

# COURSES

## COURSE DESCRIPTIONS

The courses described are approved offerings of the College.

If the course description lists the consent of the instructor as a requirement, it should be obtained prior to registration.

The College reserves the right to withdraw courses and programs in which there is insufficient enrollment.

Students are urged to register as early as possible in order to have their enrollments counted when the decision to continue or withdraw a course offering is made, and also to insure that they are enrolled in the sections of their choice.

Students interested in pursuing independent study in a particular subject area should consult the Dean of Academic & Student Affairs to determine the availability and requirements of such study.

## ELECTIVES

### HOW TO CHOOSE AN ELECTIVE

“Elective” refers to any course offered in the College catalog numbered 100 or higher. Courses with numbers less than 100 do not count toward fulfillment of degree credit requirements for graduation. However, credit for courses numbered below 100 will count toward full-time status for financial aid and other purposes. Most curricular patterns require electives from all areas.

Please be aware of programmatic “directed” electives which specify the elective courses that fulfill the requirement.

### BUSINESS

Accounting (ACC\*), Business (BBG\*, BFN\*, BMG\*, BMK\*, BRE\*, HSP\*), Computer Science (CSA\*, CSC\*, CST\*) and Economics (ECN\*)

### BEHAVIORAL SCIENCE

Anthropology (ANT\*), Psychology (PSY\*) and Sociology (SOC\*)

### COMMUNICATIONS

Communications (COM\*), Business Communications (BBG\* 210)

### COMPUTER SCIENCE

CSA\*, CSC\*, CST\*

### FINE ARTS

Art (ART\*), Graphic Design (GRA\*) and Music (MUS\*)

### HUMANITIES

Communications (COM\*), English (ENG\*), Modern Languages (including ASL\*) and Philosophy (PHL\*)

### LIBERAL ARTS

Any course selected from Art, Behavioral Science, Communications, Computer Science (CSC\* only), English, Graphic Design, Mathematics, Modern Languages (including ASL\*), Music, Natural/Physical Science, Philosophy and Social Science.

### NATURAL/PHYSICAL SCIENCE

Biology (BIO\*), Chemistry (CHE\*), Physics (PHY\*) Physical Science and Science (EAS\*, EVS\*, SCI\*)

### SOCIAL SCIENCE

Economics (ECN\*), Geography (GEO\*), History (HIS\*) and Political Science (POL\*)

Students should consult a faculty advisor or counselor to determine if a particular course satisfies a specific elective requirement.

## BASIC SKILLS PREREQUISITES

According to Community College Board Policy, the systemwide Student Assessment Program was approved by the Board of Trustees of Regional Community-Technical Colleges in May 1988. The intent of the program is to:

- provide a means of ensuring that the skills of incoming students are uniformly evaluated;
- ensure that students are placed in courses appropriate to their academic preparation;
- make available courses and other academic and student support services which allow students to develop to their full potential.

In order to achieve these goals, Northwestern Connecticut Community College administers a placement assessment composed of objective tests in reading, writing, grammar, mathematics, and possibly, a short composition sample test. These tests provide valuable information for assigning students to appropriate courses. Unless an exemption is granted, Northwestern requires that each entering student take the placement test before registering for classes. Furthermore, it is Northwestern Connecticut Community College’s policy that all students in all programs who place into remedial/developmental courses must enroll in and successfully complete those courses or demonstrate proficiency

in the skill area(s) prior to enrolling in college-level courses which require basic skills prerequisites.

The following is a listing of courses requiring a particular basic skill (prealgebra, elementary algebra, reading, writing) as a prerequisite. Students must either have sufficient scores on their placement test so as not to require the basic skills courses, or they must complete the basic skills courses before they may take any of the courses listed.

### **MAT\* 075 Prealgebra: Number Sense,**

#### **Geometry**

ACC*	100	Basic Accounting
ACC*	113	Principles of Financial Accounting
BBG*	231	Business Law I
BFN*	110	Personal Finance
BFN*	125	Principles of Banking
BFN*	207	Personal Investments
BMK*	201	Principles of Marketing
ECN*	101	Principles of Macroeconomics
MAT*	095	Elementary Algebra Foundations

### **MAT\* 095 Elementary Algebra Foundations**

CHE*	111	Concepts of Chemistry
MAT*	135	Topics in Contemporary Math
MAT*	137	Intermediate Algebra

### **ENG\* 073 Academic Reading**

ACC*	100	Basic Accounting
ANT*	101	Introduction to Anthropology
ART*	103	Art History I
ART*	104	Art History II
BIO*	121	General Biology I
BIO*	115	Human Biology
BIO*	155	General Botany
BIO*	170	Principles of Ecology
BIO*	178	General Ecology
BBG*, BFN*, BMG*, BMK*, BRE*, HSP*		
all courses (unless given instructor permission)		
CHE*	111	Concepts of Chemistry
CHE*	121	General Chemistry I
CJS*		all courses
DSC*	110	Orientation to Deafness
ECN*	100	Introduction to Economics
ECN*	101	Principles of Macroeconomics
ENG*	101	Composition
HIS*	101	Western Civilization I
HIS*	102	Western Civilization II
HIS*	201	U.S. History I
HIS*	202	U.S. History II
MED*		all courses
PHL*	101	Introduction to Philosophy
PHL*	111	Ethics
PHL*	131	Logic
PHL*	151	World Religions
POL*	111	American Government

PSY*	111	General Psychology I
PSY*	112	General Psychology II
PTA*		all courses
EVS*	100	Introduction to Environmental Science
SCI*	106	Science and Society
EAS*	102	Earth Science
SOC*	101	Principles of Sociology
SOC*	125	Volunteer Organization Leadership
SOC*	240	Criminology
SOC*	241	Juvenile Delinquency
VET*		all courses

### **ENG\* 063 Writing Intro to the Essay**

ANT*	101	Introduction to Anthropology
ART*	103	Art History I
ART*	104	Art History II
BIO*	115	Human Biology
BIO*	121	General Biology I
BIO*	155	General Botany
BIO*	170	Principles of Ecology
BIO*	178	General Ecology
BBG*, BFN*, BMG*, BMK*, BRE*, HSP*		
all courses (unless given instructor permission)		
CJS*		all courses
DSC*	110	Orientation to Deafness
EAS*	102	Earth Science
ENG*	101	Composition
EVS*	100	Introduction to Environmental Science
HIS*	201	U.S. History I
HIS*	202	U.S. History II
MED*		all courses
PHL*	101	Introduction to Philosophy
PHL*	111	Ethics
PHL*	131	Logic
PHL*	151	World Religions
POL*	111	American Government
PSY*	111	General Psychology I
PSY*	112	General Psychology II
PTA*		all courses
SCI*	106	Science and Society
SOC*	101	Principles of Sociology
SOC*	125	Volunteer Organization Leadership
SOC*	240	Criminology
SOC*	241	Juvenile Delinquency
VET*		all courses

## ACCOUNTING

### ACC\* 100 BASIC ACCOUNTING

3 semester hours

Basic understanding of accounting principles as they relate to recording procedures. Emphasis on usage by small business firms and professional offices. Not recommended to business students pursuing an accounting or business degree. Not open to students who have completed ACC\* 113. (Formerly Acct. 100)

### ACC\* 113 PRINCIPLES OF FINANCIAL ACCOUNTING

3 semester hours

Principles of Financial Accounting provides an introduction to the concepts and uses of financial accounting information in a business environment and its role in the economic decision-making process. Primary areas of study include the theory of debits and credits, special journals, the accounting cycle, notes and interest, receivables and payables, accruals and deferrals, measurement and valuation of assets and liabilities, the determination of net income and the preparation and analysis of basic financial statements. **Prerequisite:** MAT\* 075 or satisfactory score on placement test. (Formerly Acct. 105)

### ACC\* 117 PRINCIPLES OF MANAGERIAL ACCOUNTING

3 semester hours

Today's business environment is very dynamic and is in the midst of major structural changes as the economy shifts from information to a knowledge-based economy. This course examines the impact of these structural revolution changes on the managerial accounting function.

This course is a combination of cost determination and management analysis. This course will focus on traditional and contemporary modalities needed to support management's planning and expense control decisions. Topics include cost accounting systems, work flow processes and flow charting, control chart analysis, cost behavior relationships, forecasting, budgeting, variance analysis, capital expenditure decisions, analysis of financial statements, activity based and Balance Scorecard Accounting. **Prerequisite:** ACC\* 113 (Formerly Acct. 205)

### ACC\* 123 ACCT SOFTWARE APPLICATIONS

3 semester hours

An introduction to the key aspects of the available popular software application packages on the market for personal computers as used in the accounting and business environment. **Prerequisite:** ACC\* 113. (Formerly Acct. 104)

### ACC\* 271 INTERMEDIATE ACCOUNTING I

3 semester hours

Advanced study of financial statements and the accounting processes. For students desiring to make accounting a profession. Topics include preparation of financial statements, inventory problems, investments, the rulings and opinions of the Accounting Principles Board and Financial Accounting Standards Board. **Prerequisite:** ACC\* 117. (Formerly Acct. 201)

### ACC\* 272 INTERMEDIATE ACCOUNTING II

3 semester hours

Accounting for fixed assets, depreciation methods, corporate formation, changes in capital and earnings distribution. Special attention is given to financial statement analysis, the statement of changes in financial position, and readings of the rulings and opinions of the Accounting Principles Board and the Financial Accounting Standards Board. **Prerequisite:** ACC\* 271. (Formerly Acct. 202)

## AMERICAN SIGN LANGUAGE

### ASL\* 100 SIGN VOCABULARY

3 semester hours

A general elective course focusing on sign language vocabulary and fingerspelling. This course is open to any student who is interested in developing basic sign communication skills.

### ASL\* 101 AMERICAN SIGN LANGUAGE I

3 semester hours

A first course of study of the American Sign Language, the language used by the Deaf Community in the United States. This course covers the fundamentals of the basic structure of ASL grammar, vocabulary, fingerspelling/numbers, visual-gestural communication, and information related to Deaf Culture. **Corequisite:** DSC\* 101.

### ASL\* 102 AMERICAN SIGN LANGUAGE II

3 semester hours

This is a continuation of American Sign Language I. This course further covers the fundamentals of the basic structure of ASL grammar, vocabulary, fingerspelling/numbers, visual-gestural communication and information related to Deaf Culture. **Prerequisite:** ASL\* 101 with a grade of "C" or above, or consent of instructor.

### ASL\* 201 AMERICAN SIGN LANGUAGE III

3 semester hours

This course covers in depth the structure of ASL grammar, fingerspelling/numbers, and visual-gestural communication. This course also involves expressive and receptive skills in storytelling and dialogue. **Prerequisites:** ASL\* 102, DSC\* 114, both with grades of "C" or above.

### ASL\* 202 AMERICAN SIGN LANGUAGE IV

3 semester hours

A continuation of American Sign Language III. This course further covers the structure of ASL, fingerspelling/numbers, and visual-gestural communication. **Prerequisites:** ASL\* 201, and for Deaf Studies majors DSC\* 214, all with grade of "C" or above.

### ASL\* 205 LINGUISTICS OF AMERICAN SIGN LANGUAGE

3 semester hours

A survey of theory, methods and findings of linguistic research and how it relates to ASL; the relation between sound and meaning in human language; social variation in language; language change over time; universals of language; the mental representation of linguistic knowledge. **Prerequisites:** ASL\* 101, 102, 201, ENG\* 101, all with grade of "C" or above.

## ANTHROPOLOGY

### ANT\* 101 INTRODUCTION TO ANTHROPOLOGY

3 semester hours

Principles, concepts, and methodology of anthropology. Human evolution, culture and its role in human experience. Emphasis on understanding the nature of man in different societies. **Prerequisite:** eligibility for ENG\* 101. (Formerly Anth. 100)

## ART & ART HISTORY

### ART\* 100 ART APPRECIATION

3 semester hours

Introduction to the formal and expressive aspects of two- and three-dimensional art through intellectual and experiential exploration of basic principles and elements of visual art. An overview of the principal periods of art history and primary art historical issues will be included in the coursework. Previous art training not necessary. **Prerequisite:** ENG\* 093 or with concurrency. (Formerly Art 100)

### ART\* 101 ART HISTORY I

3 semester hours

An extensive study of art and architecture derived from all principal art historical periods in the west: Stone Age, Egyptian, Mesopotamian, Aegean, Greek, Roman. The Medieval era will include Early Christian, Byzantine, Romanesque, Gothic. The art and architecture of each succeeding era will be explored contextually and analyzed according to form, content, and continuity. **Prerequisite:** eligibility for ENG\* 101. (Formerly Art 141)

### ART\* 102 ART HISTORY II

3 semester hours

An extensive study of art and architecture derived from the three principal art historical periods of the west begin-

ning with 13th century Italy, through the Renaissance and Baroque periods to the Modern World. The art and architecture of each succeeding era will be explored contextually and analyzed according to form, content, and continuity.

**Prerequisite:** eligibility for ENG\* 101. (Formerly Art 142)

### ART\* 109 COLOR THEORY

3 semester hours (6 studio hours)

A visual exploration of the effects and relationships of color. Work with color aid paper, newspapers, magazines, and a variety of textures. Previous art training not required. (Formerly Art 112)

### ART\* 111 DRAWING I

3 semester hours (6 studio hours)

Introduction to drawing concepts, principles, processes and materials. Topics include gesture, line quality, perspective, value, space, volume and composition. No previous art experience necessary. (Formerly Art 113)

### ART\* 112 DRAWING II

3 semester hours (6 studio hours)

Continued exploration of drawing concepts, principles and processes presented in Drawing I. Contemporary concepts of space, abstraction and color media are introduced.

**Prerequisite:** ART\* 111. (Formerly Art 114)

### ART\* 113 FIGURE DRAWING I

3 semester hours (6 studio hours)

Introduction to drawing the human form, emphasizing both traditional techniques and a contemporary approach to the representation of the figure. Includes the nude figure, portraiture, and the figure in a still life environment. **Prerequisite:** ART\* 111. (Formerly Art 214)

### ART\* 121 TWO-DIMENSIONAL DESIGN

3 semester hours (6 studio hours)

Studio problems explore basic two-dimensional art elements: line; shape; value; color; and space; and principle of design: balance; harmony; contrast; and unity. No previous art experience necessary. (Formerly Art 121)

### ART\* 122 THREE-DIMENSIONAL DESIGN

3 semester hours (6 studio hours)

Studio problems explore basic three-dimensional art elements-line, plane, mass, volume, space, size, color, light, surface and context. Development of personal content using a variety of three-dimensional tools, materials and processes. No previous art experience necessary. (Formerly Art 122)

### ART\* 131 SCULPTURE I

3 semester hours (6 studio hours)

An introductory course in sculpture. Instruction in additive and subtractive sculptural methods. Studio activity will include modeling in low fire clay. No previous art experience necessary. (Formerly Art 132)

### **ART\* 141 PHOTOGRAPHY I**

3 semester hours (2 class hours/2 laboratory hours)  
Development of skills in practical application to basic photographic principles. Topics include light and its effect on film, cameras and lens systems, operation of the dark-room, print finishing, and creative aspects of photography. Students must have an operable 35mm camera with manual adjustments for shutter speed and aperture. (Formerly Art 120)

### **ART\* 142 PHOTOGRAPHY II**

3 semester hours  
Development of practice and theory in a variety of photographic techniques sequential to those introduced in Photography I. Topics include film and print manipulation, infrared film, print presentation, and the analysis of photography as an art form. **Prerequisites:** ART\* 141 with a "C" or better. (Formerly Art 123)

### **ART\* 151 PAINTING I**

3 semester hours (6 studio hours)  
Introduction to the principles, processes and materials of oil painting. Topics include paint identification and application, use of color, basic spatial relationships and composition. Digital painting may be explored. No previous art experience necessary. (Formerly Art 215)

### **ART\* 152 PAINTING II**

3 semester hours (6 studio hours)  
An intermediate course in painting. Topics include spatial relationships, composition, abstraction and self-expression. Digital painting may be explored. **Prerequisite:** ART\* 151. (Formerly Art 216)

### **ART\* 161 CERAMICS I**

3 semester hours (6 studio hours)  
An introductory course with an emphasis on handbuilding and an introduction to basic throwing. In handbuilding the focus will be on pinch, coil and slab methods. In throwing, cylindrical forms will be explored. Instruction in glaze application and kiln loading. No previous art experience necessary. (Formerly Art 104)

### **ART\* 163 CERAMIC HANDBUILDING**

3 semester hours (6 studio hours)  
Introduction to the basic forming methods of ceramics - pinching, coiling, slab building and modeling - and the fundamental processes of surface decoration. Emphasis on the cultivation of the student's aesthetic ideas as well as on the development of good craftsmanship. No previous art experience necessary. (formerly Art 107)

### **ART\* 164 CERAMIC THROWING**

3 semester hours (6 studio hours)  
An introduction to throwing on the potter's wheel as a means of making ceramic forms. Functional and sculptural forms will be explored. Instruction in glaze application and the kiln loading. No previous art experience necessary. (Formerly Art 108)

### **ART\* 169 STAINED GLASS ART**

3 semester hours  
This class presents the fundamental techniques for working with stained glass and is intended for those getting started in the craft. Class demonstrations and instruction include materials and tools, as well as the cutting, assembling, and soldering of glass items. Projects may include hanging glass panels, boxes, and lamps. Technical instructions for cutting glass, assembling, and soldering using copper-foil and lead came (where individual pieces of glass are fitted into metal channels), safety tips, pattern making, selecting glass, cutting techniques, tools (cutters, grinders, smoothing stones, etc.) and other illuminating topics are included. Students will be required to design, construct and finish simple and complex projects in magnificent colors. This course is designed for the non-art major.

### **ART\* 187 MUSEUM TREASURES**

1 semester hour  
A study of one or more of the permanent collections and special collections and special exhibitions of the great museums along New York City's "Museum Mile," The Fenway in Boston, or other locations. (Formerly Art 180)

### **ART\* 211 DRAWING III**

3 semester hours (6 studio hours)  
An in-depth study of techniques and methods. Studio assignments, and on-going critiques will guide the student toward a clear understanding of drawing problems and solutions. **Prerequisites:** ART\* 111, 112. (Formerly Art 213)

### **ART\* 215 ILLUSTRATION**

3 semester hours (6 studio hours)  
An advanced course in studio art where students develop a body of work for an exhibition or portfolio. Studio problems address the relationship of form to personal content as well as contemporary issues in art. Students research ideas, execute visual journals and create original works using their choice of media. Instruction in portfolio and exhibit development. **Prerequisites:** ART\* 112, ART\* 121, ART\* 122, and ART\* 113 or consent of instructor.

### **ART\* 249 PHOTOGRAPHY INDEPENDENT STUDY**

3 semester hours (6 studio/lab hours)  
This course provides the student an opportunity to apply photographic skills in the development and execution of an independent and creative photography portfolio by using traditional darkroom techniques or by using digital techniques. Topics include portfolio proposals, identifying a creative style, advanced printing techniques, and skills in preparing advanced portfolios and exhibits. **Prerequisite:** ART\* 270 and consent of the instructor.

