

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.

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.

ELECTIVES

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*

DIRECTED ELECTIVE

(computer science majors only)

Web Electives (CSC* 223, CST* 151, CST* 154)

Programming Electives (CSC* 207, CSC* 223)

Technology Electives (CSC* 234, CSC* 298, CST* 141, CST* 180)

Application Electives (CSA* 105, CSA* 135, CSA* 155, CSA* 205, CSC* 234)

FINE ARTS

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

HUMANITIES

Communications (COM*), English (ENG*), Humanities (HUM*), Modern Languages (including ASL*), Philosophy (PHL*), and Theater (THR*)

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, and Theater.

NATURAL/PHYSICAL SCIENCE

Astronomy (AST*), 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.

ACADEMIC SKILLS DEVELOPMENT

ASD 008 INDIVIDUAL REMEDIATION PROGRAM

3 - 12 semester hours

The Remediation Program consists of 3 to 12 institutional credits of tutorial and specialized instructional activities for students who need to improve academic skills before they attempt specific college-level or developmental courses. Accuplacer assesses the entering student's academic skills, paying particular attention to language and mathematics skills. The results determine which classes the student may register for. Students registered in this remedial program may also register for other classes with the approval of an academic advisor. Credit earned in the Remediation Program does not fulfill degree requirements.

ASD 010 STUDENT SUCCESS SEMINAR I

3 semester hours

Enhances the Deaf and Hard of Hearing student's successful transition from high school or the workplace to college. A wide variety of experiences focusing on self-assessment of learning style and academic goals, study skills, and independent living skills, helps the student develop knowledge and competency in a number of areas which are crucial to success in college. Take concurrently with ASD 012, ASD 081, ASD 083. Does not fulfill degree requirements.

ASD 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, important factors affecting personal and professional success, and use of library resources. Class needs may dictate extended review or more in-depth work on topics covered in Student Success Seminar I. Take concurrently with ASD 013, ASD 082, and ASD 085. Does not fulfill degree requirements. Prerequisites: ASD 010, ASD 081, and ASD 083 or consent of instructor.

ASD 012 SELECTED TOPICS FOR Deaf AND HARD OF HEARING STUDENTS I

3 semester hours

Develops knowledge key to a successful college experience for Deaf and Hard of Hearing students and concurrently supplements reading and writing competency development in ASD 081 and ASD 083. Topics may include interpersonal relationships, linguistics of American Sign Language, career exploration, discussion and analysis of current events, and management of personal finances. Take concurrently with ASD 010, ASD 081, and ASD 083. Does not fulfill degree requirements.

ASD 013 SELECTED TOPICS FOR Deaf AND HARD OF HEARING STUDENTS II

3 semester hours

Develops knowledge key to a successful college experience for Deaf and Hard of Hearing students and to concurrently supplements reading and writing competency development in ASD 082 and ASD 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 psycho-social aspects of drug abuse. Take concurrently with ASD 011, ASD 082, and ASD 085. Does not fulfill degree requirements. Prerequisites: ASD 081 and ASD 083 or consent of instructor.

ASD 038 JOB SEARCH TECHNIQUES FOR THE HEARING-IMPAIRED

3 semester hours

Practical assistance for hearing-impaired job seekers looking 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 a review of the laws preventing discrimination against individuals with disabilities. Does not fulfill degree requirements.

ASD 081 ELEMENTARY GRAMMAR REMEDIATION & DEVELOPMENT

3 semester hours

An intensive course in English grammar emphasizing simple sentence structure. Major topics: action, linking and helping verbs; the proper use of verbs in the simple and continuous present; the eight major parts of speech; subject-verb agreement; consistent use of verb tense; and basic composition. Includes two hours/week lab in addition to class time. Open only to students who are Deaf or Hard of Hearing. Should be taken concurrently with ASD 010, ASD 012, and ASD 083. Does not fulfill degree requirements.

ASD 082 ELEMENTARY WRITING REMEDIATION & DEVELOPMENT

3 semester hours

An intensive course in English writing emphasizing a continued in-depth development of competencies learned in Elementary Grammar Remediation and Development. Students will be introduced to or continue to develop these competencies: 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 two hours/week of laboratory, in addition to class time. Open only to students who are Deaf or Hard of Hearing. Take concurrently with ASD 011, ASD 013, and ASD 085. Does not fulfill degree requirements. Prerequisites: ASD 081 and ASD 083 or consent of instructor.

ASD 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 two hours/week of laboratory, in addition to class time. Should be taken concurrently with ASD 010, ASD 012, and ASD 081. Does not fulfill degree requirements.

ASD 084 MATH REMEDIATION

3 semester hours

A course of selected topics in basic mathematics, and/or consumer mathematics increasing student competencies for successful transition into developmental-level mathematics courses. Open only to students who are Deaf and Hard of Hearing. Does not fulfill degree requirements.

ASD 085 INTERMEDIATE READING & VOCABULARY DEVELOPMENT

3 semester hours

A continuation of ASD 083: Elementary Reading and Vocabulary Development, this intensive course for Deaf and Hard of Hearing students rapidly increases English vocabulary and reading comprehension competency. Includes two hours/week lab in addition to class time. Take concurrently with ASD 011, ASD 013, and ASD 082. Does not fulfill degree requirements. Prerequisites: ASD 081 and ASD 083 or consent of instructor.

ACCOUNTING

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 with a grade of "C" or better, or satisfactory score on placement test.

ACC* 117 PRINCIPLES OF MANAGERIAL ACCOUNTING

3 semester hours

The modern economy's shift from an information-based to a knowledge-based business environment is very dynamic, and has contributed to major structural changes. This course examines the impact of these structural changes on the managerial accounting function.

Combining course is a combination of cost determination and management analysis. This course will focus on traditional and contemporary modalities needed to sup-

port 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 with a grade of "C" or better.

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 with a grade of "C" or better.

ACC* 272 INTERMEDIATE ACCOUNTING II

3 semester hours

Students will account 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 with a grade of "C" or better.

AMERICAN SIGN LANGUAGE

ASL* 100 SIGN VOCABULARY (non-major)

3 semester hours

This course focuses on sign language vocabulary and fingerspelling, and is open to any student who is interested in developing basic sign communication skills. This class is a general elective.

ASL* 101 AMERICAN SIGN LANGUAGE I

3 semester hours

In this first course of study of the American Sign Language (the language used by the Deaf Community in the United States) students learn the fundamentals of the basic structure of ASL grammar, vocabulary, fingerspelling/numbers, visual-gestural communication, and information related to Deaf Culture. Corequisite: DSC* 101 (Corequisite required for Deaf Studies majors).

ASL* 102 AMERICAN SIGN LANGUAGE II

3 semester hours

Building on ASL I, this course students learn more 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 better, or consent of instructor.

ASL* 201 AMERICAN SIGN LANGUAGE III

3 semester hours

Building on ASLII, this course covers in depth the structure of ASL grammar, fingerspelling/numbers, and visual-gestural communication. Students also develop expressive and receptive skills in storytelling and dialogue. Prerequisites: ASL* 102, DSC* 114, both with grades of "C" or better.

ASL* 202 AMERICAN SIGN LANGUAGE IV

3 semester hours

Building on ASL III, students learn 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 better.

ASL* 205 LINGUISTICS OF AMERICAN SIGN LANGUAGE

3 semester hours

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

ASL* 206 ADVANCED ASL FOR INTERPRETERS

4 semester hours

Semantics impact sign/word choice and syntactic structures when interpreting between English and ASL. In order to accurately convey the message, interpreters must understand semantic influences on both the target and source languages. This course will provide expanded understanding and utilization of American Sign Language (ASL) by analyzing semantic accuracy and discourse strategies. Students will employ linguistic theory and practice of major linguistic principles in English and ASL. This course will integrate expressive and receptive skills in ASL with an emphasis on grammar, linguistic structures, and discourse styles necessary to accurately interpret between English and ASL. The student will learn how to correctly incorporate appropriate non-manual skills, phonology, and morphology using the key components of syntax and semantics. Prerequisites: INT* 103, ASL* 205, and ASL* 202.

ANTHROPOLOGY

ANT* 101 INTRODUCTION TO ANTHROPOLOGY

3 semester hours

Introduces students to the principles, concepts, and methodology of anthropology. Also emphasizes Human evolution, culture and its role in human experience, as well as an understanding of the nature of man in different societies. Prerequisite: eligibility for ENG* 101.

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/corequisite: ENG* 093 or with concurrency.

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.

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 beginning 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.

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.

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 with a grade of "C" or better.

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 with a grade of "C" or better.

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.

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.

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.

