 lab weekly. Prerequisites: Place into ENGL101 and MATH105. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: P9 900L**


**PHYS142 Physical Science II**(Fall and Spring) **4 hours**

PHYS 142 is an introductory course in geology, astronomy and meteorology. Emphasis is placed on the basic concepts of these sciences to give the student a better understanding of the earth, atmosphere, and the universe. The course is taught using active and cooperative learning techniques. Students will be expected to work in teams to produce several projects. For non-science majors. Class meets for 3 hours of lecture and 2 hours of lab per week. Prerequisites: Place into ENGL101 and MATH105. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: P9 900L**

**PHYS143 Introduction to Astronomy**(Fall, Spring & Summer) **3 hours**

A one-semester college level course in introductory astronomy. The course explores a broad range of astronomy topics, concepts, and principles, and presents information in four major areas: the night sky, the life cycle of stars, the universe of galaxies, the history of the universe, and the origin, characteristics, and evolution of the solar system. Throughout the course, special emphasis is placed on the scientific evidence that astronomers use to support their conclusions, and how astronomers have come to know what they know about the universe. Presentations via CD-ROM feature leading practitioners, theoreticians, and academics in the fields of astronomy, planetary science, and astrophysics, who describe and explain celestial objects and events. Also presented via CD-ROM are scientifically accurate three-dimensional animations and computer graphics, as well as inclusion of the latest images from NASA, JPL, Earth-based telescopes, space observatories, and the Hubble Space Telescope. Prerequisites: Placement into ENGL101 and MATH111. [T] **IAI: P1 906** 

**PHYS144 Conceptual Physics**(Fall) **3 hours**

This course examines selected concepts and methods from the following topics related to physical phenomena encountered in the natural world and in human society: mechanics, heat, electromagnetism, wave, optics, modern physics. 3 lecture hours. Prerequisites: Place into MATH105. [T] **IAI: P1 900** 

**PHYS152 Applied Mechanics-Statics**(Fall) **3 hours**

Analysis of forces and their equilibrium in structural members and forces due to friction; calculation at center of gravity and moments of inertia; study of virtual work for systems. Prerequisites: PHYS106. [T] **IAI: EGR 942**

**PHYS211 Applied Mechanics-Dynamics**(Spring) **3 hours**

An analysis of the kinetics of particles and rigid bodies involving force, mass, acceleration, energy, momentum, and impulse, as well as the kinematics of rigid bodies and particles. Prerequisites: PHYS152 and MATH130. [T] **IAI: EGR 943**

**PHYS235 Electrical Circuit Analysis**(Every other Spring) **4 hours**

Includes techniques of linear circuit analysis in the time and frequency domain using Kirchoff's Laws, network analysis methods, Thevenin and Norton equivalent circuits and phasor notation. Students are introduced to computer-aided circuit design using PC-based software tools (such as SPICE). Class meets for 3 hours of lecture and 2 hours of lab per week. Should be taken concurrently with MATH 211. Prerequisites: Should be taken concurrently with MATH211 or consent of instructor. Notes: A lab is required for this course. Some sections will require a separate lab, while other sections will include the lab. [T] **IAI: EGR 931**

**POLI****POLI 130 Principles of Political Science**(As Needed) **3 hours**

An introduction to the principles and methods of political science, focusing on the nature and development of political science as a discipline, and the various ways of analyzing the political process and institutions. Prerequisite: Place into ENGL 101. [T] **IAI: S5 903**

**POLI 150 American Government**(Fall and Spring) **3 hours**

Historical development and organization of the United States government and the federal system. Course meets requirement for Constitution test. Prerequisite: Place into ENGL 101. [T] **IAI: S5 900, PLS 911**

**POLI 160 International Relations**(Fall & Spring) **3 hours**

Introduction to basic principles and problems of international relations through a global politics approach. Through key concepts of order, welfare, and legitimacy, aims for the student to become aware of how events and processes at work throughout the world impact upon the student's own personal existence. Prerequisite: Place into ENGL 101. [T] **IAI: S5 904N, PLS 912**

**POLI 170 American Judicial Process**(Fall & Spring) **3 hours**

This class is an overview of the judicial system of the United States of America. In this course, we will discuss the structure of the American judiciary, its function, and the participants within it. These discussions will cover the following topics: civil v. criminal cases; trial courts v. appellate courts; differences in jurisdiction among courts; the recruitment of judges; how judges make decisions; how cases come to the courts and how they find their way to the Supreme Court; the impact of the courts on society; the implementation of decisions; public opinion about the courts; the relationship between the various levels of courts; and the success of litigants and interest groups in court. Prerequisite: Place into ENGL 101. [T]