### **ART\* 270 DIGITAL IMAGING**

3 semester hours (6 studio hours)  
The creation and modification of photographic images through the use of computer technology. Topics include digital input, Photoshop software, and the use of scanners

and printers. Emphasis is placed on the creative applications of digital imaging in photography.

**Prerequisite:** ART\* 142

### **ART\* 274 VIDEO & MOTION FUNDAMENTALS**

4 semester hours (2 class hours/4 studio hours)

An introduction to video production techniques and theories that includes a basic working knowledge of studio and field equipment. Students work as teams and individually with topics that include camera operation, lighting, and preproduction. Emphasis will be placed on understanding motion principles as applied to the two-dimensional medium of video, and applying video production techniques to these motion principles. **Prerequisite/Corequisite:** ART\*141 and consent of the Instructor

### **ART\* 275 DIGITAL VIDEO POSTPRODUCTION**

3 semester hours (2 class hours/4 studio hours)

Designed to be taken immediately after ART\*274, Video & Motion Fundamentals. Students will utilize their preproduction and cinematography skills to produce a short dramatic narrative, which will be entirely edited digitally. Digital audio and digital graphics will be added to complete the production. Final productions will be broadcast by local cable stations. **Prerequisite:** ART\* 274 and consent of instructor.

### **ART\* 276 INTRODUCTION TO 3D ANIMATION**

3 semester hours (6 studio hours)

Students will explore the fundamental principles of three-dimensional computer animation, including: pre-visualization, modeling techniques, movement, motion principles, lighting styles in screen space, and concept development.

### **ART\* 277 3D CHARACTER ANIMATION**

3 semester hours (6 studio hours)

Students will study character animation using three-dimensional animation software. Elementary and advanced techniques for creating believable three-dimensional characters are explored. Character design and movement are achieved through the study of motion in living creatures. The elements of storytelling and dialogue will be executed. Students will produce a short animation that tells a story. **Prerequisite:** ART\* 276.

### **ART\* 278 EXPERIMENTAL ANIMATION**

3 semester hours (6 studio hours)

Students will explore a variety of animation styles and techniques, including stop motion and object movement, which will be developed into a story by shooting digital single frame shooting. The final animation will be completed by using 2D motion, 3D animation, and video editing software. **Prerequisite/Corequisite:** ART\* 275 or ART\* 277.

### **ART\* 298 SPECIAL TOPICS: ADVANCED PROJECT**

(1- 3 credits, 3 – 6 studio hours)

Students plan, execute, display and document an advanced project in fine art under the direction of an art faculty mem-

ber. Course is designed to help the serious student progress to his or her “next step” which may involve transfer, employment or exhibition. Instruction in the development of personal content, contemporary issues, exhibition techniques, portfolio development as well as professional practices in art. Previous art experience necessary. Permission of instructor required. Contact Professor Janet Nesteruk at [jnesteruk@nwcc.commnet.edu](mailto:jnesteruk@nwcc.commnet.edu)

### **ART\* INDEPENDENT STUDIO STUDY**

1, 2 or 3 semester hours

119	Drawing (Formerly 231)
159	Painting (Formerly 234)
219	Figure Drawing (Formerly 238)
229	Design (Formerly 232)
239	Sculpture (Formerly 237)
249	Photography (Formerly 236)
259	Water Color (Formerly 235)
269	Pottery (Formerly 230)
233	Graphic Design

An opportunity to apply studio skills through the development and execution of independent creative art in various studio disciplines. Student’s written objectives, procedures, and credit hours must be approved by the supervising faculty. A student may repeat the course but total credits earned may not exceed six. **Prerequisites:** successful completion of appropriate courses including ART\* 122, 141, 152, 164, 211, and GRA\* 254 and consent of instructor.

## **BIOLOGY**

### **BIO\* 110 PRINCIPLES OF THE HUMAN BODY**

3 semester hours (3 lecture hours)

This non-majors science course is designed to provide an introduction to the structure and function of the human body with an overview of many organ systems of the body. The cellular nature of life is emphasized. This course may be taken with or without the laboratory. In addition to the textbook, students use a variety of resources from traditional print to electronic media to acquire and evaluate relevant scientific content. Representative disease states are discussed. BIO\* 110 and BIO\* 110L cannot be used as a prerequisite for BIO\* 211 or BIO\* 235. Not open for credit to students who have completed BIO\* 115 or BIO\* 211 with a “C” or better. **Prerequisite/Corequisite:** ENG\* 063 and ENG\* 073 or ENG\* 093 or satisfactory scores on the placement test.

### **BIO\* 110L PRINCIPLES OF THE HUMAN BODY LABORATORY**

1 semester hour (2 laboratory hours)

Laboratory to accompany BIO\* 110 Principles of the Human Body lecture. Laboratory activities supplement BIO\* 110 lecture content. Principles of animal cells and human body systems will be explored.

### **BIO\* 115 HUMAN BIOLOGY**

4 semester hours (3 class hours/2 laboratory hours)

This one semester laboratory science course covers principles of animal cell biology, including basic biological chemistry, cell structure and function, human genetics, cell division, cellular respiration, and protein synthesis. These concepts are applied to a study of the structure and function of the major organ systems of the human body. Aspects of health and disease are presented including basic elements of nutrition, exercise, cancer, and chemical addictions. The course can be used as a prerequisite for BIO\* 211 or BIO\* 235. **Prerequisites:** ENG\* 063 and ENG\* 073, or ENG\* 093 or satisfactory scores on the placement test. SCI\* 099 is recommended for students who do not have a strong science background.

### **BIO\* 121 GENERAL BIOLOGY I**

4 semester hours (3 class hours/3 laboratory hours)

This course focuses on aspects of plant, animal and bacterial cell biology. Cellular biochemistry, including cellular respiration and photosynthesis, reproduction, genetics and evolution will be covered. **Prerequisites:** SCI\* 099 with a “C” or better or equivalent and ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Bio. 101)

### **BIO\* 122 GENERAL BIOLOGY II**

4 semester hours (3 class hours/3 laboratory hours)

Offered: Spring Term, Even Numbered Years

The biology of organisms including plant and animal structure and function, nutrition, life cycles, and ecological relationships; the origin and evolution of life. **Prerequisite:** SCI\* 099 with a “C” or better or equivalent and ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Bio. 102)

### **BIO\* 155 GENERAL BOTANY**

Offered: Spring Term, Odd Numbered Years

4 semester hours (3 class hours/3 laboratory hours)

An introduction to the study of plants as a basis for understanding broader biological principles. Includes an evolutionary survey of the plant kingdom and the structure, physiology, reproduction, ecology, and economic significance of plants, with emphasis on the flowering plants. Use of computers is an integral part of this course. Field trips required. **Prerequisites:** SCI\* 099 or equivalent and ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Bio. 112)

### **BIO\* 170 PRINCIPLES OF ECOLOGY**

3 semester hours (3 class hours)

Principles of ecology and application to conservation and environmental problems. Field trips required. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Bio. 106)

### **BIO\* 178 GENERAL ECOLOGY**

4 semester hours (3 class hours/3 laboratory hours)

An introduction to the basic principles of ecology and application of these principles to conservation and environmental problems. Use of computers is an integral part of this course. Field trips required. **Prerequisites:** SCI\* 099 or equivalent and ENG\* 063 and ENG\* 073 or satisfactory scores on placement exams.

### **BIO\* 211 ANATOMY & PHYSIOLOGY I**

4 semester hours (3 class hours/3 laboratory hours)

This course is the first semester of a two semester sequence that provides a comprehensive study of the structure and function of the human body. Anatomy and Physiology I covers terminology, tissues, integumentary, skeletal, muscular, and nervous systems and their relationships to other systems. The physiology of movement is emphasized. Selected pathology examples are examined. Students study the relationship between structure and function using interactive physiology software, diagnostic imaging, dissection and histology slides. **Prerequisite:** BIO\* 121 or BIO\* 115. (Formerly Bio. 203)

**Prerequisite or Corequisite:** CHE\* 111

### **BIO\* 212 ANATOMY & PHYSIOLOGY II**

4 semester hours (3 class hours/3 laboratory hours)

A study of the structure and function of the human body. Includes a detailed analysis of the nervous, endocrine, digestive, respiratory, circulatory, lymphatic, urinary and reproductive systems. Pathology and disease applications are covered. Students examine the relationship between structure and function using interactive anatomy software, laboratory dissection, interactive physiology software, and histology slides. **Prerequisite:** BIO\* 211 and CHE\* 111 or consent of instructor. (Formerly Bio. 204)

### **BIO\* 235 MICROBIOLOGY**

4 semester hours (3 class hours/3 laboratory hours)

Elements of microbiology including the structure, classification, and physiology of bacteria and viruses. Infection, immunity, and the destruction of microorganisms are emphasized. Laboratory includes sterile techniques, microchemical analysis, and identification of unknowns. Recommended for Allied Health and Biology majors. **Prerequisite:** A grade of “C” or better in BIO\* 121 or BIO\* 115. (Formerly Bio. 232)

### **BIO\* 238 PARASITOLOGY**

3 semester hours

This course is intended to familiarize students with the parasites of importance in the veterinary field. The course includes both lecture and laboratories to reinforce the knowledge and identification skills necessary for the veterinary technician. **Prerequisite:** VET\* 151, strongly recommended VET\* 205.

### **BIO\* 270 ECOLOGY**

4 semester hours (3 class hours/3 laboratory hours)  
An appreciation for biodiversity is developed through lecture and laboratory exercises. Energy flow through the environment is discussed, and population and community dynamics are explored in the field and in the lecture. Other topics include biochemical cycling, speciation, genetics and genetic drift, and earth movement dynamics. **Prerequisite:** BIO\* 121. (Formerly Bio. 120)

## **BUSINESS AND MANAGEMENT ADMINISTRATION**

---

**Prerequisites:** ENG\* 073 and ENG\* 063, MAT\* 075 or satisfactory scores on placement tests.

### **BBG\* 101 INTRODUCTION TO BUSINESS**

3 semester hours  
Includes a broad range of topics that relate to the contemporary business practices. Business trends: cultivating a business in diverse global environment. Business ownership. Strategic management: the strategic consequences of competing on the edge. Financial structure: the methods used to measure the effectiveness of objectives and strategies. Management of human capital: obtaining, retraining and motivating people to produce quality goods and services. Marketing: creating and keeping customers. Process Improvement: achieving better results through improving system processes. (Formerly Bus. 100)

### **BBG\* 210 BUSINESS COMMUNICATION**

3 semester hours  
Development of skills in effective communication for personal, business, and professional use. Includes written communication, nonverbal communication, listening skills, small group communication, oral presentations, resume preparation, and interviewing techniques. (Formerly Bus. 148 Business & Professional Communication)

### **BBG\* 231 BUSINESS LAW I**

3 semester hours  
A study of the legal rights, duties and responsibilities of owning a business. This course examines the components of common law, the legal system, contracts and torts. The course also covers areas of the Uniform Commercial Code, sales of goods, warranties, product liabilities and corporate crime. (Formerly Bus. 211)

### **BBG\* 232 BUSINESS LAW II**

3 semester hours  
This course is a study of the legal principles related to the law of agency proprietorships, partnerships, corporations including sub-chapter S and limited liability corporations, and other business forms. This course will also cover negotiable instruments, bank deposits and collections, secured transactions, debtor-creditor relationships and bankruptcy law. **Prerequisite:** BBG\* 231 or consent of instructor. (Formerly Bus. 212)

### **BBG\* 294 BUSINESS INTERNSHIP**

This is a work experience course for outstanding business students who want a challenging opportunity to apply their knowledge and learn from experience in a business or community organization. Students are evaluated in an intern position obtained by the student and agreed upon by the supervisor of the cooperating worksite. Business interns are required to work a minimum of 120 hours during the semester and meet with the instructor on a regular basis. Students must have successfully completed at least 15 credit hours of study in business courses (with a minimum grade of "C" in all classes) or an equivalency and be approved by the course instructor. **Prerequisite:** ENG\* 073 and ENG\* 063 or satisfactory scores on placement tests, successful completion of 15 credit hours of study in business courses and approval by the course instructor. (Formerly Bus. 280)

### **BFN\* 110 PERSONAL FINANCE**

3 semester hours  
A practical approach to personal money management. Includes credit, taxes, investments, insurance, consumer protection, and home ownership. (Formerly Bus. 150)

### **BFN\* 125 PRINCIPLES OF BANKING**

3 semester hours  
Principles of Banking is an introductory course that covers all aspects of Bank Management. Major topic areas include:

- The changing nature of Banking
- Understanding a Bank's Financial Statement
- Asset and Liability management
- Capital Adequacy and Liquidity
- Commercial and Consumer lending

(Formerly Bus. 109)

### **BFN\* 201 PRINCIPLES OF FINANCE**

3 semester hours  
Management has been defined as the art of asking significant questions. This course builds the baseline business finance skills needed to make sound quantitative/systematic business decisions. Topics include the concepts of financial analysis or the ability to not only manipulate financial data, but also to interpret the numbers so meaningful conclusions can be drawn; the time value of money; risk and return measures; firm valuation methods; corporate leveraged restructuring and capital structure.

Additionally, at some time during their growth and maturation, virtually every business will find itself in a financial crisis where insolvency is immanent and the business' continued existence as a going concern is in doubt. Students will be exposed to the theory and practice of corporate financial distress (including bankruptcy) and will learn how to evaluate the level of adversity of a distressed business.

**Prerequisites:** This is an upper level advanced course. Therefore, financial literacy is necessary. To be successful and benefit from this course students should have successfully completed ACC\* 113 and BMG\* 202 or consent of instructor. The completion of MAT\* 167 would be helpful. (Formerly Bus. 264)

### **BFN\* 207 PERSONAL INVESTMENTS**

3 semester hours

A contemporary nontechnical approach to investments that introduces individuals to the various investment choices available and the risks associated with them. (Formerly Bus. 160)

### **BMG\* 202 PRINCIPLES OF MANAGEMENT**

3 semester hours

Principles of Management is an introductory course that covers in depth the theory and practice of management as a discipline and process. The Vision to Value Creation Model will be the primary tool employed to introduce the four major management principles – Planning (Strategic Value), Organizing (Organizational Design & Structure Value), Leading (21st century leadership value), and Controlling (Learning Value). Major topic areas include:

- The evolution, development and scope of the management process.
- Growth performance measures and strategic consequences: How does management balance the constraints of capital adequacy, growth and business risk.
- Planning and decision making starts with the vision, purpose and soul of the business. Management must answer the question – What business are we really in? Answering this question correctly is critical to management's success or failure.
- Managing Change: Managing the corporate vision and mission in a continuously dynamic business landscape. "The art of creative destruction."
- Leadership and work process improvement. The challenge of management to redesign the structure of work in order to increase its talent mind share.

Emphasis will be given to the importance of managing in a global environment and in understanding the ethical implications of managerial decisions. (Formerly Bus. 101)

### **BMG\* 210 ORGANIZATIONAL BEHAVIOR**

3 semester hours

Behavior is related to past events, thoughts, dreams, comments and actions, and is weaved into values, beliefs, ideologies, interactional patterns and activities. These characteristics when combined with the complexity of organizational structure can result in a wide performance range. Students will be exposed to organization theory, structure, design applications and the management of organizational behavior in this course. Heavy emphasis on class participation and case studies. **Prerequisites:** PSY\* 111 and BMG\* 202. (Formerly Bus. 272)

### **BMG\* 220 HUMAN RESOURCE MANAGEMENT**

3 semester hours

An introduction to human resource management. Includes the functions of human resource management: job analysis and planning, recruiting, staffing, orientation and training, performance appraisal, career planning, compensating, and motivating. The diversity of the workforce and the legal content of employment decisions will also be studied.

**Prerequisite:** BMG\* 202. (Formerly Bus. 201)

### **BMK\* 140 RETAILING**

3 semester hours

Retailing principles and applications presented from a management perspective. Includes opportunities and trends, merchandise selection, inventory management promotional programs, pricing decisions, location decisions, financial analysis. **Prerequisite:** BMK\* 201 or BMK\* 214. (Formerly Bus. 255)

### **BMK\* 201 PRINCIPLES OF MARKETING**

3 semester hours

The dynamics of the marketing function in satisfying society's needs. Includes the economic, psychological, and sociological aspects of buying behavior and the elements of the marketing mix - products and services, promotions, pricing, and distribution. **Prerequisite:** BMG\* 202. (Formerly Bus. 252)

### **BMK\* 214 INTERNATIONAL MARKETING**

3 semester hours

Global Marketing is one of the most exciting and challenging fields in business today as the global marketing position involves foreign entry and global management. This course examines the economic, political, cultural, legal and technological aspects of the global marketing environment.