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 darkroom, print finishing, and creative aspects of photography. Students must have an operable 35mm camera with manual adjustments for shutter speed and aperture.

ART* 142 PHOTOGRAPHY II

3 semester hours (2 class hours/2 laboratory 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 grade of "C" or better.

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.

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 with a grade of "C" or better.

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.

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.

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.

ART* 169 STAINED GLASS ART

3 semester hours (3 studio 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* 176 DIGITAL VIDEO ART I

3 semester hours (6 studio hours)

An introductory course investigating digital video as an extension of the fine arts. Formal attributes, which make up the language of video, including time, sound, content, and composition, will be investigated as tools of expression and devices for creating meaning. Basic production techniques such as story boarding, cinematography, lighting, and editing will be acquired through creative problem solving. Through both a survey of historical and contemporary video art and in responding to collective and individual assignments, students will become critically observant and sensitive to video as a time based medium. Digital video art's relationship to fine arts as well as to other media. Pre-requisite/Co-requisite: College level art course and computer literacy.

ART* 187 MUSEUM TREASURES

1 semester hour

A study of one or more of the permanent collections or special collections and special exhibitions of the great museums along New York City's "Museum Mile," The Fenway in Boston, or other locations.

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. Both with a grade of "C" or better.

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 with a grade of "C" or better 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 with a grade of "C" or better.

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 with a grade of "C" or better 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 with a grade of "C" or better.

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* 285 MOTION GRAPHICS

3 Credit Hours (6 studio hours)

This course is a continuation of Digital Video Art I. Motion graphics are graphics that use video and/or animation technology to create the illusion of motion. The course introduces fundamental concepts for motion graphics, including graphics and promos for television networks and film titles and logos for advertising. The focus is on design presentation and development, screen composition, graphic transitions and content. Students will learn to capture footage, alter it via computer software and create works of motion graphics. Story boarding, cinematography, lighting, and editing will be further investigated as well as the industry applications of motion graphic productions. The history and relationship of these productions to fine art will also be addressed. Prerequisite: ART* 176 or by permission of the instructor.

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 member. 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

ART* INDEPENDENT STUDIO STUDY

1, 2 or 3 semester hours

119	Drawing
159	Painting
219	Figure Drawing
229	Design
239	Sculpture
249	Photography
259	Water Color
269	Pottery
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, all with a grade of "C" or better, and consent of instructor.

ASTRONOMY

AST* 111 INTRODUCTION TO ASTRONOMY

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

Offered: Spring Term.

Lecture: An introduction to the basic concepts of classical and modern astronomy and its application utilizing hands-on experiences. Topics include the principles of celestial coordinate systems; telescope design and use; fundamental physical laws and their applications; the evolution of stars, galaxies, and the universe; modern cosmology; and astrobiology. Use of computers is an integral part of this course. Lab: Lab section to accompany AST* 111 lecture. Students develop a working knowledge of the night sky through hands-on experiences with direct observations, computer simulations and applied use of a telescope. Prerequisites: MAT* 085 or MAT* 095 with a grade of "C" or better or satisfactory placement test scores and eligibility for ENG* 101.

BIOLOGY

BIO* 110 Principles of the Human Body

3 semester hours

This non-majors course is designed as an introduction to the basic biological principles that support human life. The cellular nature of life is the basis of the course and the organization and function of organs and organ systems are emphasized. In addition to the textbook, students use a variety of resources from traditional print to electronic media to acquire and evaluate relevant scientific content. Selected body systems and disease states are also discussed. The use of computers and BlackBoard are integral aspects of this course. Prerequisites: Eligibility for ENG* 101. This course cannot be used as the prerequisite for BIO* 211, BIO* 235, or VET* 201.

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. The structure and function of animal cells and human body systems will be explored. Co-requisite/Prerequisite: BIO* 110 Lecture.

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. Prerequisite: SCI* 099 with a grade of "C" or better or equivalent and eligibility for ENG* 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 grade of "C" or better or equivalent and eligibility for ENG* 101.

BIO* 127 CELL BIOLOGY WITH ORGAN SYSTEMS

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. Prerequisite: Eligibility for ENG* 101. SCI* 099 is recommended for students who do not have a strong science background. (Replaces BIO* 115)

BIO* 155 GENERAL BOTANY

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

Offered: Spring, Odd Numbered Years.

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. In addition, applications of these principles to botanical conservation and environmental issues are emphasized. Off-site outdoor field trips for lab are required. The use of computers and BlackBoard are integral aspects of this course. Prerequisite: Eligibility for ENG* 101.

BIO* 170 PRINCIPLES OF ECOLOGY

3 semester hours (3 class hours)

Principles of ecology and application to conservation and environmental problems. Off-site outdoor field trips required. Prerequisite: Eligibility for ENG* 101.

BIO* 178 GENERAL ECOLOGY

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

An introduction to the basic principles of ecology including the constant change of the Earth and ecological communities over geologic time, concepts of adaptation, natural selection, and evolution, definitions of species and speciation, interactions of living organisms and the physical environment, and inter- and intraspecific relationships. In addition, applications of these principles to conservation and environmental problems are emphasized. Off-site outdoor field trips for lab are required. The use of computers and BlackBoard are integral aspects of this course. Prerequisite: Eligibility for ENG* 101. Offered: Fall.

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* 127 (or BIO* 115 if taken prior to Fall 2012) and CHE* 111 or CHE* 121 or with concurrency and ENG* 101. All with a grade of "C" or better.

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* 121 or BIO* 127 (or BIO* 115 if taken prior to Fall 2012) and CHE* 111 or CHE* 121 or with concurrency and BIO* 211 and ENG* 101. All with a grade of "C" or better.

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:

BIO* 121 or BIO* 127 (BIO* 115 if taken prior to Fall 2012) and CHE* 111 or CHE* 121 and ENG* 101. All with a grade of "C" or better.

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.

BUSINESS AND MANAGEMENT ADMINISTRATION

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 a 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. Prerequisite: Eligible for ENG* 101.

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. Prerequisite: Eligible for ENG* 101.

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.

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.

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: Eligible for ENG* 101, successful completion of 15 credit hours of study in business courses and approval by the course instructor.

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 imminent 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 earned grades of "C" or better in ACC* 113 and "C-" or better in BMG* 202 or received consent of instructor. The completion of MAT* 167 is also recommended.

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. Prerequisites: MAT* 075 with a grade of "C" or better, and eligibility for ENG* 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, each with a grade of "C" or better.

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 with a grade of "C-" or better.

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 with a grade of "C-" or better.

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. Eligible for ENG* 101. Prerequisite/Corequisite: BMG* 202.

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 with a grade of "C-" or better, or consent of instructor.

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: A grade of "C-" or better in BMK* 201 or BMK* 214.

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 in 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: a grade of "C-" or better in BMK* 201 or BMK* 214.

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* 137 or higher or satisfactory placement test scores and Eligibility for ENG* 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: MAT* 137 or higher or satisfactory placement test scores and Eligibility for ENG* 101.

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 with a grade of "C" or better

COLLEGE FORUM

COL* 100 FRESHMAN SUCCESS SEMINAR

1 semester hour

An extension of First-Year Experience orientation, this class eases students' transition to NCCC. Helps first-year students learn about college resources and requirements, and explore their personal learning styles, values and interests. Students discover effective ways to seek academic support. Full-time students with two or more college preparatory placements should take this class.

COMMUNICATION

COM* 101 INTRODUCTION TO MASS COMMUNICATION

3 semester hours

Radio, TV, Movies, the Web... this course reviews basic communication theory, followed by an exploration of the history, structure, and nature of American mass media. Topics include the technological development and business structure of various media industries, media professions, government regulation of the mass media, and the media's impact on culture and society. Special emphasis will be placed on how digital technology and the Internet continue to affect traditional mass communication processes and forms. Prerequisite: Eligible for ENG* 101.

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. Prerequisite: Eligibility for ENG* 101.

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

The computer plays a significant role as a productivity tool in many fields of study and employment. This course focuses on integrating comprehensive computing skills as a means to introduce students to the knowledge, skills, and techniques necessary to achieve proficiency in the Microsoft Office software applications suite (Word, Excel, PowerPoint, and Access). The computer operating system, file management operations, computer concepts, and vocabulary are included as integral elements to understanding the software applications environment. Students will examine productivity and computing procedures in workplace and academic settings, enhance their computer skills, and be able to critically apply these skills in various situations. Prerequisite: Eligibility for ENG* 101.