**POLI 231 State and Local Government**(Fall & Spring) **3 hours**

The practice of government and politics at the state, county, and local level, including areas of taxation and finance, law enforcement, commerce, and social and economic welfare. Prerequisite: Place into ENGL 101. [T] **IAI: S5 902**

**POLI 238 Comparative Government**(As Needed) **3 hours**

Analysis of the structure and function of the political systems of the United Kingdom, France, the Federal Republic of Germany, and Russia. Examination of political parties within their cultural environment and institutional framework. Prerequisite: Place into ENGL 101. [T] **IAI: S5 905, PLS 914**

**POLI 240 Non-Western Comparative Government**(As Needed) **3 hours**

Comparative examination of the political institutions, electoral systems, principles of governance, causes of political instability and revolution, and techniques of political analysis. The purpose is to provide an understanding of the major problems confronting non-Western nations and to give insight into the various tools and strategies that their political leaders can use in dealing with those problems. The course will also investigate some of the major implications of the rise of the changing non-Western world on global politics. Prerequisite: Place into ENGL 101. [T] **IAI: S5 906N**

**POLI 250 Internship in Government**(Fall & Spring) **3 hours**

Students will have the opportunity to work in the state representatives' local or Springfield offices, or in the executive, legislative, or judicial branches of city or county government, depending on applicant interest and needs of the participating entities. Requires a minimum of 225 contact hours per semester. Co-requisites include American Government, State and Local Government, and Rhetoric 101 and 102. Permission to participate must first be obtained from the Political Science Department. Prerequisite: Place into ENGL 101. [T]


**POLI 270 Special Topics: International Terrorism**(As Needed) **3 hours**

This course will examine the history, causes, effects, and successes of international terrorism and the international community's efforts to confront it. Students will understand what terrorism is, why terrorism occurs, what factors lead to terrorist group formation and individual actions, how states and multinational organizations have responded, as well as understand the structure and abilities of modern terrorism. Prerequisite: Place into ENGL 101. [T]

# PSYC

## PSYC 100 Introduction to Psychology

(Fall and Spring) **3 hours**

Consideration of psychology as a science with analysis of human development, motivation, perception, intelligence, personality, learning, adjustment, abnormality, and social behavior. Prerequisite: Place into ENGL 121. [T] **IAI: S6 900** 

## PSYC 101 Child Development

(Fall & Spring) **3 hours**

A study of physical, mental, social, emotional, and psychological development throughout the stages of development from prenatal development to young adulthood. Observation of children utilized. (16 hours observation required.) Criminal background check required. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 121. [T] **IAI: S6 903**


## PSYC 120 Intro to Substance Abuse

(Spring) **3 hours**

Historical and cultural background of drug abuse; disease concept of addiction; major classifications of abused substances; mental and physical effects; interaction of physical, psychological, and social aspects of addiction; advantages and disadvantages of treatment methods; intervention and prevention. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 121. [T]


## PSYC 205 Industrial Psychology

(As Needed) **3 hours**

Reviews psychological principles as they relate to management application. Such topics as behavioral causation, attitudes, frustration, morale, supervisory leadership, organizational training, motivation, fatigue, accidents, and absenteeism receive in-depth exploration. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: PSY 906** 

## PSYC 210 Human Development

(Fall & Spring) **3 hours**

A study of the life-span development of the individual from conception through childhood, adolescence, and adulthood to death, involving psychological, physical, cognitive, emotional, and social aspects. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S6 902** 


## PSYC 230 Abnormal Psychology

(Fall) **3 hours**

Examination of the range and varieties of psychological abnormalities or differences, their causes, and current treatment modalities. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: PSY 905**

## PSYC 240 Social Psychology

(Spring) **3 hours**

A study of the behavior of individuals as influenced by other people and the social situation. Emphasis placed upon psychological factors involved in the interaction between persons and groups, attitude formation and change, group dynamics, group structure and leadership, and related topics. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S8 900** 


## PSYC 250 Personality

(As Needed) **3 hours**

An introduction to the study of personality and behavioral problems as they relate to the social environment. Prerequisite: PSYC 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: PSY 907**