**Prerequisite:** BMG\* 202 or consent of instructor. (Formerly Bus. 250)

### **BMK\* 220 SALES**

3 semester hours

Factors involved in effective selling. Methods of conducting sales presentations. Application of psychological and persuasive selling techniques. Development of characteristics for good salesmanship. **Prerequisite:** BMK\* 201 or BMK\* 214. (Formerly Bus. 256)

### **BMK\* 230 ADVERTISING & PROMOTION**

3 semester hours

Advertising and Sales Promotion covers in depth the advertising environment, process, media planning and brand promotion. Advertising is a study in anthropology as the advertiser's intent is to convey an image of the product that includes origins, rituals, physical characteristics, environments, social relationships and beliefs to a society over time. In other words, over time the advertised product/service takes on cultural attributes. It is no longer a product/service but a way of life, an attitude, a set of values, a look, an idea that evokes an emotional response. **Prerequisite:** BMK\* 201 or BMK\* 214. (Formerly Bus. 253)

### **BRE\* 201 REAL ESTATE PRINCIPLES**

3 semester hours

Basic concepts of land use and the legal and economic principles governing transfers and financing. Ownership and interests, brokerage, legal instruments, valuation, and problems. (Formerly Bus. 170)

### **BRE\* 205 REAL ESTATE LAW**

3 semester hours

To acquaint the student with the law of real estate. Topics include general legal concepts dealing with contract law as it relates to real estate, property law, vehicles for acquiring real property, federal regulations, joint ventures, syndication, real estate investment trusts, landlord-tenant relations, modern mortgage laws, and the legal relationship among practitioner, client and purchaser. **Prerequisite:** BRE\* 201. (Formerly Bus. 175)

### **HSP\* 100 INTRODUCTION TO THE HOSPITALITY INDUSTRY**

3 semester hours

This course is an orientation to the hospitality industry and includes an overview of the various industry segments including hotels, motels, resorts, inns, restaurants, gaming, conventions and tour businesses. The course covers industry history, career and business trends, operations management and organization as well as forces shaping the future growth of the industry. (Formerly Bus. 111)

### **HSP\* 211 FOOD AND BEVERAGE COST CONTROL**

3 semester hours

This course is an in-depth coverage of commercial food service operations including proper food handling procedures in purchasing, receiving, storing, production, and quality control. Operational planning including analysis of labor expenses, labor costs controls and the relationship between cost, volume and profit will be explored. **Prerequisites:** ACC\* 117 and HSP\* 100. (Formerly Bus. 257 and Bus. 258)

### **HSP\* 242 HOTEL MANAGEMENT**

3 semester hours

This course examines the complete guest cycle including reservations and rooming, registration, guest services, guest accounting, night audit functions, and security. Management functions and operating statistics are discussed and practiced. The course includes role-playing and case studies utilizing computer exercises that simulate front office situations. **Prerequisites:** ACC\* 117 and HSP\* 100. (Formerly Bus. 259)

### **HSP\* 296 COOPERATIVE EDUCATION**

3 semester hours

In this course, students working in a team environment will actually apply hospitality and tourism operating techniques as they relate to the institutional, convention, retreat and community environments. Using systemic decision and problem solving models, students will develop, budget, plan, implement and control an actual hospitality/tourism event from start to finish. **Prerequisites:** ACC\* 117 and HSP\* 100. (Formerly Bus. 257)

## **CHEMISTRY**

---

### **CHE\* 111 CONCEPTS OF CHEMISTRY**

4 semester hours (3 class hours/2 laboratory hours)

Inorganic chemistry, elements, atomic structure, chemical and physical bonding, compound formation, chemical reactions, thermo-chemistry, aqueous solutions, electro-chemistry, kinetics, and equilibrium. Laboratory related to material covered in lecture. Not open to students who have completed CHE\* 121, 122. **Prerequisites:** MAT\* 135 or higher and ENG\* 073 or satisfactory scores on placement tests. (Formerly Chem. 101)

### **CHE\* 121 GENERAL CHEMISTRY I**

4 semester hours (3 class hours/3 laboratory hours)

Principles, theories, and laws of chemistry dealing with chemical bonding, molecular formation, periodic trends, states of matter, gas laws, and thermochemistry. **Prerequisites:** High School Chemistry, Intermediate Algebra, ENG\* 073 or satisfactory scores on placement tests. (Formerly Chem. 111)

### **CHE\* 122 GENERAL CHEMISTRY II**

4 semester hours (3 class hours/3 laboratory hours)

Chemical reaction theory, chemical kinetics, thermodynamics, gaseous equilibria, aqueous and nonaqueous solutions, acid-base theory, electrochemistry, coordination chemistry, organic and biochemistry. **Prerequisites:** CHE\* 121 and Intermediate Algebra or consent of instructor. (Formerly Chem. 112)

## COLLEGE FORUM

---

### COL\* 100 FRESHMAN SUCCESS SEMINAR

1 semester hour

COL\* 100 is an extension of First-Year Experience orientation, designed to ease students' transition to NCCC. COL\* 100 is designed to help first-year students learn about college resources and requirements, explore personal learning styles, values and interests. Students will be encouraged to discover different ways to seek academic support. COL\* 100 is highly recommended for full-time students with two or more college prep placements.

## COMMUNICATION

---

### COM\* 173 PUBLIC SPEAKING

3 semester hours

Development of poise and self-confidence in speaking before an audience. Conversational tone and clarity of expression are stressed. Practice in basic ideas of public speaking: content, organization, audience appeal, and delivery.

## COMPUTER APPLICATIONS

---

*All Computer Classes May Include Online Modules, Distance Learning Components, and/or Distance Education Delivery Systems.*

### CSA\* 105 INTRODUCTION TO SOFTWARE APPLICATIONS

3 semester hours

An introduction to the key aspects of the available popular software application packages for the microcomputer as used in the business environment. Designed to give an overview of many of the various commercially available programs, specifically the Microsoft Office Suite-Word, Excel, Access, and PowerPoint. Students will study the concepts of these applications and experience "hands-on" activities during class. This course is available both online and on-ground.

### CSA\* 135 SPREADSHEET APPLICATIONS

3 semester hours

A detailed development of the functions and applications of spreadsheet application software. The electronic spreadsheet, business graphics, data manager aspects will be explored, using the commands of Microsoft Excel for Windows. Upon completion of the basic fundamentals of functions and commands, the programming macros will be introduced, allowing the student to take full advantage of the power of spreadsheet software. **Prerequisite:** CSA\* 105 with a grade of "C-" or higher.

### CSA\* 155 MULTIMEDIA COMMUNICATIONS

3 semester hours

Exploration of how multimedia elements such as text, sound, video, animation and graphics can be effectively incorporated into a public presentation to create an engaging, powerful presentation. Delivering the presentation with integrity and professionalism will be developed through identification and practice of public speaking skills. Students will learn how to design, create, author, and deliver in-person and virtual multimedia presentations utilizing MS PowerPoint, Web 2.0 technologies, and various authoring programs. This course has been approved as a Communications Elective for Computer Science majors. **Prerequisite:** CSA\* 105 with a grade of "C-" or higher.

### CSA\* 163 THE INTERNET

3 semester hours

This course will present the various features of Internet access and use of the World Wide Web using Microsoft Internet Explorer in a Windows operating system platform. Students will learn the necessary structures of file management to download and install files from the Internet. Use of the WEB will be for research of computer related topics and topics of individual academic preferences. Topics include: search engines, e-mail, downloads, multimedia, ethics and security issues, viruses, current implementation of Internet software tools and discussion of current Internet themes. Students will create homepages and their own links to other website pages.

### CSA\* 205 ADVANCED APPLICATIONS

3 semester hours

A second course in the use of standard business software applications. Advanced features of software applications using Microsoft Office and other current available packages will be addressed. Interaction between applications, process automation and additional software applications will be discussed. **Prerequisite:** CSA\* 105 with a grade of "C-" or higher.

### CSA\* 207 COMPUTER APPLICATIONS IN MANAGEMENT AND MARKETING

3 semester hours

A study of how to use computer applications necessary in the development of hard-copy and online materials used in business management and marketing tasks. Publishing software and Web tools will be used to create a system for a simulated business that provides a plan for management/marketing strategies. **Prerequisites:** CSA\* 205 and CST\* 150 and CST\* 250.

### CSA\* 296 COMPUTER APPLICATIONS

3 semester hours

A course to offer the student an opportunity to use knowledge of commercially available software programs to solve well-defined business application problems. Students will work on major independent projects that integrate the tools, skills and techniques they have learned from other course

work in the office suite or web design classes. May be repeated for credit with consent of instructor. **Prerequisite:** CSA\* 105 or CSA\* 205 or equivalent or consent of instructor.

## COMPUTER SCIENCE

*All Computer Classes May Include Online Modules, Distance Learning Components, and/or Distance Education Delivery Systems.*

### CSC\* 102 INTRODUCTION TO COMPUTER SCIENCE 3 semester hours

This introductory course emphasizes the impact computers have on society and our interaction with them. Students are also given an introduction to information retrieval using e-mail and Internet access both through our online course delivery system, WebCT Vista, and through other online search techniques. Topics include CPU, peripheral equipment, software applications, programming languages, computer ethics and computer crime. The history of the computer and the capabilities and limitations of these devices are also presented. Students are also introduced to applications such as Word, Excel, PowerPoint. (Formerly CSCI 110)

### CSC\* 105 PROGRAMMING LOGIC AND DESIGN WITH ANSI C

3 semester hours  
A first course for computer science majors to provide an overview of problem analysis and programming logic. Topics include: set theory, Venn diagrams, Boolean logic, truth tables, decision tables, flowcharting, and an introduction to programming languages. **Prerequisite:** MAT\* 095 or a satisfactory grade on the mathematics placement test. (Formerly CSCI 111)

### CSC\* 180 COMPUTER ETHICS

3 semester hours  
A study in the ethics of computer usage as it applies to the Internet. Issues discussed include privacy, speech and regulation of the Internet, security, intellectual property and codes of ethics and conduct. Case studies in each area will be examined. **Prerequisite:** CSC\* 102 with a grade of "C" or higher or CST\* 110 with a grade of "C" or higher. (Formerly CSCI 240)

### CSC\* 205 VISUAL BASIC I

3 semester hours  
A course in Visual Basic programming language that uses modular coding and emphasizes object oriented techniques. This course addresses event driven programming in the Windows environment. This course is intended to fulfill an advanced programming language requirement. **Prerequisite:** CSC\* 210.

### CSC\* 209 ADVANCED ACCESS WITH VISUAL BASIC 3 semester hours

An applied course in the development of computer applications stressing solutions to common business problems. This course will cover tools used on various platforms for accessing and manipulating data. Business solutions will be developed using Visual Basic, Java and/or C++ as a front end interface. Application design will be covered as team projects. This course may fulfill an advanced programming language requirement. **Prerequisites:** CSC\* 205 with a grade of "C" or higher and CSC\* 231 with a grade of "C" or higher. CSC\* 290 or other programming courses are recommended. (Formerly CSCI 245)

### CSC\* 210 C PROGRAMMING

3 semester hours  
A study of the C programming language including identifiers, data types, storage, constants, expressions, operator classes, operator pointers, functions, recursion, arrays, input/output, preprocessor and headers will be considered. An examination of data files and structures and unions will be included. **Prerequisite:** CSC\* 105. (Formerly CSCI 141 Programming C)

### CSC\* 213 OBJECT-ORIENTED PROGRAMMING USING C++

3 semester hours  
A course in the C++ programming language that uses modular programming and emphasizes object oriented techniques. This course will address event driven programming in the Windows environment and interfaces to the Internet. This course may fulfill an advanced programming language requirement. **Prerequisite:** CSC\* 210 with a grade of "C" or higher. (Formerly CSCI 250)

### CSC\* 220 OBJECT-ORIENTED PROGRAMMING USING JAVA

3 semester hours  
A course in the Java programming language that uses modular programming and emphasizes object oriented techniques. This course will address event driven programming in the Windows environment and interfaces to the Internet. This course may fulfill an advanced programming language requirement. **Prerequisite:** CSC\* 210. (Formerly CSCI 230)

### CSC\* 231 DATABASE DESIGN I

3 semester hours  
Course covers the concepts of data organization and data modeling, normalization, relational algebra and logic, and relational calculus. Students will design databases and develop queries using standard SQL. **Prerequisite:** CSC\* 105. (Formerly CIS 217)

## CSC\* 232 DATABASE DESIGN II

3 semester hours

This course addresses advanced topics in database management including SQL coding for database access with platform independence. Data normalization and relational algebra are covered as the theory of data access. Actual business scenarios will be developed, and solutions created for them. **Prerequisite:** CSC\* 231. (Formerly CIS 225)

## CSC\* 250 SYSTEMS ANALYSIS & DESIGN

3 semester hours

Introduction to analysis and design of business management systems, through the three stages of business system design: analysis of information flow, systems specification and equipment, and selection and implementation of the system. Project management, requirements planning, feasibility analysis, and project estimating will be discussed.

**Prerequisites:** CSC\* 231 is recommended. (Formerly CSCI 202)

## CSC\* 290 ADVANCED PROGRAMMING

1 to 6 semester hours

Offers the student an opportunity to use knowledge of Visual Basic, and/or C++, and/or Java, and/or C programming to solve well-defined scientific or business problems. Advanced topics in each of the languages are covered. A major supervised project stressing design concepts, coding styles and documentation is required. May be repeated but the total credits may not exceed six per language.

**Prerequisite:** CSC\* 210, CSC\* 230, CSC\* 250, or CSC\* 206, depending on the language selected. (Formerly CSCI 210)

## CSC\* 295 COOPERATIVE EDUCATION/WORK EXPERIENCE

3 semester hours

A student work experience in a computer related work situation, under the supervision of Computer Science Program Coordinator. Students are evaluated in an intern position obtained by the student and agreed upon by the supervisor of the cooperating worksite. Students will engage in periodic written reports to the coordinator and site advisor, and present final summaries of their field work experiences at the end of each semester. May be repeated for credit with consent of instructor. Offered on a pass/fail basis. **Prerequisite:** Consent of instructor. (Formerly CST 280)

## CSC\* 298 CURRENT TOPICS

3 semester hours

The topics and delivery method of this course vary. It may be a distance learning, online discussion class, centering on questions and issues of current computer topics, researched through the Internet. It may also target specific areas of computer hardware, software, networking, and telecommunications with focused hands-on modules. (Formerly CSCI 201)

# COMPUTER SYSTEMS TECHNOLOGY

*All Computer Classes May Include Online Modules, Distance Learning Components, and/or Distance Education Delivery Systems.*

## CST\* 110 INTRODUCTION TO INFORMATION TECHNOLOGY

3 semester hours

An introduction to computer software analysis, hardware selection, installation, and implementation of computer systems for a small business. To train the student to provide computer support services for the workplace. (Formerly CST 130)

## CST\* 130 NETWORKING I

3 semester hours

An introduction to electronic data transmission. Topics include: communication media, communications software, encryption, protocols, and the OSI model. **Prerequisite:** CST\* 140.

## CST\* 140 INTRODUCTION TO COMPUTER HARDWARE

3 semester hours

The computer architecture from chip to board to device to system. Understanding the individual components and their relationship to a functional PC. Topics include micro-processors, peripheral devices, memory, troubleshooting, diagnostics, repair, and connectivity. **Prerequisite:** CSC\* 105 (Formerly CST 120)

## CST\* 150 WEB DESIGN AND DEVELOPMENT I

3 semester hours

Design and creation of extensive web pages using Hyper-Text Markup Language (HTML). Explore the techniques of HTML from the basics, tables, graphical bullets, multimedia, rulers, imagemaps to forms, interactive pages, components, and script writing. Lecture and textbook assignments are supplemented by lectures on the WWW, online discussion groups and e-mail interaction. The traditional strategies of learning as well as self-paced distance learning techniques are used as they relate to the online aspects of this class. Students will create and maintain their own website during this course and will be able to use homework examples as benchmarks of their own page development. **Prerequisites:** CSA\* 163 with a grade of "C-" or higher (may be taken concurrently). (Formerly CIS 212)

### CST\* 151 WEB CONSTRUCTION

3 semester hours

Page design concepts and techniques will be integrated into the creation of web development. Students will learn to create a business development site that incorporates the tools of web programming and various online resources for continuity and visual presentation, as well as the functionality of the web site. Topics include navigation, frames, tables, and hyper-links, photos and video, and sound. The completion of a comprehensive project will be a major component of this class. **Prerequisite:** CST\* 150. (Formerly CIS 208)

### CST\* 210 OPERATING SYSTEMS

3 semester hours

Topics include processor management, file systems, process management and scheduling algorithms, device management, memory management, and data integrity. The major operating systems of the various hardware platforms will be analyzed, including DOS, IBM OS/2, Unix, Linux, and the Microsoft Windows family. (Formerly CST 204)

### CST\* 231 DATA COMMUNICATIONS & NETWORKS

3 semester hours

An introduction to electronic data transmission. Topics include: communication media, communications software, encryption, protocols, and the OSI model.

**Prerequisite:** CST\* 140 with a grade of "C+" or higher. (Formerly CST 210)

### CST\* 235 NETWORK SYSTEMS

3 semester hours

Topics include the planning, design, installation, and administration of networks. Emphasis will focus on local area network environments. Topics include the OSI model, transmission media, topologies and network configurations, hardware components, protocols, security, and data integrity. **Prerequisite:** CST\* 140 with a grade of "C+" or higher. (Formerly CST 220)

### CST\* 250 WEB DESIGN AND DEVELOPMENT II

3 semester hours

Web page creation beyond HTML. JavaScript coding and concepts to enhance the development of page design, changing a static page into a dynamic page. Object concepts, forms, and controls, push buttons, scrolling text, and other events will be included. This course uses JavaScript as the language for webpage development and design. **Prerequisite:** CST\* 150 with a grade of "C" or higher. (Formerly CIS 214)

### CST\* 260 SYSTEM ARCHITECTURE

3 semester hours

A technical foundation for systems design. Topics include digital logic, Boolean algebra, combinational logic, processor technology and architecture, data representation, system integration and performance, and system design. **Prerequisite:** CST\* 140 with a grade of "C-" or higher. (Formerly CST 205)

## CRIMINAL JUSTICE

The Criminal Justice Program strives to attain a high level of academic excellence and professionalism. As a Criminal Justice major, you are required to receive a grade of "C-" or better in all Criminal Justice required courses. (Refer to the program requirements.) Any grade of "D+" or below must be repeated prior to graduating. It is important to note, that some four-year institutions may not accept a grade of "C-" to transfer.

For information on Criminology and Juvenile Delinquency see Sociology 240 & 241.

### CJS\* 101 INTRODUCTION TO CRIMINAL JUSTICE

3 semester hours

History, development, and philosophy of criminal justice in a democratic society; introduction to agencies involved in the administration of criminal justice; career orientation.

**Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests. **Fall** (Formerly CJ 100)

### CJS\* 120 POLICE AND THE COMMUNITY

3 semester hours

The purpose of this course is to provide an overview of the various aspects of the philosophy of policing known as Community Policing. Community Policing involves partnership among the police, the community and other government agencies. Community Policing is government's answer to customer service. Students are taught the evolution of policing ranging from the political era to the professional era. Classroom instruction of the specific aspects of Community Policing are supplemented with practical applications within nearby communities. **Prerequisites:** ENG\* 063 and ENG\* 073, or satisfactory score on placement tests.

**Spring** (Formerly CJ 145)

### CJS\* 203 JUVENILE JUSTICE

3 semester hours

Deviant behavior and current criminological theories with emphasis on synthesis and criminal justice applications; crime prevention and the phenomena of a crime as they concern the juvenile. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests. **Semester varies** (Formerly CJ 122)

### CJS\* 211 CRIMINAL LAW I

3 semester hours

Examination and study of criminal statutes with the emphasis on theory and philosophy of law; relationship of law and society. **Prerequisite:** CJS\* 101. **Fall** (Formerly CJ 201)

### CJS\* 212 CRIMINAL LAW II

3 semester hours

Local, state, and federal laws; development, application, and enforcement. **Prerequisite:** CJS\* 211. **Spring** (Formerly CJ 202)

### **CJS\* 213 EVIDENCE & CRIMINAL PROCEDURE**

3 semester hours

Types of criminal evidence; criminal procedure in various courts; arrest, search, and seizure; collection of evidence, discretion, and related topics. **Prerequisite:** CJS\* 101. **Spring** (Formerly CJ 224)

### **CJS\* 220 CRIMINAL INVESTIGATION**

3 semester hours

Fundamentals of criminal investigation; theory and history; crime scene to courtroom with emphasis on techniques appropriate to specific crimes. **Prerequisites:** CJS\*101. **Fall** (Formerly CJ 221)

### **CJS\* 225 FORENSIC SCIENCE**

3 semester hours

Collection, identification, preservation, and transportation of physical evidence; crime laboratory capability and limitations; examination of physical evidence within the resources of the investigator; course will include demonstration of laboratory techniques. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests. **Varies** (Formerly CJ 142)

### **CJS\* 250 POLICE ORGANIZATION & ADMINISTRATION**

3 semester hours

This course is designed as an introduction to the theory and practice of police organization and administration and deals with the various components of modern criminal justice agencies as they relate to the members of the organization and the community. Instruction will include issues confronting police organizations in the 21st Century, including the issues of discipline and union matters. **Prerequisites:** ENG\* 063 and ENG\* 073, or satisfactory score on placement tests. **Fall** (Formerly CJ 211)

### **CJS\* 257 TERRORISM**

3 semester hours

Organized terrorism as a 21st Century phenomenon affecting law enforcement and society; instruction to include the Patriot Act. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests. **Semester varies** (Formerly CJ 210)

### **CJS\* 258 STREET GANGS & ORGANIZED CRIME**

3 semester hours

Examination of the origin, growth, and structure of organized crime, and the drug cartels. Organized street gangs, which can be defined as a criminal enterprise operating throughout the U.S., will also be explored. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests. **Spring** (Formerly CJ 260)

### **CJS\* 291 CRIMINAL JUSTICE PRACTICUM**

3 semester hours

College-approved and supervised position related to the student's criminal justice program, obtained by the student with a public or private law enforcement or security agency. Students are evaluated by a member of the College faculty and the staff of the cooperating agency. **Prerequisites:** 2.0 GPA., Successful completion of 12 Criminal Justice credits and consent of instructor. **Fall.** (Formerly CJ 280)

### **CJS\* 298 SPECIAL TOPICS IN CRIMINAL JUSTICE**

1-3 semester hours

One credit courses are designed to be presented in a two-day format, usually on a consecutive Friday and Saturday. Three of these 1 credit classes can be bundled to fulfill the Criminal Justice elective or an open elective. Topics change each semester. Check the college schedule for listings of topics and time frames. The two or three credit course topics will vary when offered. **Fall and Spring** (Formerly CJ 150).