CSA* 135 SPREADSHEET APPLICATIONS

3 semester hours

A detailed development of the functions and applications of spreadsheet application software. The electronic spreadsheet, business graphics and 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: Eligibility for ENG* 101. Prerequisite/Co-requisite: CSA* 105

CSA* 140 DATABASE APPLICATIONS

3 semester hours

This course will introduce the student to the concept of a database management system and its integral role in today's workplace. The course will guide the student through the design, development and implementation of a database system using Microsoft Access. This hands-on course will introduce the student to the techniques and capabilities of Access, and how to utilize this database development program as a tool to solve common business problems. Prerequisite: Eligibility for ENG* 101. Prerequisite/Co-requisite: CSA* 105

CSA* 155 MULTIMEDIA COMMUNICATIONS

3 semester hours

Development of communication skills in effective public speaking for business and professional use. Students use MS PowerPoint and other software packages to develop, write and organize the computerized presentation slides that are an integral part of many business and professional presentations in the workplace. Topics focus on organiza-

tion of content (written and verbal), identifying audience and product appeal, practice of oral delivery skills, and integration of computerized material in oral presentations. This course has been approved as a Communication Elective for Computer Science majors. Prerequisite: Eligibility for ENG* 101. Prerequisite/Co-requisite: CSA* 105

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 better.

CSA* 290 COMPUTER APPLICATIONS CAPSTONE

3 semester hours

This advanced course provides students with an opportunity to demonstrate comprehensive learning in a specific area of study (software applications or web-design applications) through the completion of a major project which assesses technical skills and ability to develop an overall business related assignment. The type of project and specific details of the final product will be determined individually based on the individual curriculum choices of the student. Students may take more than once with permission of instructor. Prerequisite: CSA* 205 or CST* 154 either with a "C" or better.

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, and PowerPoint. Prerequisite: Eligibility for ENG* 101.

CSC* 104 INTRODUCTION TO LOGIC AND PROGRAMMING

4 semester hours

Study of computer programming and logic as applied to real world problems with solutions designed and implemented in the C programming language. Topics include set theory, Boolean algebra, truth tables, logic to program translation, basic algorithm development, generic selection and repetition, data types and memory variables, and the use of common programming tools. Prerequisite: Eligibility for ENG* 101 and a grade of "C" or better in MAT* 085 or MAT* 095, or satisfactory scores on the math placement test

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: Eligibility for ENG* 101.

CSC* 207 INTRODUCTION TO VISUAL BASIC

4 semester hours

A course in the 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 requirement. Prerequisite: CSC* 104 with a grade of "C" or better.

CSC* 223 JAVA PROGRAMMING I

4 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* 104 with a grade of "C" or better.

CSC* 233 DATABASE DEVELOPMENT I

4 semester hours

Course covers the concepts of data organization for designing databases and creating business computer systems. Data schemes and structures, querying, searching, updating and editing, indexing, sorting, screen formatting, and linking files will be emphasized. Students will develop queries using standard SQL. Prerequisite: CSC* 104 with a grade of "C" or better.

CSC* 234 DATABASE DEVELOPMENT II

4 semester hours

This course addresses advanced topics in database management including SQL coding for database creation and access with platform independence. Data normalization and relational calculus are covered as the theory of data access. Major database management packages will

be discussed, installed and administered. Actual business scenarios will be developed, and solutions created for them. Prerequisite: CSC* 233 with a grade of "C" or better.

CSC* 236 INTRODUCTION TO CLIENT-SERVER SYSTEMS

3 semester hours

A course in the design and development of n-tier client-server applications. Students will develop both web and intranet solutions for multi-platform projects. Topics will include human computer interfaces, client application development, brokers and remote procedure calls, server programming and scripting, and database integration. Students will analyze case studies of real world applications, and build their own working versions. Prerequisite: CSC* 223 with a grade of "C" or better.

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. Prerequisite/Corequisite: CSC* 233 with a grade of "C" or better.

CSC* 295 COOPERATIVE EDUCATION/WORK EXPERIENCE

3 semester hours

This is a work experience course for outstanding computer systems technology students who want a challenging opportunity to apply their knowledge and skills in a business, education, or community organization. Students are evaluated in an intern position obtained by the student in collaboration with a faculty advisor, and agreed upon by the supervisor of the cooperating worksite. Students will engage in periodic written reports to the faculty advisor and site supervisor, and present final summaries of their field work experiences at the end of each semester. Students are required to work a minimum of 120 hours during the semester and have regular contact with their faculty advisor. Prerequisite: Consent of instructor.

CSC* 298 SPECIAL TOPICS IN COMPUTER SCIENCE

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 though the Internet. It may also target specific areas of computer hardware, software, networking, and telecommunications with focused hands-on modules.

COMPUTER SYSTEMS TECHNOLOGY

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

CST* 125 HELP DESK CONCEPTS

3 semester hours

This course provides students with the skills and knowledge to support users of computer systems and software applications. It provides information/experience on evaluating, configuring, and troubleshooting hardware, software, and systems. Introduces the skills necessary to effectively provide remote customer support, and deal with issues Help Desk Support Analysts and Specialists may encounter on the job when addressing customer requirements. Electronic and written communication skills are also emphasized. This course introduces students with techniques, tools, and information schemes required by several industry certifications: CompTIA A+, Microsoft Certified Desktop Support Technician (MCDST) and the Help Desk Analyst (HAD) certifications. Prerequisites: Eligibility for ENG* 101.

CST* 141 COMPUTER HARDWARE

4 semester hours

An examination of computer architecture from chip to board to device to system, toward understanding the individual components and their relationship to a functional PC. Topics include: microprocessors, peripheral devices, memory, troubleshooting, diagnostics, repair, and connectivity. The course will stress the functionality of individual subsystems, and their relationship to one another. The course will prepare students for testing in A+ certification. Prerequisite: CSC* 104 with a grade of "C" or better.

CST* 151 WEB CONSTRUCTION

3 semester hours

The design elements, organization, page layout, navigation, visual presentation and continuity are some of the topics to be included as subjects in this course. As a beginning course in the Web Design & Development program, this course will also cover Internet vocabulary and concepts as well as file management tasks. Students will use online resources to supplement any online presentations by the instructor, and will complete a website project using template software tools at host websites online. Prerequisites: Eligibility for ENG* 101.

CST* 154 WEB CODING AND DEVELOPMENT

4 semester hours

A complete course that covers the coding syntax to create Web Pages for the Internet. The two main coding languages of XHTML (& HTML v.4) and JavaScript are the emphasis of the course. All of these coding topics follow the W3C (World Wide Web Consortium) guidelines. [The

World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential.] The full scope of the HTML/XHTML techniques and the interactive capabilities of JavaScript are examined and implemented as students create their own comprehensive webpages. Prerequisite: CST* 151 with a grade of "C" or better .

CST* 180 NETWORKING I

4 semester hours

An introduction to computer networking concepts. Topics include the functions of the ISO/OSI reference model; data link and network addresses; the function of a MAC address; data encapsulation; the different classes of IP addresses (and subnetting); the functions of the TCP/IP network-layer protocols. The student learns to plan, design and install an Ethernet LAN using an extended or hierarchical star topology; to select, install, and test cable and determine wiring closet locations; to perform beginning network maintenance, tuning, and troubleshooting along with basic documenting, auditing and monitoring of LANs. The course will prepare students for testing in Network+ certification. Prerequisite: CST* 141 with a grade of "C" or better.

CST* 201 INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS (MIS)

3 semester hours

An introductory course to provide a real-world understanding of information systems, giving students a foundation in business-related technology (IT). This course presents a balance of technical information and real-world applications. Students study innovative uses of information technology and its benefits and risks. Contemporary concepts such as supply chain management systems, data warehousing, business intelligence systems, knowledge management, Web-based electronic data interchange, and software as a service are topics covered in this course. Prerequisites: Eligibility for ENG* 101 and a grade of "C" or better in MAT* 085 or MAT* 095 or satisfactory math placement test scores.

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.

CRIMINAL JUSTICE

The Criminal Justice Program strives to attain a high level of academic excellence and professionalism. As a Criminal Justice major, students 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: Eligibility for ENG* 101. Fall

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. Course may require a visit to a local Community Court. Prerequisites: Eligibility for ENG* 101. Spring

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: Eligibility for ENG* 101. Semester varies

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 with a grade of "C-" or better. Fall

CJS* 212 CRIMINAL LAW II

3 semester hours

Local, state, and federal laws; development, application, and enforcement. Prerequisite: CJS* 211 with a grade of "C-" or better. Spring

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 with a grade of "C-" or better and ENG* 101 with a grade of "C-" or better or with concurrency. Spring

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. Students may be required to participate in a mock crime scene investigation where they will put into practice techniques learned in the classroom. Prerequisites: CJS*101 with a grade of "C-" or better. Fall

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: Eligibility for ENG* 101 Varies

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: Eligibility for ENG* 101. Fall

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: Eligibility for ENG* 101. Semester varies

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: Eligibility for ENG* 101. Spring

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 criminal justice agency. Students are evaluated by a member of the College faculty and the staff of the cooperating agency. This course requires a mandatory meeting in late May after Final Exams. At this meeting students will receive Field Manual and other materials necessary to secure a site placement. Registration for this course will close on or about June 1st. Prerequisites: 2.0 GPA., Successful completion of 12 Criminal Justice credits and consent of instructor. Fall.