## PSYC 260 Social Psychology of Aging

(As Needed) **3 hours**

Attitudes and myths about aging and social characteristics of older people. Special needs of the elderly person and her/his family in their economic, legal, housing, transportation, and health care settings. Community resources available to meet these needs. Prerequisite: PSYC 100 or SOCY 100 with a grade of C or better. Prerequisite: Place into ENGL 101. [C] **IAI: S6 905** 

# RDTC

## RDTC101 Introduction to Radiologic Technology

(Fall) **2 hours**

An overview of the profession of Radiologic Technology and the practitioner's role in the health care industry. The pedagogical principles of a radiologic technology program will also be examined. [C]

## RDTC102 Patient Care in Radiologic Technology

(Fall) **2 hours**

Routine and emergency patient care procedures, infection control, physical and psychological needs of the patient and family, medical ethics and law and the role of the radiologic technologist in patient education. [C]

## RDTC103 Radiologic Physics I

(Fall) **3 hours**

The basic components, operation, evaluation, and maintenance of stationary and mobile radiographic and fluoroscopic equipment; along with the production and characteristics of radiation. 2 lecture hours, 3 lab hours. [C]

## RDTC104 Radiologic Procedures I

(Fall) **3 hours**

Demonstration and practice of standard and special radiologic positioning of the lungs and appendicular skeleton to include the shoulder and pelvic girdles; positioning principles, terminology, and corresponding anatomy are also included. 2 lecture hours, 3 lab hours. [C]

**RDTc105 Radiologic Procedures II**(Spring) **3 hours**

Demonstration and practice of standard and special radiologic positioning of the axial skeleton to include the hip joint; positioning principles, terminology, and corresponding anatomy are also included. 2 lecture hours, 3 lab hours. [C]

**RDTc106 Radiologic Procedures III**(Summer) **3 hours**

Contrast media enhanced Radiologic procedures of the gastrointestinal, biliary, urinary, reproductive, salivary, musculoskeletal and central nervous systems. Procedural principles, terminology and corresponding anatomy are also included. 2 lecture hours, 3 lab hours. [C]

**RDTc107 Radiation Biophysics**(Spring) **2 hours**

Properties, sources, dosimetry, and biological effects of radiation. Methods of patient, personnel and public radiation protection and safety based on regulatory agency recommendations. [C]

**RDTc108 Radiologic Physics II**(Spring) **3 hours**

The phenomenon of diagnostic image formation and how it is affected by exposure factors, accessory devices, patient factors, recording media, equipment variations, processing and post-processing. The interactions of radiation with matter, radiographic quality and artifact formation will also be explored. 2 lecture hours, 3 lab hours. [C]

**RDTc109 Clinical Education I**(Spring) **2 hours**

Under the direct and/or indirect supervision of qualified radiologic technologists, students will perform radiologic procedures, provide patient care and assessment and participate in quality management as appropriate for their level in the clinical setting. [C]

**RDTc110 Clinical Education II**(Summer) **2 hours**

Under the direct and/or indirect supervision of qualified radiologic technologists, students will perform radiologic procedures, provide patient care and assessment and participate in quality management as appropriate for their level in the clinical setting. [C]

**RDTc200 Atypical Radiologic Procedures**(Fall) **3 hours**

Discussion, demonstration and practice of radiologic procedures of the geriatric, pediatric, trauma, surgical and bed-bound patient. Includes techniques for: patient assessment, positioning principles, identifying corresponding radiographic anatomy, operating standard R/F equipment in a non-routine manner and operating mobile R/F equipment.

**RDTc201 Digital Applications in Imaging**(Fall) **2 hours**

Data acquisition, processing, storage, display, and transmission in medical imaging. Advantages/disadvantages of digital imaging and quality control of digital imaging systems. [C]

**RDTc202 Radiologic Procedures IV**(Fall) **2 hours**

Discussion and demonstration of the practice of cardiac, vascular, and interventional procedures. [C]

**RDTc203 Radiologic Procedures V**(Spring) **3 hours**

The physics, equipment, and procedural protocols of computed tomography and magnetic resonance imaging, cross-sectional anatomy will also be included. [C]

**RDTc204 Radiographic Pathology**(Spring) **2 hours**

The causes, classifications, clinical manifestations and radiographic appearance of disease conditions. [C]

**RDTc205 Image Analysis**(Spring) **2 hours**

The assessment of radiographic images for diagnostic quality; maintaining minimum standards, problem solving techniques for image evaluation and a review of factors that can affect image quality. Actual images will be included for analysis. [C]