## **DEAF STUDIES**

### **DSC\* 101 VISUAL/GESTURAL COMMUNICATION**

3 semester hours

A study of nonlanguage aspects of communication: cultural variation in languages; American Sign Language (visual and gestural language); other sign language formations and variations. Emphasis will be on eye training and the use of gesture, pantomime and body language as related to American Sign Language. **Corequisite:** ASL\* 101 (Formerly DS 101)

### **DSC\* 110 ORIENTATION TO DEAFNESS**

3 semester hours

An overview of Deafness that encompasses three major topics: the nature and experience of Deafness; the education of Deaf children and adults; and the adult Deaf community. Medical, educational, psychological, social, and vocational aspects are considered. **Prerequisite:** Eligibility for ENG\* 101. (Formerly DS 110)

### **DSC\* 114 INTRODUCTION TO DEAF PEOPLE & DEAF CULTURE I**

3 semester hours

Analysis and discussion of the historical and cultural aspects of Deaf people. In the last decade, definitions of and attitudes toward Deaf people have changed from a clinical perspective to a cultural perspective that identifies, respects and promotes Deaf culture. Classes will host guest lecturers from the Deaf Community. **Prerequisites:** ASL\* 102 with grade of "C" or above, and eligibility for ENG\* 101. **Corequisite:** ASL\* 201. (Formerly DS 113)

## **DSC\* 214 INTRODUCTION TO DEAF PEOPLE & DEAF CULTURE II**

3 semester hours

This is a continuation of Introduction to Deaf People & Deaf Culture I. Topics include the role of American Sign Language in the Deaf Community; examination of Deaf history, exploration of cultural characteristics of Deaf persons, and a review of the contributions of Deaf persons to American Society. **Prerequisites:** ASL\* 201, and DSC\* 114 (both with grade of “C” or above). (Formerly DS 114)

## **DSC\* 218 SELECTED TOPICS IN DEAF STUDIES**

3 semester hours

Discussion of various topics related to current cultural and educational issues concerning the life of Deaf people. Classes will host professionals working in those related topics from the Deaf Community. Student will be given an opportunity to accrue up to fifty (50) hours of internship experience working with professionals in the Deaf Community in addition to the field experience hours. **Prerequisites:** ASL\* 201, DSC\* 114, (both with grade of “C” or above.) **Corequisite:** DSC\* 214. (Formerly DS 204)

## **DSC\* 219 AMERICAN SIGN LANGUAGE LITERATURE**

3 semester hours

Analysis and discussions of ASL poetry and storytelling as part of receptive/expressive language development and advanced skills enhancement. This course also includes storytelling techniques through the use of standard American folklore and other culturally valued forms of literature. Videotapes of Deaf poets, sign language stories and other esoteric aspects of Deaf culture, such as sport signs, will be evaluated by the students. **Prerequisites:** ASL\* 201, DSC\* 114, (both with grade of “C” or above). (Formerly DS 206)

## **DSC\* 222 FIELD EXPERIENCE IN DEAF STUDIES**

3 semester hours

Student work experience of one hundred (100) hours in an agency providing services for Deaf people under the supervision of the staff of the agency and the instructor. The instructor will place and evaluate the students in an approved agency. Meet one hour a week in the class or as instructor determines. **Prerequisites:** ASL\* 201, DSC\* 114; (both with grade of “C” or above.) **Corequisites:** ASL\* 202, DSC\* 101, DSC\* 214, and DSC\* 218. (Formerly DS 207)

## **EARLY CHILDHOOD EDUCATION**

### **ECE\* 101 INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

3 semester hours

Philosophies, methods, and materials dealing with early childhood education. Roles and responsibilities of teachers of young children. Practical aspects of the physical, cognitive, emotional, and social development of the young child.

Ten hours of observation is required (at instructor approved or NAEYC accredited centers). Field trips may be required.

### **ECE\* 103 CREATIVE EXPERIENCES FOR CHILDREN**

3 semester hours

Theory and approaches to creative art, movement, and dramatic activities for young children. Information on why and how these activities should be included in curriculum planning. Students are responsible for planning and presenting activities to young children in a preschool setting with a supervising teacher present. Field trips are required. (Formerly ECE 106)

### **ECE\* 106 MUSIC & MOVEMENT FOR CHILDREN**

3 semester hours

Basic techniques and skills for teaching music to young children. Students will explore space, time, beat, rhythm, dance, movement, stories and song both creatively and traditionally to create a well balanced music and movement program. Field trips are required. (Formerly ECE 121 Music Experiences For The Young Child)

### **ECE\* 109 SCIENCE AND MATH FOR CHILDREN**

3 semester hours

Basic theories of teaching science and mathematics to young children. Practical activities and ideas for classroom implementation. Topics include the number system, arithmetic, physical science, and life science. Field trips are required. **Prerequisite:** ECE\* 101 or simultaneous enrollment in ECE\* 101.

### **ECE\* 141 INFANT/TODDLER GROWTH & DEVELOPMENT**

3 semester hours

Students will be developing caregiving and teaching techniques appropriate for children from birth to age 3 years. They will be concentrating on learning how to set up an environment which is responsive to infants' and toddlers' physical, cognitive, social, and emotional needs. Emphasis will be placed upon how the caregiver interacts with the young child to develop trust and learning. At least two infant/toddler observations will be required. Field trips are required. **Prerequisite:** ECE\* 101.

### **ECE\* 176 HEALTH, SAFETY AND NUTRITION**

3 semester hours

Development of activities and resources as the basis for an appropriate health curriculum that encompasses all aspects of a healthy child. Students will become aware of the interrelationships between child development and the areas of health, nutrition and safety. Students are responsible for planning and presenting lessons which include food preparation. Outside observations are required. Field trips may be required.

### **ECE\* 180 CDA CREDENTIAL PREPARATION**

3 semester hours

The Child Development Associate Preparation (CDA) course is intended to help qualified students prepare to apply for the CDA Credential (which is designed for individuals who wish to be certified by the Council for Early Childhood Professional Recognition under a direct assessment system). The CDA Credential Training program is a national movement by the Council that provides a standardized credential to qualified caregivers currently working with children birth to age five. **Prerequisites:** Permission of Program Coordinator and 120 hours of approved CT Charts-A-Course training or two approved ECE college level courses. (Formerly ECE 105)

### **ECE\* 181 CDA CREDENTIAL PREPARATION II**

3 semester hours

This fieldwork course is designed for childcare providers who are preparing to make application for their Child Development Associate (CDA) Credential through the Council for Professional Recognition in Washington, D.C., under its present requirements. The student will attend a weekly seminar and a minimum of sixty (60) hours of fieldwork in an approved licensed early childhood setting. The instructor will conduct on-site observation visits. **Prerequisites:** ECE\* 101 and ECE\* 180 or simultaneous enrollment in ECE\* 101 or ECE\* 180 and consent of instructor.

### **ECE\* 182 CHILD DEVELOPMENT**

3 semester hours

This course is concerned with human development from prenatal through age eight with particular emphasis on the preschool child. The cognitive, creative, physical, personal, social and emotional benchmarks through successive stages of development will be studied in depth. This course requires ten hours of observation (in an instructor approved center) in order to receive credit.

### **ECE\* 206 ADMINISTRATION & SUPERVISION OF EARLY CHILDHOOD PROGRAMS**

3 semester hours

Aims to develop knowledge of and professional attitude toward business, legal, and psychological issues of interest to in-home child care specialists and directors or owners of early childhood facilities. Provides guidelines for a career in nurturing care in the child's own home, in the home of the worker, or for establishing a child care center. Field trips are required. **Prerequisites:** ECE\* 101 and at least one curriculum course. (Formerly ECE 140)

### **ECE\* 210 OBSERVATION, PARTICIPATION & SEMINAR**

3 semester hours

This course is designed to increase objectivity in observing and interpreting children's behavior, to observe developmental characteristics and to increase the awareness of normal patterns of behavior. Observation and participation

placements for the study of young children are provided in the NCCC Child Development Laboratory School. In addition to attending a weekly seminar, the student will observe and participate in an approved center for 60 hours to gain experience and competency in working with young children. Half of these hours will consist of participation and the other half observation. **Prerequisites:** ECE\* 101 and a minimum of one other ECE curriculum course.

### **ECE\* 222 METHODS AND TECHNIQUES IN ECE**

3 semester hours

This course is intended to train students in planning and implementing a developmentally appropriate curriculum designed to enhance the development of young children. Some components of K – 3 and all aspects of the prekindergarten curriculum will be discussed and examined. Students will have the opportunity to experiment with the curriculum using a variety of teaching styles. This course takes into account the multicultural backgrounds and interests of the students as well as the diverse backgrounds of the children they may encounter. May be taken prior to or concurrently with ECE\* 290 Student Teaching I. (Formerly ECE 200)

### **ECE\* 231 EARLY LANGUAGE & LITERACY DEVELOPMENT**

3 semester hours

Principles of language development in the young child. Emphasis on exploring how a child's cultural background and experiences influence emerging literacy. Immersion, constructive writing, inventive spelling, and other aspects of the whole language classroom will be studied. The focus will be how the teacher's role is pivotal in this process. Field trips are required. **Prerequisite:** ECE\* 101 or simultaneous enrollment in ECE\* 101. (Formerly ECE 103)

### **ECE\* 290 STUDENT TEACHING I**

3 semester hours

Supervised observation and participation in the teaching experience. Students are provided with eight hours a week of clinical experience in the College's Child Development Center laboratory school. Weekly seminars are scheduled for discussion. Field trips are required. **Prerequisites:** ECE\* 101, two or more ECE curriculum courses, current First Aid Certificate, consent of instructor and coordinator, and a 2.5 grade point average in Early Childhood Education courses. Requires fingerprinting and medical evaluation at the student's expense. (Formerly ECE 173)

### **ECE\* 291 STUDENT TEACHING II**

3 semester hours

This is a continuation of Student Teaching I. A student work experience of 150 hours is required. During this phase of the work experience, the student will concentrate on working directly with young children. The overall objectives are for the student to be able to manage a classroom effectively, plan, organize, execute and evaluate classroom activities on a weekly basis and be able to evaluate objec-

tively his or her emerging pre-teaching skills. The student will be under the supervision of an on-site supervisor as well as the College instructor. Ten hours in the College's Child Laboratory School are required with weekly seminars to discuss problems and procedures. **Prerequisites:** ECE\* 101 and ECE\* 290, three or more additional ECE curriculum courses, current First Aid Certificate, consent of instructor and coordinator, and a minimum 2.5 grade point average in Early Childhood Education courses. Requires fingerprinting and medical evaluation at the student's expense. (Formerly ECE 280)

## ECONOMICS

### ECN\* 101 PRINCIPLES OF MACROECONOMICS

3 semester hours

Macroeconomics is concerned with the general state of a nation's economy and the degree to which the economy uses and expands its capacity for producing goods and services. That is, the efficient and effective deployment of raw materials, labor and capital resources. As a result, macroeconomics deals with some of the most controversial and challenging market system performance issues of our time: inflation, taxes, income determination, unemployment, balanced budgets, and the role of government policies. **Prerequisites:** MAT\* 075 or satisfactory score on mathematics placement test and ENG\* 073 or satisfactory score on reading placement test. (Formerly Econ. 101)

### ECN\* 102 PRINCIPLES OF MICROECONOMICS

3 semester hours

Microeconomics is the study of choices that individuals and businesses make and the influence that government has on price responses, market models, cost benefit analysis and global economics. **Prerequisite:** ECN\* 101 or consent of instructor. (Formerly Econ. 102)

### ECN\* 250 MONEY AND BANKING

3 semester hours

This course presents a fundamental treatment of how money processes within the economy. Topics include the money supply and the role banks play in the creation of money and as a participant in the payment process. Money and Banking also covers how the various types of financial institutions operate, the workings of monetary and fiscal policies and how the Federal Reserve fits into the process. **Prerequisite:** ECN\* 101. (Formerly Bus. 208)

## EDUCATIONAL TECHNOLOGY

### EDT\* 200 MULTIMEDIA TOOLS FOR INSTRUCTION

3 semester hours

Course focus is on selection, utilization, and evaluation of different technologies. Coverage of types and uses of different media formats, with emphasis on the integration and application of specific approaches, strategies, techniques, and

technology appropriate to a learning environment. Exposure to commonly used peripheral equipment such as scanners, digital cameras, video and audio devices, and printers. **Prerequisites:** CSA\* 105 and CSC\* 102 or equivalent.

### EDT\* 202 RESEARCH & EVALUATION:

#### APPLICATIONS OF THE INTERNET

3 semester hours

Beyond Surfing and Searching, students will gain extensive research skills for their own projects and development of comprehensive works such as instructional materials, business related activities, and personal and professional writings. Details of search engine techniques and meta-searches are emphasized. Standards for evaluation of Internet sources for academic use will be a major component. Methodology will include case study projects to be developed both individually and in groups. **Prerequisite:** CSA\* 163 or equivalent.

### EDT\* 204 CLASSROOM SUPPORT SOFTWARE

3 semester hours

Introduction to automated classroom administration tools. Processes for grade maintenance, attendance, calendar and scheduling, lesson plan and test generation can be computerized for greater efficiency. Creation of web-based support systems and development of web activities. Use of spreadsheets, databases in classroom management. **Prerequisite:** CSA\* 105 or equivalent.

### EDT\* 206 STANDARDS AND PROCEDURES FOR TECHNICAL SUPPORT

3 semester hours

An introduction to common approaches to providing technical support. Systems to develop and maintain Help Desks, Inventory, upgrade/replacement procedures, PC maintenance schedule, back-up procedures will be investigated. Training and supervising lab assistants, evaluation of hardware and software. **Prerequisites:** CST\* 140 and CSA\* 105.

### EDT\* 210 CURRICULUM INFUSION UNIT STUDY

3 semester hours

Intensive utilization of theme-based infusion of technology. Students will select a specific academic topic related to their intended area of specialization/interest. Skills and expertise developed in previous classes will be integrated into a semester-long project that focuses on this topic. Lesson plans, instructional materials, activities, presentations, web-based activities, tests, collaborative projects will all be created by the student. This project should serve as a model for future classroom activities. **Prerequisites:** EDT\* 200, EDT\* 202, or equivalent.

## EDT\* 212 INSTRUCTIONAL & ADMINISTRATIVE NETWORK SYSTEMS

3 semester hours

Students will learn to plan, design, install and administer a network. Emphasis on data networks for schools; PC and APPLE LAN environments will be covered. Topics include: hardware and software setup, topologies, cross-platform issues, network configurations, administration, security and data integrity. **Prerequisites:** CST\* 120 and CST\* 210.

## ENGLISH

### ENG\* 001 WRITING REVIEW

1 semester hour

A condensed review of the basic principles of writing. Paragraph development and composition structure are discussed and practiced. This course is designed for the student who needs a brush-up of skills. Students requiring extensive work on sentence structure are advised to take ENG\* 063. (Formerly Eng. 020)

### ENG\* 003 FOUNDATIONS OF READING

3 semester hours

A developmental course offering high-interest reading selections, while focusing on improving comprehension skills, building a strong vocabulary, and learning various techniques to enhance study skills. Not open to students who have completed ENG\* 073. Does not fulfill degree credit requirements. (Formerly Eng. 010A)

### ENG\* 013 WRITING FOUNDATIONS OF ENGLISH

3 semester hours

A course that focuses on the basic skills of writing effective and correct sentences and paragraphs. Works on developing understanding of grammar and punctuation rules, variety of sentence construction, role of paragraph as the essential element of development in the essay. Assignments will focus on understanding the relationship between topic sentences and paragraph development, significance of vocabulary, and importance of mechanical correctness. Does not fulfill degree credit requirements. (Formerly Eng. 011A )

### ENG\* 063 WRITING: INTRODUCTION TO THE ESSAY

3 semester hours

A course that focuses on writing skills development and well-developed essays in a variety of rhetorical modes. Unity, purpose, coherent paragraphs, and effective, correct, and varied sentence structure are stressed. May not be taken for credit if a student has earned credit for ENG\* 101 or ENG\* 102. **Prerequisite:** successful completion of ENG\* 013 with a grade of "C" or better or satisfactory score on placement tests. Does not fulfill degree credit requirements. (Formerly Eng. 011B)

### ENG\* 073 ACADEMIC READING

3 semester hours

A course offering more advanced reading selections reflecting cultural diversity, while focusing on effective skills for reading in the content areas. Skills include: improving comprehension, building strong college-level vocabulary, increasing speed, and reading critically. It is designed to prepare students for higher level content courses. **Prerequisite:** successful completion of ENG\* 003 with a grade of "C" or better or satisfactory score on placement tests. Does not fulfill degree credit requirements. (Formerly Eng. 010B)

### ENG\* 093 INTRODUCTION TO COLLEGE READING AND WRITING

3 semester hours

This course explores the natural link between careful reading and good writing. Examples of professional writing will be studied as models for student writing. The expansion of the student's world through reading will be reflected in the writing assigned in the class. **Prerequisites:** successful completion of ENG\* 063 and ENG\* 073 with a grade of "C" or better or satisfactory scores on placement tests.

### ENG\* 101 COMPOSITION

3 semester hours

An introduction to the principles of effective composition. Includes a research paper. Practice in writing essays based on analysis of student and professional works. **Prerequisite:** successful completion of ENG\* 063 and ENG\* 073 with a grade of "C" or better or satisfactory scores on placement tests. (Formerly Eng. 101)

### ENG\* 102 LITERATURE & COMPOSITION

3 semester hours

Further practice in composition based on analysis of short stories, poetry and drama. Includes additional practice in research techniques. **Prerequisite:** successful completion of ENG\* 101 with a grade of "C-" or better.