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

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

DSC* 114 INTRODUCTION TO DEAF PEOPLE & DEAF CULTURE I

3 semester hours

Analysis and discussion of the historical and cultural aspect of Deaf people. In the last decade, definitions of an attitudes toward Deaf people have changed from a clinical perspective to a cultural perspective that identifies, respects and promotes Deaf Culture. An overview of Deafhood that will include the nature and experience of Deafhood; the education of Deaf children and adults; and the adult Deaf community. Classes may host guest lecturers from the Deaf Community. Prerequisites: ASL* 102 with a grade of "C" or better and eligibility for ENG* 101. Corequisite: ASL* 201.

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, medical, educational, psychological, social and vocational aspects, and a review of the contributions of Deaf persons to American Society. Prerequisites: ASL* 201 and DSC* 114 both with a grade of "C" or better.

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 better. Corequisite: DSC* 214.

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 better.

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 better. Corequisites: ASL* 202, DSC* 101, DSC* 214, and DSC* 218.

EARLY CHILDHOOD EDUCATION

ECE* 101 INTRODUCTION TO EARLY CHILDHOOD EDUCATION

3 semester hours

This course explores philosophies, methods, and materials dealing with early childhood education. Emphasis is placed on the roles and responsibilities of teachers working with young children and the practical aspects of the physical, cognitive, emotional, and social development of children. Ten hours of observation is required at instructor approval or NAEYC accredited centers). Field trips may be required. Prerequisite: ENG* 101 with a grade of "C" or better or with concurrency.

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 pre-

senting activities to young children in a preschool setting with a supervising teacher present. Field trips may be required. Prerequisite: Eligibility for ENG* 085 or ENG* 093.

ECE* 106 MUSIC & MOVEMENT FOR CHILDREN

3 semester hours

Basic techniques and skills for teaching music to young children will be explored in the course. 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 may be required. Prerequisite: Eligibility for ENG* 085 or ENG* 093.

ECE* 109 SCIENCE AND MATH FOR CHILDREN

3 semester hours

This course will provide basic theories of teaching science and mathematics to young children. A variety of practical activities and ideas will be explored for classroom implementation. Topics include the number system, arithmetic, physical science, and life science. Field trips may be required. Prerequisite: ENG* 101 with a grade of "C" or better or with concurrency.

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. Prerequisite: ENG* 101 with a grade of "C" or better or with concurrency.

ECE* 176 HEALTH, SAFETY AND NUTRITION

3 semester hours

This course provides students with the 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. Prerequisite: ENG* 101 with a grade of "C" or better.

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 twelve hours of observation (in an instructor approved center) in order to receive credit. Prerequisite: ENG* 101 with a grade of "C" or better or with concurrency.

ECE* 206 ADMINISTRATION & SUPERVISION OF EARLY CHILDHOOD PROGRAMS

3 semester hours

This course 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. The goal of this course is to provide the student with guidelines for a career in a nurturing home day care and/or for establishing a child care center. This course requires twelve (12) hours of observation. Field trips may be required. Prerequisites: ECE* 101, ENG* 101 and at least one other ECE* course all with a grade of "C" or better.

ECE* 210 OBSERVATION, PARTICIPATION & SEMINAR

3 semester hours

This course is designed to increase objectivity in observing and interpreting children's behavior, and increases the awareness of normal patterns of behavior. Observation and participation placements will be chosen by the instructor to gain experience and competency in working with young children. In addition to attending a weekly seminar, the student will observe and participate in an approved center for two (2) hours per week. Weekly seminars sessions with the instructor will be held to discuss and plan for the children's learning needs. Prerequisites: ECE* 101, ENG* 101 and at least one other ECE course all with a grade of "C" or better. May be taken concurrently with ECE* 290.

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 pre-kindergarten 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. Prerequisites: ECE* 101, ECE* 210 and ENG* 101 all with a grade of "C" or better. May be taken concurrently with ECE 291*.

ECE* 231 EARLY LANGUAGE & LITERACY

DEVELOPMENT

3 semester hours

This course explores principles of language development in the young child. With an 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 may be required. Prerequisites: ECE* 101, ENG* 101 and at least one other curriculum course all with a grade of "C" or better.

ECE* 290 STUDENT TEACHING I

3 semester hours

This course is a supervised observation and participation in the teaching experience. Students are provided with eight hours a week of clinical experience. Weekly seminars are scheduled for discussion. Field trips may be 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. This course requires fingerprinting and medical evaluation at the student's expense. Prerequisites: ECE* 101, ENG* 101, ENG* 102 and at least one other ECE* course all with a grade of "C" or better. ECE* 210 should be taken concurrently with ECE* 290.

ECE* 291 STUDENT TEACHING II

3 semester hours

This is a continuation of Student Teaching I. A student work experience of 120 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 objectively 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. Eight (8) hours per week is 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. This course requires fingerprinting and medical evaluation at the student's expense. Prerequisites: ECE* 101, ECE* 290, ENG* 101, ENG* 102 and at least one other ECE* course all with a grade of "C" or better. ECE 222 should be taken concurrently with ECE 291.

ECONOMICS

ECN* 101 PRINCIPLES OF MACROECONOMICS

3 semester hours

Macroeconomics is the study of the general state of a nation's economy and the degree to which the economy efficiently and effectively deploys raw materials, labor and capital resources to expand its capacity for producing goods and services. 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: Eligibility for ENG* 101 and MAT* 075 with a grade of "C" or better.

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 with a grade of "C" or better.

ENGLISH

ENG* 033 FOUNDATIONS OF ENGLISH

6 semester hours

The course will focus on basic reading and writing skills for a college student. It will teach the writing of an introduction and conclusion, the creation of paragraphs, and the structure of an essay. The student will use the writing mechanics of grammar, punctuation, and spelling to write a good essay. The course will improve reading comprehension skills, vocabulary, and study skills for college-level reading. Prerequisite: Eligibility based on placement test scores. Does not fulfill degree requirements.

ENG* 085 ACADEMIC READING/WRITING

6 semester hours

The course will combine critical reading and writing skills. Students will have the opportunity to explore, respond, analyze, synthesize, and evaluate course texts. Students will produce a copious amount of written work: responses, essays, papers, and peer reviews. Prerequisite: ENG* 033 with a grade of "C-" or better or satisfactory placement test scores. Does not fulfill degree requirements.

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. Writing assignments will be connected to the course readings rather than covering personal topics. This course is meant to provide an intensive

preparation for ENG* 101. Prerequisites: Satisfactory scores on placement test. Does not fulfill degree requirements.

ENG* 101 COMPOSITION

3 semester hours

An introduction to the principles of effective composition. The course focuses on expository rather than personal writing. Successful completion of a research paper is required. Practice in writing essays based on analysis of student and professional works. Prerequisite: ENG* 085 or ENG* 093 with a grade of "C-" or better or satisfactory placement test scores.

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: 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. Prerequisite: ENG* 101 with a grade of "C-" or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

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 and writing essays. Prerequisite: ENG* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

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. Prerequisite: ENG* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of "C-" or better or consent of instructor.

ENG* 224 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 with a grade of "C-" or better or consent of instructor.

ENG* 229 AMERICAN STUDIES

3 credits

This seminar will examine the historical and literary definitions of what it means to be an American. Through historical documents, novels, short stories, and other printed sources, students will investigate how various events and ideas intertwined to define important aspects of American

culture. The class will be run as a seminar with emphasis placed on individual reading and class discussion. Students will be responsible for class presentation on several topics. Prerequisite: ENG* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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. Prerequisite: ENG* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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. Prerequisite: ENG* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

ENG* 260 WOMEN’S LITERATURE I

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 modern in their themes and writing styles. Prerequisite: ENG* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

ENG* 262 WOMEN’S LITERATURE II

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* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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* 101 and ENG* 102 both with a grade of “C-” or better 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 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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 with a grade of “C-” or better or consent of instructor.