**RDTc209 Clinical Education III**(Fall) **2 hours**

Under the direct and/or indirect supervision of qualified radiologic technologists, students will perform radiologic procedures, provide patient care and assessment and participate in quality management as appropriate for their level in the clinical setting. [C]

**RDTc210 Clinical Education IV**(Spring) **2 hours**

Under the direct and/or indirect supervision of qualified radiologic technologists, students will perform radiologic procedures, provide patient care and assessment and participate in quality management as appropriate for their level in the clinical setting. [C]

**RDTc211 Clinical Education V**(Summer) **2 hours**

Under the direct and/or indirect supervision of qualified radiologic technologists, students will perform radiologic procedures, provide patient care and assessment and participate in quality management as appropriate for their level in the clinical setting. [C]


**RDTc212 Special Topics in Radiologic Technology**(Summer) **2 hours**

Selection, development, and presentation of a patient case study; included is a curricular review and preparation for the certification exam. [C]

## SOCY


### SOCY 100 Introduction to Sociology

(Fall and Spring) **3 hours**

Study of society, including the rules, interactions, and cultural patterns that organize everyday life. The course will analyze social conflicts, the structure and functions of institutions, dynamics of individual and group interactions, race relations, and social classes. Prerequisite: Place into ENGL 121. [T] **IAI: S7 900** 


### SOCY 200 Marriage and The Family

(As Needed) **3 hours**

Study of the universal and changing features of family as a basic institution. Contemporary issues such as the restructured family in divorce, remarriage, death, family problems and problem-solving strategies will be explored. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S7 902, SOC 912** 

### SOCY 201 Social Problems

(As Needed) **3 hours**

Survey of problems in an urban-industrial society, emphasizing the social inter-relationships and cultural conflicts involved in their origins, significance, and solutions. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S7 901, SOC 911** 

### SOCY 202 Introduction to Social Work

(Spring) **3 hours**

An introduction to the fields of practice. A survey of social work methods, agency organization, research and evaluation, and social policy and planning. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: SW 911**


### SOCY 203 Introduction to Women's Studies

(As Needed) **3 hours.**

An interdisciplinary focus on women's studies, using the disciplines of sociology, political science, psychology and history to examine issues related to women's lives and gender roles in contemporary society. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S9 900**

### SOCY 205 Juvenile Delinquency

(Fall) **3 hours**

Definitions and interpretations; theories of causation and prevention; organization and functions of community agencies and institutions including police, courts, and probation. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: CRJ 914** 

### SOCY 225 Race and Ethnic Relations

(Spring) **3 hours**

A study of racial, ethnic, religious, and cultural minorities in societies, with emphasis on the conditions and problems of minority groups and group relations in the U.S.; the concept of race; sources and functions of prejudice; the range of intergroup relationship patterns, from pluralism to

genocide; reactions to dominant or minority status; the relationship between prejudice and social institutions, including education, media, economy, religion, and the law. Prerequisite: SOCY 100 with grade of C or better. Prerequisite: Place into ENGL 101. [T] **IAI: S7 903D**


### SOCY 230 Service Learning

(Fall, Spring & Summer) **1-3 hours**

Service learning provides for sharing of resources between Danville Area Community College and the community. Service learning combines classroom instruction with community service, focusing on critical reflective thinking as well as personal and civic responsibility. This course involves active learning and reflection, drawing lessons from the experience of service. Prerequisite: Place into ENGL 121. [T]

### SOCY 299 Sociology of Sports

(As Needed) **3 hours**

The social institution of sports is examined using such sociological concepts as socialization, deviance and violence, gender, race, social class, media, religion and the economics of sports. By looking at sports objectively, we can come to understand the role sports play in our culture, and how we are shaped by this very important institution. Prerequisite: Place into ENGL 101. [T] 

## SONO

### SONO101 Abdominal and Small Parts Sonography

(Fall) **6 hours**

Sonographic evaluation of small parts, superficial structures and abdominal organs. [C]

### SONO102 OB/GYN Sonography

(Fall) **5 hours**

Sonographic evaluation of the female pelvis and reproductive system. [C]

### SONO103 Cardiovascular Sonography

(Fall) **1 hour**

Sonographic demonstration of the cardiovascular system. [C]

### SONO104 Sonography Physics and Instrumentation

(Fall) **3 hours**

The physics of acoustics and sonographic instrumentation. [C]

### SONO105 Cross Sectional Anatomy

(Spring) **3 hours**

Sectional human anatomy as demonstrated in various planes. [C]