### ENG\* 114 CHILDREN'S LITERATURE

3 semester hours

This course offers an exploration of award winning children's literature from past to present. Its range also includes both international and multicultural writings in a variety of genres. The class incorporates diverse approaches and activities for using and teaching literature to children of all ages. (Formerly Eng. 180)

### ENG\* 194 LITERARY CHAMPIONS – NOBEL AND PULITZER PRIZEWINNERS

3 semester hours

An exploration of social context, theme, and other literary concerns found in the writings of recent Nobel and Pulitzer Prizewinners. Readings, films, intensive student discussions, and outside research required. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 208)

### ENG\* 200 ADVANCED COMPOSITION

3 semester hours

This course provides students an opportunity to improve their written communication skills by completing advanced writing assignments and research projects of their own choosing. Students will learn proper documentation styles and more complex writing and research techniques. The course will improve students' information literacy skills and allow them to effectively navigate through a wide variety of sources in order to collect credible evidence that will support their written claims. Advanced Composition is open to students in all majors and careers, and students will be allowed to pursue research on topics in their individual disciplines. The course requires computer and library usage.

**Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 226)

### ENG\* 211 THE SHORT STORY

3 semester hours

Close reading and analysis of short fiction. Includes both traditional forms and modern experimental prose. Lecture, discussion, group projects, films, writing essays. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 210)

### ENG\* 213 POETRY

3 semester hours

Practice in the close reading and analysis of poetry across a wide range of English and American work from a variety of time periods. Emphasis on how poems work: prosody, diction, figurative language, structure, tone, and theme. In addition, students will practice writing their own poetry, exchanging work and critiquing one another. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 209)

### ENG\* 214 DRAMA

3 semester hours

This 3 credit course will trace the development of the theatre from its Greek base to its modern identity. Most of the major literary periods with their dominant themes will be highlighted. A field trip to view a production will be featured along with guest speakers based in the profession. (Formerly Eng. 219)

### ENG\* 219 LITERATURE OF GREAT EXPEDITIONS

3 semester hours

An examination of writing produced by and about great expeditions and an investigation into the changing concept of exploration. Readings will be drawn from narratives of New World discovery, Arctic exploration, and Himalayan mountaineering. Personal writing will be required, as well as experiential activity. **Prerequisite:** ENG\* 101 or consent of instructor. (Formerly Eng. 220)

### ENG\* 221 AMERICAN LITERATURE I

3 semester hours

Reading and study of examples of American literature from the colonial period to the mid-nineteenth century. The class will study significant writers of the time period and examine the development of the themes of individualism, idealism, opportunity, equality, and inclusion as they appear across a range of genres. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 211)

### ENG\* 222 AMERICAN LITERATURE II

3 semester hours

Reading and study of examples of American literature from the mid-nineteenth century to the present. The class will study significant writers of the time period and explore the themes of individualism, idealism, opportunity, equality, and inclusion as they appear across a range of genres. An overview of literary movements will be provided. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 212)

### ENG\* 231 BRITISH LITERATURE I

3 semester hours

A study of selected British Literary works in the major genres of poetry, prose and drama from the eighth to the mid-eighteenth centuries by means of readings films and discussions. (Formerly Eng. 231)

### ENG\* 232 BRITISH LITERATURE II

3 semester hours

A study of selected British literacy works in the major genres of poetry, drama, and prose from the late eighteenth century to the present by means of readings, films and discussions. (Formerly Eng. 232)

### ENG\* 233 SHAKESPEARE

3 semester hours

An introduction to Shakespeare's works through the study of representative plays. Emphasis on language, imagery, themes, characterization, staging. Includes reading, lecture, discussion, films, and writing critical essays. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 259)

### ENG\* 240 STUDIES IN WORLD LITERATURE

3 semester hours

An exploration of universal themes and various cultural perspectives through readings, film, and discussion. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 243)

### ENG\* 260 STUDIES IN WOMEN'S LITERATURE

3 semester hours

The themes of love, work, and marriage will be explored as the heroines of these novels and stories are forced to make life choices, often between marriage and a vocation, individuality and society's narrow expectations. Authors include both established and neglected 19th and early 20th century American women writers, many of them surprisingly mod-

ern in their themes and writing styles. **Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 217)

### ENG\* 262 WOMEN IN LITERATURE

3 semester hours

This course will introduce students to a variety of contemporary women writers. Focus will be on both the diversity and commonality of women's experience, as explored in 20th century short story, novel, and poetry. Several women writers may visit class to read and discuss their work.

**Prerequisite:** ENG\* 102 or consent of instructor. (Formerly Eng. 218)

### ENG\* 271 FILM AND LITERATURE

3 Semester hours

The course examines film both as a genre and in its relationship to literature. Film is a relatively new art form that has only recently earned its place in both academic and popular culture as a leading medium for storytelling. The course will consider film techniques and will focus on how films tell stories that engage viewers in unique ways. The course will touch on the history of film and will consider the relationship of film to literature. Students will consider elements common to film and literature such as character development and presentation, narrative tension and structure, diction and point of view, as well as such innate differences as arise between a reader visualizing a literary text and an onlooker engrossed by a filmed moving image. **Prerequisite:** ENG\* 102 or consent of instructor.

### ENG\* 281 CREATIVE WRITING

3 semester hours

Composition in prose, poetry, or dramatic form. Assignments include a variety of writing styles, such as dialogue, argument, narrative, and description. Students will be expected to share their work and critiques within the class. Each student also submits for approval a lengthier project of his or her own choosing to complete by the end of the semester. **Prerequisite:** ENG\* 101 or consent of instructor. (Formerly Eng. 206)

### ENG\* 284 ADVANCED CREATIVE WRITING

3 semester hours

This course gives students the opportunity to continue their creative writing on a more intensive and complex level.

**Prerequisite:** ENG\* 281 or consent of instructor. (Formerly Eng. 207)

## ENVIRONMENTAL AND EARTH SCIENCE

### EAS\* 102 EARTH SCIENCE

3 semester hours

An exploration of the basic processes that have formed and continue to form our planet. Included are causes of earthquakes, volcanic eruptions and origins of volcanoes, mountain building, erosional forces, movement of the plates (plate tectonics). Other topics are atmosphere, the rock cycle, ocean currents and their influence on global and

regional climate, and ocean basins. The geologic time scale and fossil evidence are discussed. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement test. (Formerly Sci. 115)

### EAS\* 104 NATURAL HISTORY

3 semester hours

An introduction to various aspects of the earth such as its origin, history, climates, weather, and varieties of life forms. Emphasizes general descriptions rather than technical explanations. Field trips required. (Formerly Sci. 121)

### EVS\* 100 INTRODUCTION TO ENVIRONMENTAL SCIENCE

3 semester hours

This three credit, non-laboratory science is designed to provide an overview of long-term effects on the well-being of the planet and its inhabitants. The course will also examine population, resources, pollution, and attitudes. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement test. (Formerly Sci. 105)

## GENERAL

### Genl. 008 INDIVIDUAL REMEDIATION PROGRAM

3 - 12 semester hours

This Remedial Program consists of 3 to 12 institutional credits of tutorial and specialized instructional activities for all students who need to improve academic skills prior to registration for certain college-level or developmental courses. Prior to registration, assessment is made of the academic skills of the entering student, with particular attention to language and mathematics skills. The results are analyzed and used to help students register for appropriate classes. Students registered in this remedial program may register for other classes with the approval of an academic advisor. Credit for the Remedial Program does not count toward graduation.

### Genl. 010 STUDENT SUCCESS SEMINAR I

3 semester hours

A course of study designed to enhance the Deaf and Hard of Hearing student's successful transition from high school or the work place to college. By means of a wide variety of experiences focusing on self-assessment of learning style and academic goals, study skills, and independent living skills, the student will develop knowledge and competency in a number of areas which are crucial to success in college. Should be taken concurrently with Genl. 012, Genl. 081, and Genl. 083. Does not fulfill degree credit requirements.

### Genl. 011 STUDENT SUCCESS SEMINAR II

3 semester hours

A continuation of Student Success Seminar I. Topics include advanced study skills, support services in academic settings, time management for long-term projects, key factors affecting personal and professional success, and use of library resources. Class needs may determine review or more

in-depth work on topics covered in Student Success Seminar I. Should be taken concurrently with Genl. 013, Genl. 082, and Genl. 085. Does not fulfill degree credit requirements. **Prerequisites:** Genl. 010, Genl. 081, and Genl. 083 or consent of instructor.

### **Genl. 012 SELECTED TOPICS FOR Deaf AND HARD OF HEARING STUDENTS I**

3 semester hours

A course of diverse topics designed to develop knowledge key to a successful college experience for Deaf and Hard of Hearing students and to concurrently supplement reading and writing competency development in Genl. 081 and Genl. 083. Topics may include but not be limited to interpersonal relationships, linguistics of American Sign Language, career exploration, discussion and analysis of current events, and management of personal finances. Should be taken concurrently with Genl. 010, Genl. 081, and Genl. 083. Does not fulfill degree credit requirements.

### **Genl. 013 SELECTED TOPICS FOR Deaf AND HARD OF HEARING STUDENTS II**

3 semester hours

A continuation course of diverse topics designed to develop knowledge key to a successful college experience for Deaf and Hard of Hearing students and to concurrently supplement reading and writing competency development in Genl. 082 and Genl. 085. Topics may include but not be limited to job search techniques, discussion and analysis of current events, creative thinking and problem solving, using interpreters in academic and community settings, and psychosocial aspects of drug abuse. Should be taken concurrently with Genl. 011, Genl. 082, and Genl. 085. Does not fulfill degree credit requirements. **Prerequisites:** Genl. 081 and Genl. 083 or consent of instructor.

### **Genl. 021 STUDY SKILLS**

1 semester hour

Designed to improve study habits, notetaking, test taking skills, and organization of time and academic materials. Offered on a pass/fail basis.

### **Genl. 024 HUMAN SEXUALITY**

1 semester hour

Designed for Deaf and Hard of Hearing students to study the human reproductive system and various facets of sexuality through lecture, discussion, videotapes, and guest speakers.

### **Genl. 030 THE PSYCHOLOGY OF SELF-AWARENESS**

1 semester hour

The assessment of individual traits, abilities, interests, and personality style through small group exercises and testing. The emphasis of the course will be on using increased self knowledge to create effective lifestyle and career plans.

### **Genl. 032 CAREER DIRECTIONS**

1 semester hour

A small group course designed to help students assess their strengths and interests and use this information to develop career goals. Vocational testing, computer assisted guidance programs, and informational interviewing will all be utilized during this course.

### **Genl. 034 EFFECTIVE JOB SEARCH STRATEGIES**

1 semester hour

A highly functional and realistic approach to developing effective skills in conducting a job search campaign with exercises and information designed to cover the critical areas of self-assessment, how to research an industry or company, accessing job listings, resume development, preparing cover letters and applications, interviewing, and follow up. Offered on a pass/fail basis.

### **Genl. 038 JOB SEARCH TECHNIQUES FOR THE HEARING-IMPAIRED**

3 semester hours

A practical approach to assist hearing-impaired job seekers to gain the knowledge and skills necessary to seek out and secure employment. Topics covered include job networking, resume development, cover letters, job interviewing with the use of an interpreter, and the laws that prevent discrimination against individuals with disabilities.

### **Genl. 050 ESL/CONVERSATION AND WRITING**

2 - 24 semester hours

Need-directed work on oral and written skills for English as a Second Language students and other students who require attention in these areas. Vocabulary, pronunciation skills, and grammatical structure are polished. (During their studies at NCCC, students may earn a total of 24 institutional credits in this area, but these credits may not be applied toward graduation.) Offered on a pass/fail basis. Consent of instructor required.

### **Genl. 081 ELEMENTARY GRAMMAR REMEDIATION & DEVELOPMENT**

3 semester hours

An intensive course in English grammar with emphasis placed on simple sentence structure. Students will be introduced to: action, linking and helping verbs; the proper use of verbs in the simple and continuous present; the 8 major parts of speech; subject-verb agreement; consistent use of verb tense; and basic composition. Includes 2 hours/week lab in addition to class time. Open only to students who are Deaf or hard of hearing. Should be taken concurrently with Genl. 010, Genl. 012, and Genl. 083. Does not fulfill degree credit requirement.

## **Genl. 082 ELEMENTARY WRITING REMEDIATION & DEVELOPMENT**

3 semester hours

An intensive course in English writing including a continued in-depth development of competencies introduced in Elementary Grammar Remediation and Development. Students will be introduced to or continue to develop competencies in: simple, continuous and perfect tenses (past, present and future); advanced parts of speech; simple, compound and complex sentence structures; punctuation; avoiding fragments, run-ons, comma splices and misplaced modifiers; parallelism; and writing expanded, unified compositions. Includes 2 hours/week lab in addition to class time. Open only to students who are Deaf or hard of hearing. Should be taken concurrently with Genl. 011, Genl. 013, and Genl. 085. Does not fulfill degree credit requirements. **Prerequisites:** Genl. 081 and Genl. 083 or consent of instructor.

## **Genl. 083 ELEMENTARY READING & VOCABULARY DEVELOPMENT**

3 semester hours

An intensive course for Deaf and Hard of Hearing students designed to rapidly increase English vocabulary and reading comprehension competency. Includes 2 hours/week lab in addition to class time. Should be taken concurrently with Genl. 010, Genl. 012, and Genl. 081. Does not fulfill degree credit requirements.

## **Genl. 084 MATH REMEDIATION**

3 semester hours

A course of selected topics in basic mathematics, and/or consumer mathematics designed to increase student competencies for successful transition into developmental-level mathematics courses. Open only to students who are Deaf and hard of hearing.

## **Genl. 085 INTERMEDIATE READING & VOCABULARY DEVELOPMENT**

3 semester hours

A continuation of Genl. 083: Elementary Reading and Vocabulary Development, this intensive course for Deaf and Hard of Hearing students is designed to rapidly increase English vocabulary and reading comprehension competency. Includes 2 hours/week lab in addition to class time. Should be taken concurrently with Genl. 011, Genl. 013, and Genl. 082. Does not fulfill degree credit requirements. **Prerequisites:** Genl. 081 and Genl. 083 or consent of instructor.

## **Genl. 119 ASSESSMENT OF LIFE EXPERIENCES FOR CREDIT**

1 semester hour

A workshop: a minimum of three class meetings and a series of individual conferences. The identification, classification, and documentation of learning achieved in other than formal classroom settings. Participants prepare summaries, portfolios in which their learning is identified and documented, and for which specific credit requests are defined.

Portfolios are submitted to a faculty committee for evaluation. **Prerequisite:** ENG\* 101. Offered on a pass/fail basis. (Formerly Ind. 119)

## **GEOGRAPHY**

### **GEO\* 101 INTRODUCTION TO GEOGRAPHY**

3 semester hours

Principles, concepts, and methods of modern geography. Focuses on basic patterns of the physical environment and climate and their relationship to human settlement patterns, the interrelationship between place and self. (Formerly Geog. 110)

### **GEO\* 102 INTRODUCTION TO HUMAN GEOGRAPHY**

3 semester hours

Introduction to Human Geography is the study of human activity on the Earth's surface. This interdisciplinary study looks at human population growth and decline, culture, politics, agriculture, economics, and settlement patterns as they apply to different geographic areas around the Globe. This course will expose students to the systematic study of patterns and processes that have shaped human understandings, use, and alterations of the Earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. To learn about the methods and tools geographers use in their science and practice students will complete weekly computer-based and hands-on lab activities. The end result of the course will be for students to become more informed citizens in a globalizing world. **Prerequisite:** ENG\* 063 and ENG\* 073, or ENG\* 093, or eligibility for ENG\* 101.

### **GEO\* 111 WORLD REGIONAL GEOGRAPHY**

3 semester hours

Study of geographic relationships among natural and cultural environments of the world's major culture regions with specific reference to the non-western world. (Formerly Geog. 120)

## **GRAPHIC DESIGN**

### **GRA\* 151 GRAPHIC DESIGN I**

3 semester hours

An introduction to the basic principles and processes of graphic design. Topics include design principles, the creative use of letterforms, the development of graphic concepts, and the technical use of graphic design tools. Projects will proceed from concept to output ready art. Career possibilities in the field are discussed and the Macintosh computer is introduced.

## GRA\* 241 DIGITAL PAGE DESIGN I

3 semester hours

An introduction to electronic publishing techniques. Students learn to combine text and graphics to produce multi-page documents. Projects include newsletters and brochures. Instruction in typographic principle, and page layout software. **Prerequisite:** GRA\* 151 or CSA\* 105. (Formerly GrD 106)

## GRA\* 252 GRAPHIC DESIGN II

3 semester hours

An introduction to the art and design capabilities of the Macintosh computer. Instruction in drawing, image manipulation and page layout software. Students will be gradually introduced to software packages through a series of graphic design problems. **Prerequisite:** GRA\* 151. (Formerly GrD 102)

## GRA\* 253 GRAPHIC DESIGN III

3 semester hours

A further investigation of the creative practical aspects of typography and layout. Studio problems address the effective use of type in visual communication problems. Lectures discuss the vocabulary and history of typography and the basics of color printing. More complex problems of graphic design are discussed including package and book design. **Prerequisite:** GRA\* 252. (Formerly GrD 203)

## GRA\* 254 GRAPHIC DESIGN IV

3 semester hours

An introduction to the art of web design and interactive art for the web. Students learn web and interactive software and basic scripting for the web. Methods of sound recording, web image manipulation, and page navigation are also introduced. **Prerequisites:** All previous GRA\* courses. (Formerly GrD 204)

## GRA\* 291 GRAPHIC DESIGN PORTFOLIO

3 semester hours

An independent study course designed to fit the individual needs of each student. Internships are available. **Prerequisites:** GRA\* 253 and ART\* 243 or ART\* 272.

## HEALTH CAREERS

---

### HLT\* 103 INVESTIGATIONS IN HEALTH CAREERS

3 semester hours

This course is designed to assist traditional and non traditional college students to meet the expectations of a curriculum and a career in health related fields. The student will become familiar with the rigors of an educational program designed for health careers and the specific skills needed to maximize the student's opportunity for academic and clinical success. The student will have the opportunity to observe various health care career opportunities and how these professions function in the health care arena. The course will include a comprehensive overview of the duties

and responsibilities associated with clinical competency. Interdisciplinary learning strategies, correlating clinical and didactic education, life management skills, work ethics, and critical thinking skills necessary for all health providers will be emphasized.

## HEALTH & PHYSICAL EDUCATION

---

### HPE\* 101 through 300 PHYSICAL ACTIVITIES

1 semester hour (2 class hours)

Group instruction and practical experiences in basic lifetime skills. Students may choose from among several offerings, depending on prior skills and interests, ranging from individual fitness courses to organized group to competitive activities. Offerings may vary from semester to semester but a variety of experiences and possible times are offered in an attempt to meet the needs of all students. Examples of offerings may include aerobics, skiing, hiking, backpacking, dance, volleyball, weight training, Nautilus, swimming, rock climbing, indoor climbing, paddleball, yoga, canoeing, and others. Certain activities may entail an additional expense, which the student must pay, for the rental equipment. Fitness courses offered through the YMCA begin one week after classes begin and end one week prior to the start of exams. Students must attend an orientation for their class during that second week. In order to obtain the desired benefit from engaging in fitness activities offered through the YMCA, it is expected that students will attend 3 times each week for their workout. Attendance for 2 sessions each week is a minimum to expect benefit from physical fitness programs. Any student failing to attend a minimum of 18 sessions during the semester will not be allowed a passing grade. Grading policies for courses not offered through the YMCA will be determined for each course by the instructor. Grades will be issued on a pass/fail basis for all HPE\* courses unless written request for letter grade is submitted to the Physical Education Coordinator during the first week of class.