ENG* 298 SPECIAL TOPICS IN LITERATURE OR WRITING

3 semester hours

This course gives students the opportunity to explore a more advanced topic in one area of literature or writing in greater depth. Topic will vary from semester to semester. See course descriptions for additional details. Prerequisite: ENG* 101 and ENG* 102 both with a grade of “C-” or better or consent of instructor.

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 astronomical history of the Earth, plate tectonics, earthquakes, volcanoes, mountain building, erosional forces, movement of the plates (plate tectonics). Other topics are atmospheric processes and trends, 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. The use of computers and BlackBoard are integral aspects of this course. Prerequisites: Eligibility for ENG* 101.

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. General descriptions are emphasized rather than technical explanations. Off-site outdoor field trips are required. The use of computers and BlackBoard are integral aspects of this course. Prerequisites: Eligibility for ENG* 101.

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 examine natural systems, population, global and regional issues, resources, pollution, solutions, and attitudes, amongst other current and historical topics. The use of computers and BlackBoard are integral aspects of this course. Prerequisites: Eligibility for ENG* 101.

GEOGRAPHY

GEO* 101 INTRODUCTION TO GEOGRAPHY

3 semester hours

Introduces basic principles, concepts, and methods of modern geography. Focuses on the physical environment and climate and their relationship to human settlement patterns, as well as the interrelationship between place and self. Prerequisite: ENG* 101 with a "C-" or better or with concurrency.

GEO* 102 INTRODUCTION TO HUMAN GEOGRAPHY

3 semester hours

The study of human activity on the Earth's surface. Takes an interdisciplinary look at human population growth and decline, culture, politics, agriculture, economics, and settlement patterns as they apply to different geographic areas around the Globe. Exposes students to the systematic study of patterns and processes that have shaped human understandings, use, and alterations of the Earth's surface.

Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students learn about the methods and tools geographers use in their science and practice. Students will complete weekly computer-based and hands-on lab activities. Students will become better informed citizens in a globalizing world. Prerequisite: 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. Prerequisite: ENG* 101 with a grade of "C-" or better or with concurrency.

GERMAN

These courses are 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.

GER* 101 ELEMENTARY GERMAN I

3 semester hours

Prerequisite: Eligible for ENG* 101.

GER* 102 ELEMENTARY GERMAN II

3 semester hours

Prerequisite: GER* 101 with a "C-" or better.

GRAPHIC DESIGN

GRA* 151 GRAPHIC DESIGN I

3 semester hours (6 studio 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* 227 INTERACTIVE MEDIA

3 semester hours (6 studio hours)

This course provides an introduction to the principles and processes of interactive design and development using the Macintosh computer platform. It will focus on the look and feel of interactive documents as well as the principles of aesthetics in regard to online information. All aspects of interactive media will be learned including; motion graphics, time based media, type for the internet, navigation, action scripting, page layout and publishing on the web. Online culture and the use of the internet in society will also be discussed. Prerequisites: GRA* 151 and GRA* 252 both with a grade of "C" or better or consent of the instructor.

GRA* 252 GRAPHIC DESIGN II

3 semester hours (6 studio 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 with a grade of "C" or better.

GRA* 260 WEB DESIGN

3 semester hours (6 studio hours)

This course provides an introduction to the principles and processes of online design and development using the Macintosh computer platform. It will focus on the look and feel of sites as well and the principles of aesthetic layout and navigation. All aspects of web design will be learned including: HTML, CSS, digital image preparation, site maps, page layout, navigation, online type techniques and the inclusion of media rich elements such as digital video. Industry standards, ADA accessibility, online culture and the use of the internet in relation to society will also be discussed. Prerequisites: GRA* 151 and GRA* 252 both with a grade of "C" or better or consent of the instructor.

GRA* 291 GRAPHIC DESIGN PORTFOLIO

3 semester hours (6 studio 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 all with a grade of "C" or better.

HEALTH CAREERS

HLT* 103 INVESTIGATIONS IN HEALTH CAREERS

3 semester hours

This course is designed to assist traditional and nontraditional 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 & PERSONAL WELLNESS

HPW 030 LIFE & CAREER PLANNING

1 semester hour

This course is designed to provide students with the skills needed to develop a lifestyle plan for their future. Individu-

al and group assessment exercises, discussions, and written assignments will be used to help students to increase their self-awareness and make appropriate plans.

HPW 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.

HEALTH & PHYSICAL EDUCATION

HPE* 101 through 300 PHYSICAL ACTIVITIES

1 semester hour each (class times and requirements vary)
HPE courses include individual fitness programs, organized group classes, and competitive activities for students of all abilities and interests. HPE courses may be taken in multiple semesters.

HPE* 112 AQUACIZE

1 semester hour

Aquacize is a structured, hour-long water fitness class for adults with aerobic, strength building, and endurance components. This fitness class uses low-stress water resistance for a stimulating and safe workout. Water walking will also be incorporated. Aquacize may be taken only for a Pass/Fail grade, or on an Audit (non-grade) basis. This off-campus course is offered in special partnership with the Northwest YMCA, with branches in Torrington, Winsted, and Canaan. Students must meet specified attendance requirements in order to earn a Passing grade.

HPE* 127 TOTAL FITNESS

1 semester hour

This off-campus course is offered in special partnership with several local health and fitness centers. Students who enroll in this course receive access to the full array of health and wellness programs that are typically included with a facility membership at one of these providers. Activities include self-paced strength training circuits, free weights, cardio machines, aerobic workouts, and instructor-led group fitness classes. Some facilities may also offer open swimming times and aerobic sports such as racquetball and basketball. Not included are any specialty health classes wherein the provider requires additional registration fees (i.e., weight loss programs, personal training, swimming lessons, CPR, First Aid, etc.). This class may be taken only for a Pass/Fail grade, or on an Audit (non-grade) basis. This off-campus course is offered in special partnership with Energy Fitness in Torrington, Nautilus Plus in Torrington, and the Northwest YMCA with branches in Torrington, Winsted, and Canaan. Students must meet specified attendance requirements in order to earn a Passing grade.

HPE* 261 YOGA

1 semester hour

This yoga course will be an integrative approach to yoga implementing all of the elements necessary to successfully complete a yoga practice or take it to another level. This class may be taken only for a Pass/Fail grade, or on an Audit (non-grade) basis. Students must meet specified attendance requirements in order to earn a Passing grade.

HPE* 274 ZUMBA

1 semester hour

This course, taught by a licensed Zumba® instructor, combines high energy and motivating music with unique moves and combinations that allow participants to exercise with no worries. Zumba® combines traditional Latin dance styles including salsa, mambo, cha-cha, cumbia and merengue, as well as hip hop and belly dancing moves. The routines feature aerobic fitness interval training with a combination of fast and slow rhythms that tone and sculpt the body. By focusing on interval training, classes seek to burn calories without exhausting participants with a high impact pace. Zumba® is based on the theory that a work out should be fun and easy to do. This allows participants to stick to a fitness program and achieve long-term benefits that are good for both the body and mind. This class may be taken only for a Pass/Fail grade, or on an Audit (non-grade) basis. Students must meet specified attendance requirements in order to earn a Passing grade.

HPE* 281 INDOOR CLIMBING

1 semester hour

Students will learn the basics of indoor wall climbing which includes, but is not limited to, safely using climbing equipment presented, the basics of indoor climbing, proper conduct on and around the climbing wall, and team belay on a climbing wall. Students should wear comfortable clothing and shoes that are appropriate for climbing (no flip-flops or open-toed shoes).

HPE* 283 OUTDOOR CLIMBING

1 semester hour

Explore rock climbing outdoors in this beginner's course focused on basic technique, safety and the connection of climbing with overall well-being. This course functions around personal goal setting and general participation. Grading is not based on how far up students climb or any other measurement of physical ability/agility. The only physical requirement is that students be able to hike 20 minutes on moderate terrain. An orientation session will be held on campus, followed by three all-day climbing trips typically scheduled on Saturdays. Off-campus classes will require students to drive or car-pool to climbing locations in central and western Connecticut, and hike into the climbing area. Individuals with concerns about the physical nature of the class and their ability are encouraged to consult with the instructor prior to registering.

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: Eligible for ENG* 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 nation states and institutions. Prerequisite: Eligible for ENG* 101.

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 threatened to tear it apart. Prerequisites: ENG* 101 with a grade of "C-" or better or with concurrency.

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* 101 with a grade of "C-" or better or with concurrency.

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* 101 with a grade of "C-" or better or with concurrency.

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* 101 with a grade of "C-" or better or with concurrency.