### SONO106 Special Topics in Sonography

(Summer) **3 hours**

Selection, development and presentation of a patient case study, included is a curricular review and preparation for the certification examination. [C]

### SONO107 Clinical Education I

(Spring) **12 hours**

Supervised instruction in sonography at a clinical education affiliate. [C]

**SONO108 Clinical Education II**(Summer) **12 hours**

Continuation of supervised instruction in sonography at a clinical education affiliate. [C]

**SPAN****SPAN 100 Spanish for Public Safety**(Fall) **3 hours**

Designed for public safety majors, the course provides basics in understanding and speaking Spanish in the law enforcement, fire science and corrections fields. Vocabulary and structures in relevant situations and settings are emphasized. This is a one semester course; no prior Spanish is required. Prerequisite: Place into ENGL 121 [C]

**SPAN 101 Elementary Spanish I**(Fall) **4 hours**

A class designed for beginners or false beginners (with little Spanish skills). Emphasis on the total language learning process: speaking, writing, listening, reading, and cultural discussions. DACC adopts the Communicative approach in foreign language instruction. Much of the class will be conducted in Spanish. Prerequisite: Place into ENGL 101. [T]

**SPAN 102 Elementary Spanish II**(Spring) **4 hours**


Continuation of SPAN 101. Prerequisite: SPAN 101 or equivalent. [T]

**SPAN 103 Intermediate Spanish I**(Fall) **4 hours**

Communicative emphasis further develops student's listening, speaking, and writing abilities and Hispanic cultural awareness through readings and literature. Course Placement Prerequisite: SPAN 102 or equivalent. [T]

**SPAN 104 Intermediate Spanish II**(Spring) **4 hours**Continuation of SPAN 103. Course Placement Prerequisite: SPAN 103 or equivalent. [T] **IAI: H1 900****SPCH****SPCH 101 Oral Communication**(Fall & Spring) **3 hours**

An introductory course to help the student develop skills for successful oral-communication: interpersonal communication theories, listening techniques, assertiveness skills, and group decision making skills; also, the verbal and non-verbal factors in the preparation and oral delivery of information to a group. Communication theories are discussed and put into practice in the classroom. Students

are expected to present both informative and persuasive speeches. A minimum of three speeches is required. Prerequisite: Place into ENGL 121. [T] **IAI: C2 900****SPCH 102 Public Speaking**(Fall and Spring) **3 hours**An introductory course which emphasizes the thoughtful preparation and practice of delivering speeches before a group. Students are expected to present both informative and persuasive speeches. Prerequisite: Place into ENGL 101. [T] **IAI: C2 900** **SPCH 113 Group Discussion**(Spring) **3 hours**A study of leadership, group process, and interpersonal relations in the small group with emphasis on practice in leading and participation in problem-solving and decision making groups. Topics for discussion taken from current problems, films, and printed material. Recommended for communications, business, education, and counseling or psychology majors. Credit does not fulfill the Communications requirement for Associate degree. Prerequisite: Place into ENGL 101. [T] **IAI: SPC 920****SPCH 141 Oral Interpretation**(As Needed) **3 hours**Interpretative oral reading of fiction, non-fiction, drama, children's literature, and poetry. The primary emphasis is on the student's individual oral performance and interpretation of various forms of literature for the class. Recommended for theater, communications, elementary education, and literature majors. Prerequisite: Place into ENGL 101. [T] **IAI: SPC 915, TA 916****SPCH 145 Acting I**(Fall) **3 hours**An introductory course which emphasizes principles and methods of acting. Characterization, observation, and other basics are taught through acting exercises, improvisations, and scene study. Prerequisite: Place into ENGL 101. [T] **IAI: TA 914****SPCH 146 Acting II**(Spring) **3 hours**Acting II will emphasize an intense approach to acting, improvisations, scene study and production of a play. Prerequisite: Place into ENGL 101. [T] **IAI: TA 915****SPCH 147 Theatre Performance Practicum**(Fall & Spring) **1 credit hour**

A course to increase proficiency in preparation and presentation of theatrical performance; credit is awarded for performing in a major college production.