## HISTORY

---

### HIS\* 101 WESTERN CIVILIZATION I

3 semester hours

A survey of ancient societies from classical Greece and Rome through Medieval Europe. Emphasis will be placed on the formation of ancient civilizations and the development of religious thought and institutions (to 1300). **Prerequisite:** ENG\* 073 with a "C-" or better or satisfactory score on the reading placement test. (Formerly Hist. 101)

### HIS\* 102 WESTERN CIVILIZATION II

3 semester hours

A survey of Western history from the Renaissance ca. 1300 through the 20th Century. Emphasis will be placed on the development of modern ideas and institutions. **Prerequisite:**

ENG\* 073 with a “C-“ or better or satisfactory score on the reading placement test.

### **HIS\* 201 U.S. HISTORY I**

3 semester hours

A survey of American history from the Colonial Era through the Civil War. Emphasis will be placed on the underlying trends and movements that helped to forge a nation and then threaten to tear it apart. **Prerequisites:** ENG\* 063 & 073 with a “C-” or better or ENG\* 101 (may be taken concurrently) or consent of instructor. (Formerly Hist. 201)

### **HIS\* 202 U.S. HISTORY II**

3 semester hours

A survey of American history from the Civil War through World War II. Emphasis will be placed on the nation’s internal development and its growth as a world power. **Prerequisite:** ENG\* 063 & 073 with a “C-” or better or Eng 101 (may be taken concurrently) or consent of instructor. (Formerly Hist. 202)

### **HIS\* 213 THE U.S. SINCE WORLD WAR II**

3 semester hours

A survey of American history from World War II through contemporary times. Emphasis will be placed on foreign policy as well as major political, economic, and social trends. **Prerequisite:** ENG\* 063 & 073 with a “C-” or better or ENG\* 101 (may be taken concurrently) or consent of instructor. (Formerly Hist. 203)

### **HIS\* 226 THE U.S. CIVIL WAR**

3 semester hours

A survey of American history from the antebellum period through the Civil War and Reconstruction periods. Students will analyze the historical antecedents that led the United States into sectional conflict, and they will investigate the lasting effects of the Civil War on American society. **Prerequisite:** ENG\* 063 & 073 with a “C-” or better or ENG\* 101 (may be taken concurrently) or consent of instructor. (Formerly Hist. 226)

### **HIS\* 242 MODERN IRELAND**

3 semester hours

A survey of Irish history from the ancient world through the 20th Century. Students will analyze the historical background of critical events in Irish history. Topics for discussion will include the role of nationalism in Irish history and the relationship between Ireland and the United Kingdom. **Prerequisite:** ENG\* 063 & 073 with a “C-” or better or ENG\* 101 (may be taken concurrently) or consent of instructor. (Formerly Hist. 265)

### **HIS\* 299 INDEPENDENT STUDY IN HISTORY**

1, 2 or 3 semester hours

Provides students with opportunities to apply their understanding of basic social science methodology in advanced and independent study/research projects. The specific

objectives, procedures, and credit hours are established by the student in written form and approved in writing by the faculty member with whom the student will work before the execution of the intended project. A student may repeat the course but the total credits may not exceed six. **Prerequisites:** previous course work in history and consent of instructor. (Formerly Hist. 230)

## **HUMAN SERVICES**

### **HSE\* 101 INTRODUCTION TO HUMAN SERVICES**

3 semester hours

The nature and implications of human services. Consideration of mental health; welfare; probation and school services; and public and private social services. (Formerly HS 110)

### **HSE\* 202 INTRODUCTION TO COUNSELING / INTERVIEWING**

3 semester hours

An introduction to the basic components of the helping relationship, exploring the unique qualities of therapeutic relationships and elements which tend to interfere with the therapeutic process. An opportunity to develop and practice skills necessary in the therapeutic interview. **Prerequisites:** PSY\* 111, HSE\* 101, or RLS\* 101. (Formerly HS 114)

### **HSE\* 203 THEORIES OF COUNSELING**

3 semester hours

Introduction to counseling theories and techniques as used in a variety of settings. The class works together as a therapeutic group and practices skills that are covered in the readings, lectures, films, and discussions. **Prerequisites:** HSE\* 202 and PSY\* 245. (Formerly HS 250)

### **HSE\* 235 PROFESSIONAL & ETHICAL ISSUES IN HUMAN SERVICES**

3 semester hours

An in-depth study of current professional issues including ethical, legal, and moral standards. The student will apply decision making skills and critical analysis to professional situations where standards conflict. Topics include: confidentiality, duty to warn, client rights, dual relationships, competence, multicultural issues, sanity, malpractice, and expert testimony. (Formerly HS 230)

### **HSE\* 281 HUMAN SERVICES FIELD WORK I**

3 semester hours

Work experience in a private or public agency under the supervision of the staff of the agency and of the College. Employment for a minimum of 120 hours is required. Weekly seminars to review work experiences and discuss problems and procedures. **Prerequisite:** HSE\* 203. (Formerly HS

## HSE\* 282 HUMAN SERVICES FIELD WORK II

3 semester hours

Work experience in a private or public agency under the supervision of the staff of the agency and of the College. Employment for a minimum of 8 hours per week for 15 weeks is required. Weekly seminars to review work experiences and discuss problems and procedures. **Prerequisite:** HSE\* 281. (Formerly HS 280)

## HUMANITIES

### HUM\* 250 CROSS-CULTURAL EXPERIENCE

3 semester hours

This is a 3 credit service-learning course which takes place primarily in a foreign country (typically the Dominican Republic or Mexico). Students study beforehand an overview of the history of the country and the social issues confronting the population we will be working with. Cross-Cultural communication is emphasized and explored. Under the leadership of faculty, students develop projects to present to school students and adult learners in the service-learning site. Working in groups of 3-4, students may develop projects in the following areas: creative experiences; music and movement; science and math. A daily journal, self-evaluation, final report and presentation are required. **Prerequisite/Corequisite:** Students should be able to communicate using basic or more advanced Spanish.

## INTERPRETING: ASL/ENGLISH

### INT\* 103 PRE-INTERPRETING SKILLS

3 semester hours

This course is designed to establish the requisite skills essential to subsequent interpreter preparation. Before students can be introduced to the models of interpreting, they must first learn how to analyze and understand incoming source messages. This foundational course will teach various techniques to effectively process information for meaning. **Prerequisite:** ASL\* 102. **Corequisite:** ASL\* 201.

### INT\* 112 CONSECUTIVE INTERPRETING

3 semester hours

Students are introduced to the technique of consecutive interpreting as a skill development tool for increasing discourse analysis, visualization, and message equivalence and as a practice form for simultaneous interpreting. Students will expressively and receptively interpret from both recorded texts and live speakers in a consecutive format. **Prerequisites:** INT\* 103, ASL\* 205, INT\* 121.

### INT\* 121 PROFESSIONAL STANDARDS IN INTERPRETING

3 semester hours

An introduction to the field of interpreting, including an overview of the general socio-cultural systems and socio-

political aspects involved, as well as professional ethics and standards for interpreting. **Corequisite:** ASL\* 201.

### INT\* 132 ARTISTIC INTERPRETING

3 semester hours

A survey of forms and techniques used to enhance the use of sign language when interpreting in the performing arts and as an art form itself. **Prerequisite:** INT\* 103.

### INT\* 134 EDUCATIONAL INTERPRETING

3 semester hours

This course surveys the field of interpreting in the educational setting. It focuses on an analysis of the educational environment's impact on the Deaf and Hard of Hearing student and the myriad roles of an interpreter in this setting. Included are discussions on the application of federal and local regulations and the Registry of Interpreters for the Deaf (RID) Code of Ethics. **Prerequisites:** ASL\* 201, INT\* 121.

### INT\* 212 SIMULTANEOUS INTERPRETING

4 semester hours (3 hours classroom and 2 hours lab/observation)

Students are introduced to English-to-ASL and ASL-to-English interpreting in the simultaneous mode. This course will develop the interpreting skills needed to process a continuous message from the Source Language to the Target Language. Team interpreting is introduced and practiced. Additional strategies for providing peer feedback are developed and refined. Lab hours will provide intense experiential opportunities to practice and hone skills introduced in class. Occasionally lab hours will be satisfied at off-site locations. **Prerequisite:** INT\* 112.

### INT\* 214 ADVANCED INTERPRETING: SIGN-TO-VOICE

3 semester hours

Designed to enhance voicing skills developed in the simultaneous and consecutive interpreting classrooms. Skill building will include team interpreting for formal/lecture type settings. **Prerequisite:** INT\* 212.

### INT\* 216 TRANSLITERATION: ENGLISH-TO-ENGLISH

3 semester hours

Many Deaf and Hard of Hearing consumers prefer messages conveyed using an English language structure. This course is designed to take expressive and receptive interpreting skills developed in previous courses and assist students in producing or receiving messages in signed English. **Prerequisite:** INT\* 212.

### INT\* 230 INTERPRETING WITH SPECIALIZED POPULATIONS

3 semester hours

This course is designed to identify and develop the specific skills and knowledge necessary to interpret with individuals

of special populations such as persons who are Deaf-blind, aural-oral, or who have minimal language skills/competencies. **Prerequisite:** INT\* 212.

### INT\* 231 INTRODUCTION TO INTERPRETING IN HEALTH CARE SITUATIONS

3 semester hours

A survey of the field of interpreting in various health care settings. The focus will be interpreting communication interactions that may occur in hospitals, doctor's offices, and other medical facilities. Also included will be mental health interpreting and interpreting in substance abuse/recovery settings. **Prerequisite:** INT\* 103. **Corequisite:** INT\* 112.

### INT\* 240 PRACTICUM IN INTERPRETING

3 semester hours

Student will complete at least one hundred (100) hours of practical work experience in supervised settings. All practicum opportunities obtained by the student must receive prior approval by instructor. Periodic written reports and site evaluations will be provided to the instructor. **Prerequisites:** INT\* 212, 231. **Corequisites:** INT\* 214, 216, 230, 241 and consent of instructor.

### INT\* 241 SEMINAR

3 semester hours

This course will provide an open forum for discussing questions and concerns arising from the student's observation of interpreted situations and individual practicum experiences. In addition students will prepare for securing professional positions upon graduation and establish professional development goals for achieving national interpreter certification. Program experience portfolio presentation will be required at the end of the semester. **Required corequisite:** INT\* 240.

## MANUFACTURING

### MFG\* 101 FUNDAMENTALS OF MANUFACTURING

3 Semester Hours

The course provides knowledge of the basic physical principles applied in modern manufacturing equipment. This survey-type course introduces mechanical, electrical and fluid power principles, providing a basic understanding of operation of mechanical, electromechanical and fluid power subsystems and devices found in manufacturing.

## MATHEMATICS

### MAT\* 075 PREALGEBRA: NUMBER SENSE, GEOMETRY

3 semester hours

Computational, problem solving, and analytical reasoning skills with an emphasis on step-by-step procedure. Topics covered: whole numbers, fractions, decimals, ratio and proportion, percent, measurement, calculator use, negative numbers, and an introduction to Algebra. Credit does not count toward graduation.

### MAT\* 095 ELEMENTARY ALGEBRA FOUNDATIONS

3 semester hours

Negative numbers, simplifying algebraic expressions, linear equations and inequalities, graphing, systems of linear equations, polynomials and rational expressions, equations involving fractions (incl. algebraic fractions), exponents (incl. scientific notation), radicals, quadratic equations, and applications. Credit does not count toward graduation.

**Prerequisite:** a grade of "C-" or better in MAT\* 075 or a satisfactory score on the mathematics placement test.

### MAT\* 135 TOPICS IN CONTEMPORARY MATH

3 semester hours

This course is a college-level practical Math course providing a survey of a wide variety of Math topics (problem solving, set theory, logic, algebra, geometry, consumer Math, probability, and statistics). It counts as a Mathematics Elective in all degree programs. In addition, it is an excellent course to prepare students for MAT\* 167 (Statistics with Technology) (suggested for Liberal Arts majors). Also, for those students with a grade in the "C" range in MAT\* 095 (Elementary Algebra Foundations), MAT\* 135 can provide a successful alternative pathway prior to taking MAT\* 137 (Intermediate Algebra) – for those students who ultimately need to take Intermediate Algebra. **Prerequisite:** A grade of "C-" or better in MAT\* 095 or a satisfactory score on the mathematics placement test.

### MAT\* 137 INTERMEDIATE ALGEBRA

3 semester hours

This course is an extremely rigorous course in traditional Intermediate Algebra intended only for Math, Science, Engineering, Nursing, Teacher Preparation, and Business majors or for those students whose future coursework includes algebra-based courses such as upper-level Chemistry or Calculus. It has a minimal review of Elementary Algebra Foundations. Those needing a more extensive review of Elementary Algebra Foundations (due to a period of time elapsing since completing that course) should retake MAT\* 095 (Elementary Algebra Foundations). Those needing a more general Math course, or additional Math preparation after completing Elementary Algebra Foundations – prior to taking Intermediate Algebra (e.g. For those with a grade in the "C" range in MAT\* 095), should consider MAT\* 135(Topics in contemporary math).

Topics include: polynomial and rational expressions, exponents and radicals, complex numbers, linear, quadratic, literal, absolute value, and radical equations, systems of linear equations, linear and absolute value inequalities, graphing linear and quadratic functions, functional notation, exponential and logarithmic functions, binomial theorem, and applications.

This course counts as a Math elective toward graduation (but does not transfer as a Math course to most 4-year colleges). **Prerequisite:** A grade of "C-" or better in MAT\* 095 ("B-" or better strongly recommended) or a satisfactory score on the mathematics placement test.

### **MAT\* 167 PRINCIPLES OF STATISTICS**

3 semester hours

Basic concepts used in collecting, presenting, and analyzing data; descriptive statistics, probability, distributions, sampling theory, statistical inference to include hypothesis testing, regression, and correlation. The use of the micro-computer for data analysis is an integral part of the course. **Prerequisite:** MAT\* 135, 137 or equivalent.

### **MAT\* 186 PRECALCULUS**

4 semester hours

An exploration of functions and their graphs. Linear, quadratic, polynomial, piecewise, absolute value, greatest integer, rational, exponential, logarithmic, and trigonometric functions and their behaviors in a two-dimensional graphing system will be covered as well as conic sections and applications. Use of the graphing calculator or appropriate computer software is an integral part of the experience. **Prerequisite:** MAT\* 137.

### **MAT\* 254 CALCULUS I**

4 semester hours

Plane analytic geometry, functions, limits, continuity, derivatives, differentiation of algebraic functions, applications of the derivative, antidifferentiation, the definite integral, and an introduction to transcendental functions. **Prerequisite:** MAT\* 186 or equivalent.

### **MAT\* 256 CALCULUS II**

4 semester hours

Differentiation and integration of trigonometric, exponential, and inverse functions, parametric equations, methods of integration and applications of the definite integral, hyperbolic functions, infinite series. **Prerequisite:** MAT\* 254 or equivalent or consent of instructor.

## **MEDICAL ASSISTING**

### **MED\* 111 ADMINISTRATIVE MEDICAL ASSISTING**

3 semester hours

The theory, practice, and techniques of fundamental medical office management are presented. An overview of the profession of medical assisting and its role in providing quality health care are examined. Administrative functions, including office responsibilities, medical records, management, medical business correspondence, computer applications and professional communications for the Medical Assistant will be emphasized. (Formerly MA 101)

### **MED\* 113 HEALTHCARE INSURANCE**

2 semester hours

This course presents an overview of healthcare insurance. Course material and discussions will focus on the different types of insurance and various health care plans including government plans, private plans and managed care. There is a focus on federal and state health insurance regulations.

### **MED\* 115 MEDICAL CODING**

2 semester hours

This course will present the theory and practice of fundamental medical billing, collections and insurance processing procedures. The roles of third-party billing and guidelines in health care business practice will be stressed. This is a hands-on coding and billing course requiring basic computer skills. **Prerequisites:** MED\* 113 and MED\* 125.

### **MED\* 125 MEDICAL TERMINOLOGY**

3 semester hours

The basic structure, spelling, definition, and pronunciation of medical and pathological terms including all organ systems, diseases and diagnosis, and frequently used medical abbreviations. (Formerly MA 105)

### **MED\* 133 CLINICAL MEDICAL ASSISTING**

3 semester hours

This course presents the theory and practice of clinical skills used by the medical assistant in a medical office. The course focuses on practices commonly performed in assisting with clinical procedures, developing communication skills between healthcare professionals and patients, and providing patient education and instruction. Topics include clinical asepsis and infection control, physical examinations, vital signs and measurements, assisting with minor surgery, nutrition education, rehabilitative medicine and specialty examinations. (Formerly MA 102)

### **MED\* 216 ELECTRONIC MEDICAL RECORDS MANAGEMENT**

3 semester hours

This course provides the student with the opportunity to put administrative skills learned in previous coursework into practice in a simulated medical setting using electronic health care records (EHR) and performing electronic office management. The course provides experience with actual office practice duties including payments, claims, patient entries, patient billing statements, production of health care claims and management of electronic health care records. **Pre-requisites:** MED\* 111, MED\* 125, CSA\* 105 **Co-requisites:** MED\* 113, MED\* 115, MED\* 133, MED\* 245

### **MED\* 245 CLINICAL LABORATORY PROCEDURES**

4 semester hours

This course provides an introduction to clinical laboratory procedures and equipment. A study of basic diagnostic ambulatory tests for patient examination, evaluation and treatment are studied. Students will perform phlebotomy and capillary blood collection methods. Students will obtain the necessary skills to perform various diagnostic tests performed in ambulatory facilities including hematology and blood chemistry tests, routine urinalysis, and electrocardiograms. Students are required to purchase a lab coat to be worn in class. A physical examination and proof of immunization is also required. (Formerly MA 202)

### MED\* 250 PRINCIPLES OF PHARMACOLOGY

3 semester hours

An examination of the more commonly prescribed medications as they relate to specific body systems. Topics include practices governing the use, dispensing, administration and storage of pharmaceuticals. Terminology relating to drugs and the administration of drugs is emphasized. **Prerequisite:** MED\* 125. (Formerly MA 205)

### MED\* 281 MEDICAL ASSISTING EXTERNSHIP

4 semester hours

Preparation and work experience in an ambulatory medical setting under the supervision of the facility staff and College instructor. Students complete 10 hours of simulated training on campus in preparation for a 160 hour experience at an assigned site. The 160 hours is divided equally between the administrative and clinical areas to permit the student to be involved in the total environment of the medical facility. The experience allows the student to apply knowledge from the classroom and college medical laboratory environment to the ambulatory healthcare environment. **Prerequisites:** approval by the medical assisting program coordinator; completion of all medical assisting – MED\* designated courses. Students must have current CPR and first aid certification during the entire externship experience. Certifications may be obtained through RLS\* 201. (Formerly MA 280)

### MED\* 285 EXTERNSHIP FOR HOSPITAL PATIENT CARE TECHNICIAN

3 semester hours

This is a 100 hour externship for students enrolled in the Hospital Patient Care Technician program. Students will be placed at a participating hospital for clinical rotations through various departments. The course provides the student with the opportunity to perfect those competencies learned in the classroom/laboratory setting. **Prerequisites:** current Connecticut certified nurse's assistant credential (CNA), current CPR certification, successful completion of MED\* 125, MED\* 133, and MED\* 245.