HIS 229* TOPICS IN AMERICAN STUDIES

3 credits

This course will examine the historical and literary definitions of what it means to be an American. Through historical documents, novels, short stories, and other sources, students will investigate how various events and ideas intertwined to define important aspects of American culture.

Emphasis will be placed on individual readings and class discussion. Prerequisite: ENG* 101 with a "C-" or better.

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* 101 with a grade of "C-" or better or with concurrency.

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: ENG* 101 with a grade of "C-" or better or with concurrency, previous course work in history, and consent of instructor.

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. Prerequisite: Eligibility for ENG* 101.

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 all with a grade of "C" or better.

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 both with a grade of "C" or better.

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. Prerequisite: HSE* 202 and 203 both with a grade of "C" or better.

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 125 hours is required. Weekly seminars to review work experiences and discuss problems and procedures. Prerequisite: HSE* 203 and PSY* 245 or concurrently with permission from instructor.

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 125 hours is required. Weekly seminars to review work experiences and discuss problems and procedures. Prerequisite: HSE* 203 and PSY* 245 or concurrently with permission from instructor.

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* 113 INTERPRETING I: CONSECUTIVE & TRANSLITERATING

4 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/transliterating format. Additionally two hours of service learning in the hearing community is required to enhance cultural identity. Prerequisites: ASL* 205, INT* 103, INT* 121.

INT* 114 INTERPRETING II: SIMULTANEOUS & TRANSLITERATING

4 semester hours

Students are introduced to English-to-ASL and ASL-to-English interpreting in the simultaneous mode. This course will develop the interpreting and transliterating skills needed to process a continuous message from the Source Language to the Target Language. Expressive and receptive skills will continue to be developed to assist students in producing or receiving messages in signed English. 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* 113.

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* 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* 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* 242 INTERPRETING PRACTICUM & SEMINAR

4 semester hours

The student will complete at least one hundred (100) hours of simulated or practical work experience in supervised settings to conform with state laws. This course will also 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. Prerequisites: INT* 212 and 231 Corequisites: INT* 214, 216, 230, and consent of instructor.

MATHEMATICS

MAT* 075 PRE-ALGEBRA: 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, basic geometry (perimeter, area, and volume), negative numbers, and an introduction to Algebra. *Credit does not fulfill degree requirements and is not transferable outside the Connecticut Community College system.*

MAT* 085 PRE-ALGEBRA/NUMBER SENSE/ GEOMETRY & ELEMENTARY ALGEBRA

6 semester hours

A rigorous and accelerated combination of Pre-Algebra and beginning Algebra courses emphasizing computational, problem solving, and analytical reasoning skills with an emphasis on step-by-step procedure. Topics covered: whole numbers, fractions, decimals, ratio & proportion, percent, measurement, calculator use, basic geometry (perimeter, area, and volume), negative numbers, simplifying algebraic expressions, linear equations and inequalities, graphing, systems of linear equations, polynomials and rational expressions, equations involving fractions (including algebraic fractions), exponents (including scientific notation), radicals, quadratic equations, and applications. *Credit does not fulfill degree requirements and is not transferable outside the Connecticut Community College system.* Prerequisite: MAT* 075 with a "C" or better, or satisfactory scores on the math placement test.

MAT* 095 ELEMENTARY ALGEBRA FOUNDATIONS

3 semester hours

A rigorous beginning algebra course involving the following topics: 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 fulfill degree requirements and is not transferable outside the Connecticut Community College system.* Prerequisite: MAT* 075 with a "C" or better, or satisfactory scores on the math placement test.

MAT* 135 TOPICS IN CONTEMPORARY MATH

3 semester hours

This course is a survey of a wide variety of math topics (problem solving, set theory, logic, algebra, geometry, consumer math, probability, and statistics). It fulfills the mathematics requirement in some degree programs at NCCC. *Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your*

math requirements while at Northwestern. MAT 135 typically transfers as a general elective, not as a math course.* Prerequisite: A grade of "C" or better in MAT* 085 or MAT* 095, or satisfactory scores on the math placement test.

MAT* 137 INTERMEDIATE ALGEBRA

3 semester hours

This course is an extremely rigorous course in traditional Intermediate Algebra 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, and applications. *This course fulfills graduation requirements in many degree programs at NCCC. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern. MAT* 137 typically transfers as a general elective, not as a math course.* Prerequisite: A grade of "C" or better in MAT* 085 or MAT* 095 ("B-" or better is strongly recommended), or satisfactory scores on the math placement tests, SAT, or ACT.

MAT* 146 MATH FOR THE LIBERAL ARTS

3 semester hours

A practical course in mathematics involving a wide range of topics: critical thinking, problem solving, set theory, logic, geometry, consumer math, probability, statistics, and voting theory. *This course fulfills graduation requirements at Northwestern, and will transfer to a Bachelor's Degree program as a mathematics course. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern.* Prerequisite: MAT* 137 with a "C" or better, or satisfactory scores on the math placement tests, SAT, or ACT.

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. *This course fulfills graduation requirements at Northwestern, and will transfer to a Bachelor's Degree program as a mathematics course. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern.* Prerequisite: MAT* 137 with a "C" or better, or satisfactory scores on the math placement tests, SAT, or ACT.

MAT* 186 PRECALCULUS

4 semester hours

An exploration of functions and their graphs. Polynomial, rational, exponential, logarithmic, and trigonometric functions and their behaviors in a two-dimensional graphing system will be examined and used to model real life situations. Students will also be introduced the calculation of limits and derivatives. The use of a graphing calculator is an integral part of this course. *This course fulfills graduation requirements at Northwestern, and will transfer to a Bachelor's Degree program as a mathematics course. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern.* Prerequisite: MAT* 137 with a "C" or better, or satisfactory scores on the math placement tests, SAT, or ACT.

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. *This course fulfills graduation requirements at Northwestern, and will transfer to a Bachelor's Degree program as a mathematics course. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern.* Prerequisite: MAT* 186 with a "C" or better, or satisfactory scores on the math placement tests, SAT, or ACT.

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. *This course fulfills graduation requirements at Northwestern, and will transfer to a Bachelor's Degree program as a mathematics course. Check with your Academic Advisor if you intend to transfer to a 4-year college or university and wish to complete your math requirements while at Northwestern.* Prerequisite: MAT* 254 with a "C" or better, or satisfactory scores on the math placement tests, SAT, or ACT.

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.

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. Prerequisites: MED* 111 and MED* 125. Both with a grade of "C" or better.

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.

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. Prerequisite: MED* 125 with a grade of "C" or better or with concurrency.

MED* 215 ADVANCED MEDICAL CODING

4 semester hours

This program covers advanced ICD and CPT medical coding procedures and is designed to help students meet the challenge of today's changing standards while learning and improving their coding skills. Included in the course are in-depth coding content and practice in CPT, ICD-9-CM (Volumes 1 & 2), and HCPCS Level II coding, along with information on the Correct Coding Initiative (CCI), compliance and reimbursement issues, E&M guidelines, and an Introduction to ICD-10. This course is a "practicum" and includes practice "cases" in which the student must complete the billing and coding cycle from beginning to end. This course increases the coder's level of competency as you experience how to extract information from case studies. You will continue to accurately select codes and correlate procedures and diagnoses appropriate to the

type of facility, as well as sequence codes in the proper order for optimum reimbursement.

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. Prerequisites: MED* 111, MED* 125, CSA* 105 Corequisites: 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.

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 with a grade of "C" or better or with concurrency and BIO* 110 with a grade of "C" or better or BIO* 127 (or BIO* 115 if taken prior to Fall 2012) with a grade of "C-" or better.

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.

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.

MUSIC

MUS* 101 MUSIC HIS & APPRECIATION I

3 semester hours

Study of music from the Middle Ages to the present, using lectures, recordings, and outside listening assignments. Previous training not required. A field trip may be required.

MUS* 109 HISTORY OF MUSIC IN FILM

3 semester hours

Study of the use of music in American and European film from the late 19th century to the present. Learning materials include videos, CD's, photo documentation, lectures and class projects. Prerequisite: ENG* 085 or ENG* 093 or with concurrency or Eligibility for ENG* 101.

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, ENG* 085 or eligibility for higher level English or consent of the instructor. Prerequisite: ENG* 085 or ENG* 093 or with concurrency or Eligibility for ENG* 101 or consent of instructor.

MUS* 137 History and Appreciation of Jazz

3 semester hours

This course is a historical study of jazz from its early roots to the players today. Students will learn about the evolution of jazz and how it has been influenced by technology and society. Students will examine the artists and music in jazz today, and the role of jazz in the past. Various audio and video performances of jazz musicians and ensembles will be analyzed for their effects on this genre of music. Students will attend and critique live performances, and talk with the performing musicians when possible. Topics covered include the New Orleans era, the Big Band era, Swing, Bebop and Hard Bop, the Bossa Nova era, and Jazz today.