# WELD

**\*\*Protective clothing, safety glasses, and gloves are required.\*\***

## WELD 101 Blueprint Reading (Mech.)

(Fall & Spring) **4 hours**

Fundamentals of blueprint reading as applied to the mechanical trades. Students work with actual drawings. This course should not be taken by students enrolled in DRAF 160. [C]

## WELD 170 Gas Welding

(Fall & Spring) **4 hours**

Designed to provide an opportunity to learn skills and the fundamental knowledge in Oxy-Acetylene welding and safety. Instruction will be given covering brazing cast iron welding and flame cutting. Emphasis will also be given to vertical weldments and the proper method of welding non-ferrous metals. [C]

## WELD 180 Arc Welding

(Fall & Spring) **4 hours**

Electric arc welding processes are discussed. Flat, horizontal, vertical and overhead positions will be stressed. Alloying elements and their uses in various steel will be covered. Welding of aluminum and castings will also be covered. [C]

## WELD 185 Soldering and Brazing for HVAC

Designed to provide an opportunity to learn the proper soldering and brazing techniques as they pertain to the HVACR industry.

## WELD 200 Welding Equipment and Codes

(Fall & Spring) **2 hours**

Introduction to the various welding codes. Acceptable weldments according to various codes will be reviewed. Methods of testing welds will be explained. Troubleshooting, repair, maintenance, and testing of welding equipment and machines will be emphasized. [C]

## WELD 270 TIG Welding

(Fall & Spring) **4 hours**

All aspects of TIG welding are covered. Electrode preparation, striking the TIG arc, length of TIG arc and breaking of the arc. The students will enhance their skills by making vertical and overhead welds on pipe, aluminum, and stainless steel. Set up and adjustment of equipment is stressed. [C]

## WELD 280 MIG Welding

(Fall & Spring) **4 hours**

All aspects of MIG welding are covered including set up and adjustment of equipment. Shielded gas systems and shielded gases will be discussed. Practice on the vertical and overhead positions on mild steel, stainless and alumi-

num. Students should become proficient with the MIG process. [C]

## WELD 290 Plasma Arc Welding and Cutting

(Fall & Spring) **4 hours**

The student will learn the Plasma welding and cutting techniques such as melt-in and keyhole on stainless steel, aluminum, and other metals. The cutting method used is "transferred arc." [C]

## WELD 295 Welding Certification Review I

(As Needed) **2 hours**

This course is intended to provide a classroom review for individuals who desire to become American Welding Society (AWS) certified as an Entry Level Welder. This course is specifically designed to prepare the individual for the practical knowledge test. The AWS test is a written closed-book test designed to partially show that the Entry Level Welder understands and possesses a prerequisite amount of knowledge, attitude, skill, and habits to perform routine, predictable, repetitive, proceduralized tasks involving motor skills and limited theoretical knowledge while working under close supervision. At the conclusion of the class, the students will actually take the AWS Entry Level Welder written examination. The course grade is contingent upon performance on the AWS exam. Prerequisite: experience in welding and or completion of at least 12 credit hours in welding courses.

## WELD 296 Welding Certification Review II

(As Needed) **2 hours**

This course is intended to direct the performance tests for individuals who desire to become American Welding Society (AWS) certified as an Entry Level Welder. This course is specifically focused on facilitating the AWS performance tests. These AWS tests are designed--along with the written examination--to show that the Entry Level Welder understands and possesses a prerequisite amount of knowledge, attitude, skill, and habits to perform routine, predictable, repetitive, proceduralized tasks involving motor skills and limited theoretical knowledge while working under close supervision. The majority of the class consists of laboratory work where, under close supervision to ensure test validity, the students will perform the specified AWS Entry Level Welder performance tests. The course grade is contingent upon performance on the AWS exam. Prerequisite: successful completion of WELD 295.

# WIND

## **WIND 100 Introduction to Wind Energy**

**4 hours**

This course will provide the student with an overall perspective and foundation for the wind energy industry. Topics such as air flow, blade efficiencies, and environmental impacts will be covered. A tower climb test will be part of this class. Safety will be stressed throughout this course.

## **WIND 150 Wind Turbine Materials and Electro Mechanical Equipment**

**4 hours**

This course will cover identification and analysis of the components and systems of a wind turbine. Lubricants, fasteners, gears and gear ratios, and coating will be a brief list of topics covered. Prerequisite: WIND 100.

## **WIND 200 Wind Power Delivery Systems**

**4 hours**

Students will study the components and the process of the electrical power generation and delivery systems for wind energy. Students will learn to inspect electrical control system components. Students will be exposed to manufacture documentation and software, schematics, wire diagrams, and flow charts. Prerequisite: WIND 150.

## **WIND 250 Wind Turbine Troubleshooting**

**4 hours**

Students will practice installation, operation, maintenance, troubleshooting, and repair of wind turbine electro-mechanical systems. Prerequisite: WIND 200.