## MODERN LANGUAGES

### GER\* 101 & 102 ELEMENTARY GERMAN I & II

3 semester hours

This course is designed to provide a basic foundation of the German language. Emphasis will be placed on vocabulary, sentence structure and grammar. Besides language, we will also periodically investigate German culture and history and its connection to language development. **Prerequisite** for GER\* 102: GER\* 101.

### SPA\* 101 & SPA\* 102 ELEMENTARY SPANISH I & II

3 - 3 semester hours

Designed to give beginning students early and successful experiences with reading, speaking, and writing Spanish. May be taken for credit or as an audit. **Prerequisite:** for SPA\* 102: SPA\* 101. (Formerly Span. 101 and Span. 102)

### SPA\* 120 BASIC SPANISH FOR HEALTH PROFESSIONALS

1 semester hour

This is a one-credit course. This course will provide the student with an opportunity to enhance healthcare communication skills for persons working with a Spanish-speaking clientele. Basic words and phrases needed to greet, refer to body parts, interview, and give instructions will be presented. (Formerly AH 150)

### SPA\* 201 & SPA\* 202 INTERMEDIATE SPANISH I & II

3 - 3 semester hours

Continued practice with reading, speaking, and writing Spanish. May be taken for credit or as an audit. (Formerly Span. 201 and Span. 202)

## MUSIC

### MUS\* 101 MUSIC HIS & APPRECIATION I

3 semester hours

Appreciation of music from the Middle Ages to the present. Lectures, recordings, and outside listening assignments. Previous training not required. A field trip may be required. (Formerly Mus. 101)

### MUS\* 103 HISTORY OF AMERICAN MUSIC

3 semester hours

A survey of America's musical heritage and the awakening acceptance of American music on its own terms. Some required concert attendance. **Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 105)

### MUS\* 106 AMERICAN POPULAR SONG

3 semester hours

A celebration of American popular music coinciding with the advent of the phonograph and the radio. Includes Broadway show tunes, jazz, pop music, and rock. Concert attendance may be required. **Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 119)

### MUS\* 123 MUSIC OF THE BAROQUE ERA

3 semester hours

Concentrating on the miracle of 1685, Bach, Handel, Scarlatti, and their contemporaries. Concert attendance may be required. **Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 111)

### MUS\* 124 MUSIC OF THE CLASSICAL PERIOD

3 semester hours

Survey of the music of the classical period: 1750 - 1825, including the full flowering of Haydn, Mozart, and their contemporaries. Concert attendance may be required.

**Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 125)

### MUS\* 125 MUSIC OF THE ROMANTIC ERA

3 semester hours

Traces the music of the geniuses and the turbulent times in 19th Century Europe from the mature Beethoven to the Nationalists. Examines art music from the solo song and piano miniature to the choral symphony and grand opera. Concert attendance may be required.

**Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 113)

### MUS\* 126 20TH CENTURY/MODERN MUSIC

3 semester hours

Considers a wide variety of 20th century musical idioms. Composers covered include Stravinsky, Bartok, Gershwin, DeBussy, Prokofiev, Williams, Britten, Menotti, Bernstein, and the American School. Concert attendance may be required. **Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus.)

### MUS\* 132 MUSIC OF THE OPERA

3 semester hours

Reviews the origins of modern opera and studies the significant major operatic works in the repertoire. Concert attendance may be required. **Prerequisite:** ENG\* 063, ENG\* 073 or eligibility for ENG\* 093, ENG\* 101 or consent of the instructor. (Formerly Mus. 118)

## PHILOSOPHY

### PHL\* 101 INTRODUCTION TO PHILOSOPHY

3 semester hours

An examination of basic philosophical problems: the nature of God, religion, morality, justice, knowledge, freedom, mind, and reality. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Phil. 100)

### PHL\* 111 ETHICS

3 semester hours

A critical examination of different ethical theories and discussion of significant contemporary issues such as abortion, nuclear war, suicide, capital punishment, euthanasia, sexual ethics, and aid for the needy. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Phil. 110)

### PHL\* 112 MEDICAL ETHICS AND LAW

3 semester hours

This course is an in-depth study of the ethical and bioethical issues influencing professional healthcare practice. Critical analyses of ethical principles and the relationship seen in current professional ethical issues will be developed. The student will investigate current laws governing professional healthcare providers' and health care workers' actions. (Formerly MED\*170)

### PHL\* 116 BUSINESS & PROFESSIONAL ETHICS

3 semester hours

A case-based application of ethical theories to issues in the world of business. Examines both personal and corporate responsibilities in the context of justice and the good life. Rational philosophical analysis emphasized in class discussion and writing assignments. **Prerequisite:** ENG\* 101.

### PHL\* 131 LOGIC

3 semester hours

An introduction to philosophy concerned with the nature of deductive and inductive reasoning and the relationship between language and thought. Class exercises include practice in analyzing and diagramming arguments, identifying logical fallacies, and determining whether arguments are valid or invalid. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Phil. 120)

### PHL\* 151 WORLD RELIGIONS

3 semester hours

It has been suggested that religions differ not because they give different answers to basic questions, but because they do not agree on which questions are basic. During this course we will consider the religious systems of ancient Egypt and Greece as well as Zoroastrianism, Judaism, Christianity, Islam, and the great Eastern religious systems. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Phil. 116)

### PHL\* 178 MODERN PHILOSOPHY

3 semester hours

This course will look at the progress of modern philosophical thinking, its modifications and various rejections of long standing premises. It will include references to the feminine as well as an acknowledgement of the various views that represent modern thought and how it is manifested in aspects of today's living. **Prerequisite/Corequisite:** ENG\* 063 and ENG\* 073 or satisfactory score on placement tests and PHL\* 101 or PHL\* 111.

# PHYSICAL THERAPIST ASSISTANT

## PTA\* 120 INTRODUCTION TO PHYSICAL THERAPY 3 semester hours

Learning opportunities in this course assist the student to recognize the roles of physical therapy within various practice settings. Students differentiate functions of physical therapists and physical therapist assistants as members of the healthcare team through study of documentation principles, ethics, laws and organizations important to the provision of services. Learning also includes development of knowledge and abilities within the domains of conduct, communication and sensitivity to individual and cultural differences. **Prerequisite:** admission to the PTA Program.

## PTA\* 125 PHYSICAL THERAPY FOR FUNCTION 4 semester hours

(lecture: 45 contact hrs, lab: 45 contact hrs)  
This course provides the student with introductory concepts and techniques for effective patient teaching and physical therapy intervention for function and mobility. Emphasis is placed on competence in problem-solving and the physical therapist assistant's role in modification of physical therapy interventions. **Prerequisite:** admission to the PTA Program.

## PTA\* 220 INTRODUCTION TO THE PHYSICAL THERAPY CLINIC

1 semester hour (clinic: 30 contact hrs during summer term)  
This course provides an orientation to the physical therapy clinic and the provision of physical therapy interventions. Students develop communication, intervention, and problem-solving techniques within the physical therapy clinic. **Prerequisites:** PTA\* 120 and PTA\* 125 with a grade of "C" or higher.

## PTA\* 230 PHYSICAL AGENTS IN PHYSICAL THERAPY 4 semester hours (lecture:45 contact hrs, lab: 45 contact hrs)

This course develops the student's competence with problem solving and application of physical therapy interventions using physical agents, including therapeutic applications of heat, cold, water, electricity, light and mechanical forces or devices. **Prerequisites:** PTA\* 120 and PTA\* 125 with a grade of "C" or higher, PTA\* 220 with a grade of "P".

## PTA\* 235 KINESIOLOGY FOR REHABILITATION 4 semester hours (lecture: 45 contact hrs, lab/clinic: 45 contact hrs)

This course fosters learning of the anatomical and biomechanical principles of human movement through the study of the musculoskeletal and nervous systems. Competencies attained include accurate data collection by goniometry, manual muscle testing, posture and gait analysis including the effects of biomechanical forces on the human body. **Prerequisites:** PTA\* 120 and PTA\* 125 with a grade of "C" or higher, PTA\* 220 with a grade of "P".

## PTA\* 250 THERAPEUTIC EXERCISE

5 semester hours (lecture: 45 contact hrs, lab/clinic: 90 contact hrs)

Learning includes the theory and techniques to safely and effectively implement therapeutic exercise interventions based on a plan of care established by a physical therapist. Students also develop competence to measure a patient's response to interventions and respond accordingly and to provide effective instruction to patients and caregivers.

**Prerequisites:** PTA\* 230 and PTA\* 235 with a grade of "C" or higher.

## PTA\* 253 PATHOPHYSIOLOGY FOR REHABILITATION

3 semester hours(lecture: 45 contact hrs)

This course develops comprehension about abnormalities and the physical, physiological and psychological changes that occur throughout the human lifespan. The student learns the effects of pathology on the rehabilitation of patients with orthopedic, neurological, and general medical conditions. **Prerequisites:** PTA\* 230 and PTA\* 235 with a grade of "C" or higher.

## PTA\* 258 PTA IN THE HEALTHCARE ARENA

2 semester hours(lecture: 15 contact hrs, clinic: 40 contact hrs) This course develops the student's ability to apply physical therapy interventions and data collection techniques within the clinic environment and advances the student's abilities with communication, conduct and problem-solving within the structure of the healthcare system. **Prerequisites:** PTA\* 230 and PTA\* 235 with a grade of "C" or higher.

## PTA\* 260 PHYSICAL THERAPY SEMINAR

2 semester hours (lecture: 30 contact hrs)

In this course students demonstrate the ability to apply principles of problem solving to selected professional issues, industry trends, and special populations that may be encountered as a physical therapist assistant. Learning opportunities assist in the transition from student to clinician and identification of interest areas for lifelong learning.

**Prerequisites:** PTA\* 250, PTA\* 253 and PTA\* 258 with a grade of "C" or higher.

## PTA\* 262 PTA INTERNSHIP II

5 semester hours (clinic: 280 contact hrs)

Within this clinic-based course students learn to integrate and apply physical therapy concepts and to effectively perform physical therapy interventions as a physical therapist assistant. Students develop their abilities for daily organization and management of a patient caseload and effectively contribute to the healthcare team. **Prerequisites:** PTA\* 250, PTA\* 253 and PTA\* 258 with a grade of "C" or higher.

## PTA\* 265 PTA INTERNSHIP III

5 semester hours (clinic: 280 contact hrs)

Within this clinic-based course students learn to problem-solve and competently function in the clinic environment as

a physical therapist assistant. Students develop competence with time management, clinical prioritization and the entry-level abilities of the physical therapist assistant prior to course completion. **Prerequisites:** PTA\* 250, PTA\* 253 and PTA\* 258 with a grade of “C” or higher.

## PHYSICS & PHYSICAL SCIENCE

---

### PHY\* 110 INTRODUCTORY PHYSICS

4 semester hours (3 class hours/2 laboratory hours)  
An introductory physics course for the non-science major or individuals who may lack sufficient preparation for science and engineering courses. Principles and applied problems in kinematics, dynamics statics, energy, waves, fluids, thermodynamics, electricity, magnetism, and optics. Not open to students who have completed PHY\* 221, 222. **Prerequisite:** MAT\* 137. (Formerly Phys. 101)

### PHY\* 121 GENERAL PHYSICS I

4 semester hours (3 class hours/3 laboratory hours)  
A traditional algebra and trigonometry based college physics course for the non-science major or the science major who may lack sufficient mathematical preparation for engineering physics. Subject areas include fundamental concepts and mathematical exposition, applied problems in kinematics, dynamics, statics, energy, heat and thermodynamics, and phases of matter. The use of computers, analysis software, computer interfaces and sensors will be an integral part of this course. **Prerequisite:** MAT\* 186, satisfactory completion of high school general physics or PHY\* 110. (Formerly Phys. 121)

### PHY\* 122 GENERAL PHYSICS II

4 semester hours (3 class hours/3 laboratory hours)  
This is the second course in the college Physics sequence. Subject areas include fundamental concepts and mathematical exposition, applied problems in electricity, magnetism waves, optics, sound, light and as time permits, introduction to modern physics in the area of nuclear and atomic physics, special and general relativity. The use of computers, analysis software, computer interfaces and sensors will be an integral part of this course. **Prerequisite:** PHY\* 121. (Formerly Phys. 122)

### PHY\* 221 CALCULUS-BASED PHYSICS I

4 semester hours (3 class hours/3 laboratory hours)  
A traditional Calculus based college physics course for the science major or engineering major. Subject areas include applied mathematical processes and problems in kinematics, dynamics, statics, energy, heat and thermodynamics, and phases of matter. The use of computers, analysis software, computer interfaces and sensors will be an integral part of this course. **Prerequisite:** satisfactory completion of a high school general physics course or PHY\* 110 and MAT\* 254. (Formerly Phys. 221)

### PHY\* 222 CALCULUS-BASED PHYSICS II

4 semester hours (3 class hours/3 laboratory hours)  
This is the second course in the Engineering Physics sequence. Subject areas include applied problems in electricity, magnetism, waves, optics, sound, light and as time permits, introduction to modern physics in the area of nuclear and atomic physics, special and general relativity. The use of computers, analysis software, computer interfaces and sensors will be an integral part of this course. **Prerequisite:** satisfactory completion of PHY\* 221 or equivalent. (Formerly Phys. 222)

## POLITICAL SCIENCE

---

### POL\* 111 AMERICAN GOVERNMENT

3 semester hours  
The structure, functions, services, and problems of the federal government together with factors influencing political action. Application of the principles of government in today's issues. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Pol. Sci. 215)

### POL\* 122 THE POLITICS OF SOCIAL WELFARE

3 semester hours  
The basic concepts of social welfare and its social, economic, and political roots. Analysis of welfare decision making and services. The basic practices and procedures of U.S. and State of Connecticut social welfare programs. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Pol. Sci. 122)

### POL\* 216 COMPARATIVE IDEOLOGIES

3 semester hours  
Comparative study of modern political ideology: survey of Western and Eastern (Islam) political thought and theory with emphasis on the development of the nation-state. **Prerequisite:** HIS\* 102. (Formerly Pol. Sci. 216)

### POL\* 295 POLITICAL SCIENCE INTERNSHIP

3 semester hours  
A supervised work-study program to provide the student with experience in the Connecticut State Legislature. By application only. Consult department chairperson, Social Sciences. (Formerly Pol. Sci. 270)

### POL\* 299 INDEPENDENT STUDY IN POLITICAL SCIENCE

1, 2 or 3 semester hours  
Provides students with opportunities to apply their understanding of basic social methodology in advanced and independent study/research projects. The specific objectives, procedures, and credit hours are established by the student in written form and approved in writing by the faculty member with whom the student will work before the execution of the intended project. A student may repeat the course but the total credits may not exceed six. **Prerequisite:**

sites: previous course work in political science and consent of instructor. (Formerly Pol. Sci. 230)

## PSYCHOLOGY

### PSY\* 104 PSYCHOLOGY OF ADJUSTMENT

3 semester hours

Designed to expand the student's awareness of self and others, and to allow exploration of choices which are available in significant areas of life such as love, sexuality, identity, alienation, and goals. (Formerly Psy. 205 Psychology of Adjustment And Personal Growth)

### PSY\* 111 GENERAL PSYCHOLOGY I

3 semester hours

A study of human behavior and mental processes through the investigation of such topics as biological roots, human development, memory, psychological research, learning, social psychology. This course is a prerequisite for most psychology courses. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Psy. 101)

### PSY\* 112 GENERAL PSYCHOLOGY II

3 semester hours

A study of human behavior and mental processes through the investigation of such topics as sensation, perception, states of consciousness, motivation, emotion, personality, psychological disorders, therapy. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Psy. 102)

### PSY\* 141 SUBSTANCE ABUSE ISSUES

3 semester hours

In this course students will examine specific biological, psychological, and social aspects of substance abuse/dependence and its impact on the individual, family, and society. Students will be able to understand theoretical frameworks and identify effective recovery approaches and prevention strategies. Course presentation will include speakers, videos, and experiential workbook activities. This course fulfills psychology and liberal arts electives. **NOTE:** This course does not satisfy elective credit for the DAR\* program. (Formerly Psy. 141)

### PSY\* 201 LIFE SPAN DEVELOPMENT

3 semester hours

This course will examine physical, social-emotional and cognitive development from conception through old age. Particular emphasis will be placed on research and methodology of the developmental perspective.