NURSING

NUR* 101 INTRODUCTION TO NURSING PRACTICE

8 semester hours

Classroom: 60 hours

Clinical/College Laboratory: 180 hours

The student will focus on concepts basic to nursing practice. Emphasis is placed on application of the nursing process, communication, and skill acquisition. Clinical and laboratory experiences offer opportunities to integrate theoretical principles and demonstrate caring and competence in beginning professional role development. Prerequisites: ENG* 101, BIO* 211, and BIO* 212. Corequisites: BIO* 235 and PSY* 111.

NUR* 102 FAMILY HEALTH NURSING

8 semester hours

Classroom: 60 hours

Clinical: 180 hours

The student will focus on issues affecting the family, including childbearing, childrearing, geriatric care and intermediate health care needs of limited duration. The medical surgical health problems include care for the client in the perioperative period and the client experiencing orthopedic and simple genitourinary conditions. The course addresses several psychiatric disorders: anxiety and cognitive disorders, common child and adolescent psychiatric disorders. The student will have clinical rotations that provide experience caring for the childbearing family as well as caring for medical-surgical clients across the lifespan. Prerequisite: NUR* 101, PSY* 111, and BIO* 235. Corequisite: NUR* 103, PSY* 201, and SOC* 101.

NUR* 103 PHARMACOLOGY FOR FAMILIES ACROSS THE LIFESPAN

1 semester hour

Classroom: 15 hours

The student will focus on the safe use, pharmacological principles, indications and nursing implications related to drug therapy when caring for individuals and families. Emphasis will be placed on medications used with perinatal, neonatal, pediatric, geriatric and peri-operative clients. The course will stress the general characteristics of selected medications and will include indications, pharmacokinetics, side effects, adverse effects, contraindications, administration, nursing implications across the lifespan, client education and relationship to prior learning. Prerequisite: NUR* 101. Corequisite: NUR* 102

NUR* 108 PERSPECTIVES IN NURSING

3 semester hours

This course will enable students to assess their potential to complete the Connecticut Community College Nursing Program (CT-CCNP), and provide them with an introduction to nursing roles, skills and responsibilities. The course will emphasize defining the role of the nurse and exploring

baseline skills such as problem solving, interpersonal relations, mathematical calculations and basic medical terminology. Students will be introduced to information literacy skills within the science and art of nursing, critical thinking, and the nursing process as applied to interactions with people of all ages and cultures. Students will also compare and contrast varying health care and nursing roles. This course is most appropriate for degree students planning to enroll in Nursing or any of the health career programs; however, Liberal Arts and General Studies students are also eligible. This elective course is exploratory in nature. It fulfills general college graduation requirements but does NOT fulfill graduation requirements of the CT-CCNP Nursing Program. Prerequisites: MAT 095, ENG 063/073 or ENG 085 or ENG 093, or satisfactory placement test scores.

NUR* 130 LPN TO RN TRANSITION I

1 semester hour

Clinical: 45 hours (includes clinical and on campus laboratory distribution)

This course is the final component of the Connecticut League for Nursing LPN to RN Articulation Plan for the Connecticut Community Colleges Nursing Program (CT-CCNP) which prepares LPNs to enter the CT-CCNP in the second year of study. Students enrolling in this course have been accepted for admission into the (CT-CCNP) and have chosen the option to enter the third semester. Prerequisites: Connecticut Community Colleges BIO* 211, BIO* 212, ENG* 101, BIO* 235, PSY* 111, PSY* 201, and SOC* 101. Charter Oak State College NUR* 190.

NUR* 201 NURSING CARE OF INDIVIDUALS AND FAMILIES I

9 semester hours

Classroom: 60 hours

Clinical/College Laboratory: 225 hours

The student will focus on holistic care of individuals and families across the lifespan with a variety of health care needs. The needs of clients experiencing endocrine, respiratory, gastrointestinal, cardiovascular conditions and selected mental health disorders are examined. Bioterrorism as a health care issue will be addressed. Clinical laboratory experience provides the student an opportunity to administer care to a diverse population of clients in a variety of acute care and community health care settings. The student will utilize critical thinking, caring, professionalism and communication skills in the care of the client. Emphasis is placed on provision of safe and competent care and development of the professional role as a member of a multidisciplinary health care team. Over the semester, the student is increasingly challenged in the clinical area with more complex client assignments. Prerequisites: NUR* 102, NUR* 103, PSY* 201, and SOC* 101. Corequisites: NUR* 202 and ENG 102.

NUR* 202 PHARMACOLOGY FOR INDIVIDUALS AND FAMILIES WITH INTERMEDIATE HEALTH-CARE NEEDS

1 semester hour

Hours: 15 hours

The student will focus on pharmacologic principles related to the care of individuals and families across the lifespan with intermediate health care needs. Emphasis will be placed on medications used for clients who have endocrine, gastrointestinal, respiratory, cardiovascular, auto-immune, and psychiatric conditions and clients who are survivors of bioterrorism. Prerequisite: NUR* 103. Corequisite: NUR* 201 and ENG* 102

NUR 203 NURSING CARE OF INDIVIDUALS AND FAMILIES II

8 semester hours

Classroom: 45 hours

Clinical: 225 hours

The student will focus on the holistic care of individuals, families, and groups with complex health care needs. The student will incorporate critical thinking, caring behaviors, professionalism, and communication skills when providing nursing care in a variety of acute, long-term and/or community settings. The student will have an opportunity to manage a multi-client assignment with an emphasis on safe and competent practice. An observational experience with a visiting nurse agency, a dialysis unit and/or a cancer center will be provided. Prerequisites: NUR* 201 and NUR* 202. Corequisites: NUR* 204 and NUR* 205.

NUR* 204 PHARMACOLOGY FOR INDIVIDUALS, FAMILIES AND GROUPS WITH COMPLEX HEALTH CARE NEEDS

1 semester hour

Classroom: 15 hours

The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and clients who choose an alternative therapy. Prerequisite: NUR* 202. Corequisite: NUR* 203 and NUR* 205.

NUR* 205 NURSING MANAGEMENT AND TRENDS

2 semester hours

Classroom: 30 hours

The student will explore the basic principles of management, leadership and collaborative relationships as they relate to providing safe and competent care. The focus is on the utilization of critical thinking skills to make decisions, priority setting, delegation, legal parameters of nursing practice and ethical issues. The student will expand the concept of caring to the profession of nursing through collegial and interdisciplinary communication. The course facilitates the transition of the student into the profession

and his/her role in contemporary nursing practice. Prerequisite: NUR* 101, NUR* 102, NUR* 103, NUR* 201, and NUR* 202. Corequisite: NUR* 203, and NUR* 204.

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: Eligibility for ENG* 101.

PHL* 111 ETHICS

3 semester hours

Critically examines different ethical theories and discusses significant contemporary issues such as abortion, nuclear war, suicide, capital punishment, euthanasia, sexual ethics, and aid for the needy. Prerequisites: Eligibility for ENG* 101.

PHL* 112 MEDICAL ETHICS

3 semester hours

In this course the student will investigate ethics, bioethics and current laws governing professional healthcare providers' and health care workers' actions and explore the history, philosophy and ethics impacting healthcare decisions. This course is designed to introduce students to the ethical principles and legalities influencing healthcare. Using case studies to explore the complex issues involved in medical treatment and research, students will discuss the history and philosophies which contributed to the development of ethical codes of practice in the medical professions. The ethical, legal and philosophical issues impacting medicine such as truth-telling, experimentation, paternalism, abortion, euthanasia, allocation of sparse resources and the obligations of professional conduct that impact personal beliefs will be examined. Pre-requisite: Eligibility for ENG* 101.

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. Class discussion and writing assignments emphasize rational philosophical analysis. Prerequisite: ENG* 101.

PHL* 151 WORLD RELIGIONS

3 semester hours

Considers the religious systems of ancient Egypt and Greece as well as Zoroastrianism, Judaism, Christianity, Islam, and the great Eastern religious systems. Addresses the idea that religions differ not because they give different answers to basic questions, but because they do not agree on which questions are basic. Prerequisites: Eligibility for ENG* 101.

PHL 156 ISLAM IN THE CONTEMPORARY WORLD

3 semester hours

This course will examine the Islamic faith and the contemporary milieu of Islamic belief and practice. A general historical survey of the Islamic tradition will be undertaken to be able to clearly focus on Islam in our modern context and clarify the ways the Muslim world reckons with global culture, politics and social progress in the 21st century. Prerequisite: Eligibility for ENG* 101.