**Prerequisite:** PSY\* 111.

### PSY\* 204 CHILD AND ADOLESCENT DEVELOPMENT

3 semester hours

The development of behavior from conception to adulthood. Patterns of growth, development of skills, intelligence, and personality. **Prerequisite:** PSY\* 111. (Formerly Psy. 211)

### PSY\* 208 PSYCHOLOGY OF ADULT DEVELOPMENT & AGING

3 semester hours

The development of the individual from young adult to old age. Patterns of physical, psychological, and social development. **Prerequisite:** PSY\* 111 or consent of instructor. (Formerly Psy. 212)

### PSY\* 210 DEATH & DYING

3 semester hours

An opportunity to become more comfortable with the concepts of death. Includes discussion of personal experiences, a review of books and articles, class presentations, films, tapes, and possible guest speakers or field trips. (Formerly Psy. 109)

### PSY\* 211 PSYCHOLOGY OF WOMEN

3 semester hours

Psychological assumptions about women and how these assumptions are being questioned or supported by recent research. (Formerly Psy. 166)

### PSY\* 235 FAMILY DYNAMICS

3 semester hours

An introduction to the structure and function of the family. Includes the study of different models developed to understand the function and patterns of family interaction as well as laws enacted to protect and support the family. The life cycle of the family will be studied with emphasis on the predictable and identifiable tasks and processes with which all families must contend. Special focus will be placed on the goal of the family system to promote growth and development of its individual members and the ways in which we can maximize the potential for growth by tapping the power of the family. **Prerequisite:** PSY\* 111. (Formerly Psy. 210)

### PSY\* 240 SOCIAL PSYCHOLOGY

3 semester hours

Personal and situational factors which affect individual social behavior. Topics include "the self" attitudes, affiliation, aggression, group formation, and environmental psychology. **Prerequisite:** PSY\* 111. (Formerly Psy. 260)

### PSY\* 243 THEORIES OF PERSONALITY

3 semester hours

The structure, dynamics, and development of personality. Psychological theories and philosophical issues. **Prerequisite:** PSY\* 111. (Formerly Psy. 235)

### **PSY\* 245 ABNORMAL PSYCHOLOGY**

3 semester hours

An exploration of the causes, effects and treatment of abnormal behavior. Topics covered include the difficulty of defining normal and abnormal behavior, critical understanding of diagnostic and research tools used by mental health professionals, and discussion of the possible developmental roots of psychological disorders. **Prerequisite:** PSY\* 111 (Formerly Psy. 206)

### **PSY\* 247 INDUSTRIAL & ORGANIZATIONAL PSYCHOLOGY**

3 semester hours

Identification of personal career goals. How to become more motivated in a job or career, as well as how to motivate others. Heavy emphasis on class participation and class exercises. **Prerequisite:** PSY\* 111 or BMG\* 202. (Formerly Psy. 272)

### **PSY\* 258 BEHAVIOR MODIFICATION**

3 semester hours

This course is designed to teach students the theoretical and practical aspects of Applied Behavior Analysis. Principles of both Operant and Classical Conditioning paradigms will be covered. Strict emphasis will be placed on definition and measurement of behavior, identification and methods of reinforcer delivery and analysis of behavioral change. Students will be expected to design and implement a behavior change program as part of the course. **Prerequisite:** PSY\* 112

### **PSY\* 260 PSYCHOLOGY OF THE EXCEPTIONAL CHILD**

3 semester hours

Special children, who they are, how they behave, and what can be done to help them. Emphasis on the child in the home and in social environments; school-related problems. **Prerequisite:** PSY\* 111. (Formerly Psy. 218)

### **PSY\* 275 ALTERED STATES OF CONSCIOUSNESS**

3 semester hours

The variety and extent of human awareness. Research and theory relating to waking and sleeping, hypnosis, meditation, sensory deprivation, drug states, and related topics. **Prerequisite:** PSY\* 111. (Formerly Psy. 240)

### **PSY\* 298 SPECIAL TOPICS IN PSYCHOLOGY**

1 - 3 semester hours

Designed to offer the student an opportunity to understand the investigation of a specific topic in psychology. One to three semester hours are prearranged in writing with the instructor. A student may repeat the course but the total credits may not exceed six. **Prerequisites:** consent of instructor and PSY\* 111. (Formerly Psy. 290)

## **RECREATION**

### **RLS\* 101 INTRODUCTION TO RECREATION & LEISURE SERVICES**

3 semester hours

Historical background, social significance, and importance of recreation. Aims to foster a positive outlook toward recreation programming and organization. One field trip required. (Formerly Rec. 111)

### **RLS\* 102 SOCIAL RECREATION**

3 semester hours

Methods and materials for planning, organizing, and conducting social activities for groups of various sizes and ages. Committee techniques to plan and produce actual social recreational situations. (Formerly Rec. 114)

### **RLS\* 103 SOCIAL AND FOLK DANCE I**

2 semester hours

Basic dance skills and methods of teaching dancing. Encourages an enjoyment of dancing and an appreciation of its significance in the recreation program. Meets the Social and Folk Dance requirement of the Recreation and Physical Education programs. May be taken for Physical Activity credit. (Formerly Rec. 129)

### **RLS\* 121 INTRODUCTION TO THERAPEUTIC RECREATIONAL SERVICES**

3 semester hours

Therapeutic recreational services in hospitals, residential centers, correctional, and special institutions. Relationship of therapeutic recreation with other rehabilitative services. Field trips required. (Formerly Rec. 218)

### **RLS\* 122 PROCESS & TECHNIQUE IN THERAPEUTIC RECREATION**

3 semester hours

Acquaints students with physical activities adapted for various special populations. Adaptive, corrective, and development techniques are explored in lectures, demonstrations, and activities. (Formerly Rec. 119)

### **RLS\* 145 PARK MANAGEMENT**

3 semester hours

The management of park and outdoor recreation areas, including acquisition, organization finances, legal responsibilities, and operational policies: consideration of both public and private areas. Field trips. (Formerly Rec. 152)

### **RLS\* 171 PROGRAMMING ADVENTURE ED**

3 semester hours

This course is designed to provide the student with an understanding of a variety of programs using an adventure based model and the skills necessary to lead specific adventure activities. (Formerly Rec. 180)

### **RLS\* 172 ADVENTURE BASED COUNSELING**

3 semester hours

Adventure Based Counseling (ABC) is a mixture of experiential learning, outdoor education, and group counseling techniques. It is a tool that can be adapted to almost any setting where group work is practiced. This course is an exploration of the theory and practice of Adventure Based Counseling as coined by Project Adventure, which will provide the practitioner with an alternative approach to group work. (Formerly Rec. 181)

### **RLS\* 175 LEADERSHIP & GROUP PROCESS IN ADVENTURE EDUCATION**

3 semester hours

This course is designed to provide the student with an overview of group development, group dynamics, group maintenance, and leadership models. This course serves students majoring in Recreation, Human Services, and students whose tasks require an understanding of group function and dysfunction. Students will observe group development and behavior as the class moves through its stages. **Prerequisite:** PSY\* 111 or its equivalent. (Formerly Rec. 185)

### **RLS\* 176 ROPES COURSE MANAGEMENT**

3 semester hours

A challenge ropes course is a series of individual and group physical challenges that require a combination of team work skills and individual commitment. Constructed of rope, cables, and wood, courses are built outdoors in trees or telephone poles and indoors in gymnasiums. This course is intended to provide guidelines for the operation of a ropes course as used by Project Adventure and other certified programs. The course addresses safety, management and training issues, and instructions for several high and low ropes activities and initiatives. (Formerly Rec. 186)

### **RLS\* 179 FIELD WORK IN ADVENTURE EDUCATION**

3 semester hours

Practicum placement for second semester students in the Adventure Education Certificate Program. (Formerly Rec. 285)

### **RLS\* 191 CONNECTICUT COACHING CERT**

3 semester hours

A survey of the legal, medical, safety, and psychological aspects of coaching youth and adolescents along with the basic principles and practices of coaching. (Formerly Rec. 160)

### **RLS\* 201 FIRST AID & EMERGENCY CARE**

3 semester hours (3 class hours/1 laboratory hour)

Theoretical and practical techniques and skills in emergency care in a variety of demonstrable situations. Offers certification by American Red Cross. Field trips required. (Formerly Rec. 200)

### **RLS\* 215 RECREATIONAL LEADERSHIP & SUPERVISION**

3 semester hours

Application of theoretical and practical leadership methods and skills in park and recreation services. **Prerequisite:** RLS\* 101. (Formerly Rec. 211)

### **RLS\* 219 FIELD WORK IN REC LEADERSHIP**

3 semester hours

Field internship for second-year students enrolled in recreation leadership, therapeutic recreational service, or park management. Requires consent of program counselor. (Formerly Rec. 280)

### **RLS\* 221 THERAPEUTIC RECREATION PROGRAMMING**

3 semester hours

A study of the equipment selection, leadership techniques and program modifications required for appropriate special programs designed to meet the needs and interests of members of various special populations. Classes will meet at alternate sites on occasion as announced by the instructor. Off-campus site visits required. (Formerly Rec. 217)

### **RLS\* 271 WILDERNESS FIRST RESPONDER**

4 semester hours

Created to provide outdoor leaders with the knowledge and skills necessary to deal with medical emergencies in remote settings. Applicable to expedition work, camping, backpacking, guiding, rangers, and travelers, this sixty-four hour course carries a three year certification through the Wilderness Medical Associates. Topics include CPR, ALS, BLS, extrication, search and rescue, hypothermia, emergency childbirth, allergies, toxins, burns, wounds, fractures, dislocations, and legal issues. Will substitute for RLS\* 201. No prerequisite. Certification fee approximately \$160.00 additional. Offered on a pass/fail basis. (Formerly Rec. 205)

## **SCIENCE**

### **SCI\* 099 FUNDAMENTAL CONCEPTS IN SCIENCE**

3 semester hours

An introduction to basic principles of chemistry and biology. Topics covered include scientific method, structure of matter, basic chemical reactions, cell structure and function and basic lab skills such as measurement with metric units and microscope use. This course is designed for students who wish to strengthen their basic science skills. Successful completion with a "C" meets science prerequisites for BIO\* 115 and BIO\* 121. **Prerequisite:** ENG\* 003 and ENG\* 013 or satisfactory scores on placement tests.

### **SCI\* 106 SCIENCE AND SOCIETY**

3 semester hours

This course is designed to give students a basic understanding of the scientific method, scientific vocabulary and basic

chemical and biological processes so that they can adequately evaluate the scientific information they encounter in their daily lives. Topics such as acid rain, nutrition, cancer and genetic predisposition will be explored. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement test.

### SCI\* 160 HAZARDOUS MATERIALS HANDLING AND SAFETY

3 semester hours

This course is a study of accident prevention, safety, industrial hygiene and proper procedures for handling hazardous materials. Properties of many industrial reagents and solvents are examined so they can be handled and stored properly. The following specific topics will be covered: Material Safety Data Sheets (MSDS), labeling, personnel training and records, emergency response program, toxicity routes of entry, storage, ventilation, personal protective equipment, barriers, spills containment, requirements of OSHA, SPCC, PCRA, and TSCA will be reviewed to provide participants with a working knowledge of the regulations. Students completing this course will be eligible for the "Hazardous Waste Operations and Emergency Response" (HAZWOPER), OSHA certification examination.

## SOCIOLOGY

---

### SOC\* 101 PRINCIPLES OF SOCIOLOGY

3 semester hours

An introduction to patterns of human behavior and social interaction. The nature of social adjustment, personality and the socialization process, formal and informal groups, and institutions. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. (Formerly Soc. 100)

### SOC\* 125 VOLUNTEER ORGANIZATION LEADERSHIP

3 semester hours

Through the experiential model, students develop organizational and leadership skills, examine various leadership styles and outcomes. Group dynamics are studied within the context of formal, volunteer community and government organizations. Projects are conducted through campus organizations. **Prerequisites:** ENG\* 063 and ENG\* 073. (Formerly Soc. 145)

### SOC\* 201 CONTEMPORARY SOCIAL ISSUES

3 semester hours

Selected problems in American society, including causes, effects on the individual, and approaches to resolution. **Prerequisite:** SOC\* 101 or consent of instructor. (Formerly Soc. 112 Contemporary Social Problems)

### SOC\* 240 CRIMINOLOGY

3 semester hours

The course of Criminology deals with the causes of crime and how it relates to our society, as well as the response of society to criminal behavior. The relationship of the criminal justice system and corrections is also explored. Development of the criminal mind and the inmates' social world within prison are of particular importance. Defining the concept of crime and the nature of criminal law are important aspects of this course of study. The effects of alcohol and substance abuse are prominent factors in modern criminal behavior, since a majority of crimes are related to this type of abuse. How society deals with these social problems will shape the future of criminal acts. **Prerequisites:** ENG\* 063 and ENG\* 073, or satisfactory score on placement tests. (Formerly Soc. 221)

### SOC\* 241 JUVENILE DELINQUENCY

3 semester hours

This course will examine the social aspects of juvenile delinquency and the pressures which cause this behavior to emerge. The organization, functions and jurisdiction of the juvenile court system, as well as processing, detention, case disposition and juvenile delinquency statutes, will be discussed. The juvenile delinquency process in many states is being reexamined as today's youth have learned to abuse an antiquated system. **Prerequisites:** ENG\* 063 and ENG\* 073, or satisfactory score on placement tests. (Formerly Soc. 211)

### SOC\* 250 SOCIOLOGY OF WORK

3 semester hours

Labor as a cultural universal. The emergence and transformation of modern work structure and work processes. (Formerly Soc. 130)

### SOC\* 298 SPECIAL TOPICS

1 - 3 semester hours

Designed to offer the student an opportunity to undertake the investigation of a specific topic in sociology. One to three semester hours are prearranged in writing with the instructor. A student may repeat the course but the total credits may not exceed six. **Prerequisites:** SOC\* 101 and consent of instructor. (Formerly Soc. 210)

## VETERINARY TECHNOLOGY

---

### VAS\* 150 VETERINARY ASSISTING

5 semester hours (3 class hours/2 laboratory hours)

The objective of the Veterinary Assisting course is to develop student's skills to assist Veterinarians and Veterinary Technicians at an entry-level position to treat illness, ease discomfort, cure diseases, mend injuries, and improve nutrition.

Students will learn the basics of animal husbandry including common small animal species and breeds characteristics and

various routine care requirements. They will learn the basics of animal restraint, first aid, anatomy, emergency care, surgical preparation, basic nursing techniques, laboratory procedures and basic imaging techniques. Students will also learn how to work as an effective veterinary team member and to maintain safe work practices within the veterinary office. **Prerequisites:** VET\* 100, VET\* 101, ENG\* 101

#### **VAS\* 180 VETERINARY ASSISTANT EXTERNSHIP**

2 semester hours

The student completes 200 hours of work experience under the supervision of a veterinarian or certified veterinary technician in a clinical setting. The externship will allow the student to apply the conceptual knowledge and technical skills learned in the classroom. Essential skills will be evaluated by the clinical supervisor and only checked off after they are satisfactorily completed under standardized guidelines; "C" or higher. **Corequisite:** VAS\* 150

#### **VET\* 100 INTRODUCTION TO ANIMAL CARE**

2 semester hours

This course is designed to give students in the Veterinary Technology Program "hands-on" experience with small, large and laboratory animals. Basic animal husbandry topics discussed include breed differentiation, clinical nutrition, behavior, and species restraint techniques. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. **Fall**

#### **VET\* 101 INTRODUCTION TO VETERINARY TECHNOLOGY**

3 semester hours

This course is an introduction to veterinary science. The profession and employment opportunities for veterinary technicians are presented. The principles of animal health and the prevention of disease are stressed. Common illnesses, vaccination protocols, basic nutrition and animal reproduction are discussed. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. **Fall**

#### **VET\* 102 VETERINARY OFFICE MANAGEMENT & COMMUNICATION**

3 semester hours

This course is intended to introduce the student to office procedures and business practices related to private veterinary practices. Topics include reception techniques, telephone etiquette, management of medical records, billing procedures, scheduling of appointments, inventory control, computer use, and staff management. **Prerequisites:** ENG\* 063 and ENG\* 073 or satisfactory scores on placement tests. **Spring**

#### **VET\* 151 SMALL ANIMAL VETERINARY TECHNOLOGY**

4 semester hours (3 class hours/2 laboratory hours)

This course will introduce the student to small animal nursing procedures including laboratory animals. Included topics will be restraint, physical examinations, medical

and surgical nursing techniques and emergency care. The importance of client education and the role of the veterinary technician in the clinical setting will be stressed. **Prerequisites:** VET\* 100 and 101. Field trips required. Rabies vaccines must be completed prior to starting class. **Spring**

#### **VET\* 152 LARGE ANIMAL VETERINARY TECHNOLOGY**

4 semester hours (3 class hours/2 laboratory hours)

This course will be an overview of the technical aspects of large animal veterinary care. Emphasis will be on large animal handling, restraint and medication. In addition, common medical conditions, routine large animal care and preventive health will be discussed. **Prerequisites:** VET\* 100 and 101. Field trips required. **Spring**

#### **VET\* 201 VETERINARY ANATOMY & PHYSIOLOGY I**

4 semester hours (3 class hours/3 laboratory hours)

This course is the first of a two part series designed to provide students with a broad foundation of the structure and function of the major animal species for students intending to pursue a career as a Veterinary Technician or continue on with their education in veterinary science or a related field.

Beginning with basic chemistry, the body's three major levels of organization (cells, tissues, and organs) provide the foundation for a systematic investigation of the structure and function of the animal body, for the most common species seen in veterinary practice, including companion animals, livestock, avian, laboratory animals and exotics. The laboratory component will allow students to gain experience with the tools and techniques used to study the body on a macroscopic and microscopic level. Students will measure and assess physiological parameters used to evaluate the major organ systems and investigate the connections between the study of anatomy and physiology with clinical veterinary medical and surgical practice. **Prerequisite:** BIO\* 115 Human Biology or BIO\* 121 General Biology

#### **VET\* 202 VETERINARY ANATOMY & PHYSIOLOGY II**

4 semester hours (3 class hours/3 laboratory hours)

This course is the second part of a two part series designed to provide students with a broad foundation of the structure and function of the major animal species for students intending to pursue a career as a Veterinary Technician or continue on with their education in veterinary science or a related field.

A continuation of topics from Veterinary Anatomy and Physiology I including: organ systems of the body and their mutual interdependence, homeostasis and regulation (chemical, hormonal, neuro-endocrine), the biochemistry of how cells obtain energy from food, reproduction and the inheritance of physical characteristics. The connection between the study of anatomy and physiology with clinical veterinary medical surgical practice will be emphasized. **Prerequisite:** VET\* 201

**VET\* 205 VETERINARY LABORATORY PROCEDURES**

3 semester hours (2 class hours/3 laboratory hours)

A study of veterinary clinical laboratory procedures including specimen collection, hematology, cytology, blood chemistry, urinalysis, and necropsy technique. Immunology and serology will also be discussed. Field trips will be required to collect samples for lab. **Prerequisites:** MED\* 125 and VET\* 151.

**VET\* 212 PRINCIPLES OF IMAGING**

1 semester hour (1 class hour/1 laboratory hour)

The principles of radiation and its uses in patient diagnostics are presented as well as the technical skills needed to perform radiological procedures. Alternative imaging techniques are also included. The dog and cat are primarily used in the laboratory. **Prerequisites:** MED\* 125, VET\* 151, 201, 202, and 280. VET\* 230 and 212 must be taken concurrently. **Fall**

**VET\* 220 ANIMAL PATHOLOGY**

3 semester hours

A study of the more common diseases affecting domestic and farm animals. The causation, progression, transmission, treatment, and prevention are presented. The impact on public health and the role of the veterinary profession are discussed. **Prerequisites:** MED\* 125, VET\* 151, 152, 201, and 202.

**VET\* 230 VETERINARY ANESTHESIA AND SURGICAL NURSING**

4 semester hours (3 class hours/3 laboratory hours)

Surgical and anesthetic procedures, including a study of anesthetic drugs, patient preparation and post-op care will be discussed. Training manikins, anatomy models, and live dogs and cats will be used in lab. **Prerequisites:** MED\* 125, 250, VET\* 151, 201, 202, and 280. VET\* 230 and 212 must be taken concurrently. **Fall** (Formerly VET 210)

**VET\* 240 PERIODONTOLOGY AND ORAL RADIOLOGY**

2 semester hours (lecture/lab)

This course will introduce the student to the field of veterinary dentistry. Oral anatomy, terminology, instrumentation, periodontology, and oral radiography will be discussed. The clinical applications of modern veterinary dental care and the role of the veterinary dental hygienist will be emphasized. Dental models and live animals are used in the laboratory. **Corequisites:** VET\* 212 and 230.

**VET\* 280 VETERINARY EXTERNSHIP I**

1 semester hour

This externship will offer a supervised experience under the direction of a licensed veterinarian, certified technician or animal research technician. The student will refine skills learned in the first year classes and laboratories. **Prerequisites:** Approval of Vet Tech advisor and successful completion of MED\* 125, VET\* 100, 101, and 151.

**VET\* 281 VETERINARY EXTERNSHIP II**

2 semester hours

This externship will offer a supervised experience under the direction of a licensed veterinarian, certified technician or animal research technician. The student will refine skills learned in all previous veterinary technology courses. **Prerequisites:** Approval of Vet Tech advisor and successful completion of VET\* 205 and 230.