PHL* 178 MODERN PHILOSOPHY

3 semester hours

Looks at the progress of modern philosophical thinking, its modifications and various rejections of long-standing premises. Acknowledges feminism as well as other views that represent modern thought and how it is manifested in aspects of today's living. Prerequisite/Corequisite: Eligibility for ENG* 101 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 better.

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 better, 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 better, 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 better.

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 better.

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 better.

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 better.

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 better.

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 better.

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. Prerequisites: MAT* 137 with a grade of "C" or better, or satisfactory scores on the math placement test, SAT, or ACT.

PHY* 121 GENERAL PHYSICS I

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

A college algebra-based general physics course for the science/technology or engineering technology major or the engineering major that may lack sufficient conceptual understanding physics. Subject areas include applied mathematical processes and problems in kinematics, dynamics, statics, energy, heat and thermodynamics, and phases of matter. The use of cognitive and mathematical skills employed by scientists and engineers will also be a central focus of this course. The use of computers,

analysis software, computer interfaces and sensors will be an integral part of this course. Prerequisite/Co-Requisite: MAT* 186, or completion of PHY* 110 with a grade of "C" or better.

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 with a grade of "C" or better.

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 cognitive and mathematical skills employed by scientists and engineers will also be a central focus of this course. The use of computers, analysis software, computer interfaces and sensors will be an integral part of this course. Prerequisite: MAT* 254 with a grade of "C" or better.

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: PHY* 221 with a grade of "C" or better.

POLITICAL SCIENCE

POL* 111 AMERICAN GOVERNMENT

3 semester hours

Surveys the structure, functions, services, and problems inherent in federal governments, as well as factors influencing political action. Students apply the principles of government to modern American life. Prerequisites: Eligibility for ENG* 101.

POL* 122 THE POLITICS OF SOCIAL WELFARE

3 semester hours

Review the basic concepts of social welfare and its social, economic, and political roots. Studies the influence of beliefs about the appropriate role of the government in the economy and in people's live on the provision of welfare decision-making and services. Review of basic practices

and procedures of federal and state-level social welfare programs. Prerequisites: Eligibility for ENG* 101.

POL* 216 COMPARATIVE IDEOLOGIES

3 semester hours

A comparative study of modern political ideology: survey of Western and Eastern (Islam and non-Islam) political thought and theory, with emphasis on the development of the nation-state. Prerequisite: HIS* 102 with a grade of "C-" or better and Eligibility for ENG* 101.

POL* 295 POLITICAL SCIENCE INTERNSHIP

6-12 semester hours

A supervised work-study program to provide the student with experience in the Connecticut State Legislature. By application only. Consult Division Director for Liberal Arts, Social, and Behavioral Sciences.

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. Prerequisites: previous course work in political science and consent of instructor.

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. Prerequisite: ENG* 085 or ENG* 095 or either can be taken concurrently or eligibility for ENG* 101.

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, and social influences. This course is a prerequisite for most psychology courses. Prerequisites: ENG* 101 with a grade of "C" or better or with concurrency.

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, and emotion. Per-

sonality, psychological disorders, and forms of therapy are discussed. Prerequisites: ENG* 101 with a grade of "C" or better.

PSY* 201 LIFE SPAN DEVELOPMENT

3 semester hours

This course examines 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 with a grade of "C" or better.

PSY* 204 CHILD AND ADOLESCENT DEVELOPMENT

3 semester hours

This course examines cognitive, physical and socio-emotional growth from conception through adolescence. Emphasis is placed on research and methodology within the field. Prerequisite: PSY* 111 with a grade of "C" or better.

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. Prerequisite: PSY* 111 with a grade of "C" or better.

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 with a grade of "C" or better.

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* 111 with a grade of "B" or better.

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 with a grade of "C" or better.

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 with a grade of "C" or better.

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. Prerequisites: Eligibility for ENG* 085.

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 water pollution, climate change, nutrition, disease, and food systems will be explored. The use of computers and BlackBoard are integral aspects of this course. Prerequisites: Eligibility for ENG* 101.

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

Introduces students to patterns of human behavior and social interaction. Areas of focus include, the nature of social adjustment, personality and the socialization process, formal and informal groups, and institutions. Prerequisites: ENG* 101 with a grade of "C-" or with concurrency.

SOC* 125 VOLUNTEER ORGANIZATION LEADERSHIP

3 semester hours

Through the experiential model, students develop organizational and leadership skills, examine various leadership styles and outcomes. Work with volunteer community and government organizations allows student to apply theories of Group dynamics. Projects are conducted through campus organizations. Prerequisites: Eligibility for ENG* 101.

SOC* 201 CONTEMPORARY SOCIAL ISSUES

3 semester hours

Study selected problems in American society, including causes, effects on the individual, and approaches to resolution. Prerequisite: SOC* 101 with a grade of "C" or better or consent of instructor and ENG* 101 with a grade of "C" or better.

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: Eligibility for ENG* 101.

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: Eligibility for ENG* 101.

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 with a grade of "C-" or better and consent of instructor.

SPANISH

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

3 semester hours each

Designed to give beginning students early and successful experiences with reading, speaking, and writing Spanish. Prerequisite: for SPA* 102: SPA* 101 with a "C-" or better.

SPA* 120 BASIC SPANISH FOR HEALTH PROFESSIONALS

1 semester hour

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.

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

3 semester hours each

Continued practice with reading, speaking, and writing Spanish. Prerequisite for SPA* 201: SPA* 102 with a grade of "C-" or better. Prerequisite for SPA* 202: SPA* 201 with a grade of "C-" or better.

THEATER

THR* 125 INTRODUCTION TO TECHNICAL THEATER WITH LAB

4 semester hours

Introduces basic elements of design related to technical stagecraft. This will include lighting, set design, and construction. Working on an actual theater production is required.

THERAPEUTIC RECREATION

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.

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.

RLS* 215 RECREATIONAL LEADERSHIP & SUPERVISION

3 semester hours

Application of theoretical and practical leadership methods and skills in park and recreation services. Prerequisite: RLS* 121 with a grade of "C" or better.

RLS* 219 FIELD WORK IN REC LEADERSHIP

3 semester hours

Required field internship for second-year students enrolled in the Therapeutic Recreation certificate or associate degree program. Prerequisites: RLS* 121 and RLS* 122 both with a grade of "C" or better. Students must meet with the program advisor prior to enrolling in this course.

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. Prerequisites: RLS* 121 and RLS* 122 both with a grade of "C" or better.

VETERINARY TECHNOLOGY

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: Admission to Vet Tech Program; BIO* 121 (or BIO* 115 if taken prior to Fall 2012), MAT* 137, CHE* 111, and CSA* 105 all with a grade of "C" or better and eligibility for ENG* 101. 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: Admission to Vet Tech Program; BIO* 121 (or BIO 115 prior to Fall 2012), MAT* 137, CHE* 111, and CSA* 105 all with a grade of "C" or better and eligibility for ENG* 101. 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: Admission to Vet Tech Program; BIO* 121 (or BIO 115 if taken prior to Fall 2012), MAT* 137, CHE* 111, and CSA* 105 all with a grade of "C" or better and eligibility for ENG* 101. 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/3 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 physiol-

ogy with clinical veterinary medical and surgical practice. Prerequisite: Admission to Vet Tech Program; BIO* 121 (or BIO* 115 if taken prior to Fall 2012), CHE* 111 and CSA* 105.

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. Lecture incorporates heavy use of PowerPoint images of blood smears, urine, and cytology to aid in identification of cells and structures in the laboratory. The primary source of blood and urine samples for laboratory will be surgery patients from VET*230 L, Anesthesia and Surgical Nursing Lab. In addition, field trips may 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

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*250 PRINCIPLES OF PHARMACOLOGY – VET TECH

3 semester hours (lecture/lab)
This course provides an overview of the more commonly prescribed veterinary medications as they relate to specific body systems. Topics include practices governing the use, dispensing, administration, and storage of pharmaceuticals as well as prevention and treatment of parasites. Terminology relating to drugs and administration of drugs is emphasized. Spring (Formerly MED* 250)

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.

VET* 298 SPECIAL TOPICS IN VETERINARY TECHNOLOGY

1 - 3 semester hours
This course will introduce students to a wide range of topics in a variety of animal-related fields, such as veterinary health care, ancillary animal businesses (grooming, boarding, etc.), animal science, and other current topics in the field of veterinary technology. The course will be open to students in the veterinary technology program, and as a free elective for other students.

