Course Descriptions

This symbol indicates the course is also available online. Availability may change each semester so please look for updates online by visiting www.sunyocc.edu

Anthropology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM A385; (315) 498-2301.

ANT 151 Introduction to Physical Anthropology (3) General introduction with emphasis on causes and evolution of human similarities and differences - both culturally and biologically. Traces human evolution from primate beginnings to the development of cultural man (Homo sapiens).

ANT 152 Introduction to Cultural Anthropology (3) An introduction to the cultural and social systems that humans have devised over time and space, using a comparative and evolutionary perspective. The focus will be on non-Western societies and their institutions, but some comparisons with modern, industrialized societies will be made.

ANT 160 Poverty, Inequality and Discrimination (3) An interdisciplinary course which studies and distinguishes poverty, discrimination and inequality. Various kinds of inequality are examined: racial, ethnic, religious and systems of inequality based on sex/gender and age. Current statistics are presented and discussed. The history of stratification is examined. Reasons for continuing unequal and unjust systems are examined and analyzed. Other societies which are egalitarian and stratified are compared.

ANT 201 The Anthropology of Marriage & the Family (3) The course will examine marriage and family systems and structures worldwide, with an emphasis on the variations in pre-industrial and non-western societies. A comparison will be made with a case study of the U.S. family.

Architectural Technology

FOR MORE INFORMATION, CONTACT THE ARCHITECTURAL TECHNOLOGY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM 352, (315) 498-2687

ARH 110 Design Studio 1 (4) This is the first of two design studio foundation courses. Students explore elements of design and their relationship in two and three dimensions. Concepts include design vocabulary, design process positive and negative space, hierarchy, proportion symmetry, movement, rhythm, composition and unity. Architectural concepts of space and form, organizations, circulation, scale, structure, volume, fenestration and materials are introduced. Co-requisite: ARH/IND 120 and 154 or Permission of Instructor.

ARH 111 Design Studio 2 (4) This is the second of two design studio foundation courses. Students continue to explore elements of design and their relationships in two and three dimensions. Design concepts and process are discussed in detail. Architectural and interior design concepts of space, organizations, circulation, scale, structure, volume, massing, fenestration and materials are analyzed and discussed. Prerequisite: ARH/IND 110. Co-requisite: ARH/IND 155 or Permission of Instructor.

ARH 120 Drafting Studio 1: Wood Frame (3) This course will develop basic architectural drafting skills (manual). The student will demonstrate an understanding of these skills through the development of a set of architectural drawings for a wood frame house or similar structure. Students will be required to buy basic architectural drafting equipment.

ARH 121 Drafting Studio 2: Masonry (3) Students apply and improve drafting skills by developing architectural working drawings for a small commercial building. Drawing documents include symbol conventions, plans, sections, elevations and details with the emphasis on masonry bearing wall construction. Prerequisite: ARH/IND 120. Co-requisite: ARH 142 and 143 or Permission of Instructor.

ARH 140 Wood Frame Construction (3) This is a lecture course covering the materials and methods of contemporary residential construction. The characteristics, properties, performance and application of exterior and interior materials and systems used in wood frame construction will be discussed.

ARH 142 Commercial Construction I (2) The first course in a two course sequence covering the materials and methods of contemporary commercial construction. This course focuses on sitework, foundations, concrete framing systems, and masonry wall systems made of concrete, clay, and stone. Prerequisite: ARH/IND 140.

ARH 143 Commercial Construction II (2) The second course in a two course sequence covering the materials and methods of contemporary commercial construction. This course focuses on steel framing systems, moisture and thermal protection, glass and windows, cladding and curtainwalls, doors and hardware. Prerequisite: ARH/IND 140.

ARH 154 Graphic Communications I (3) A freehand drawing course designed to help the drafter/designer appreciate forms, texture, composition. Basic instruction in pencil techniques, perspective principles. A basic course designed to help the drafter/designer develop a style of architectural rendering. Co-requisite: ARH 120 or Permission of Department
ARH 155 Graphic Communications II (3) A
continuation of ARH 154 with emphasis on per-
spective drawing and introduction to shades and
shadows. Various media are introduced including
colored pencils and markers. Prerequisite: ARH
154 or Permission of Department.

ARH 215 Design Studio 3 (4) This is the third
design studio for Architecture. Students are ex-
pected to apply knowledge of design concepts
and design process to “real-life” design problems.
Programming, site analysis, context, fenestra-
tion, materials, structure and design development
will be explored. Experimentation with space, form,
light and proportion will be stressed. Significant
trends in architectural and interior design, as prac-
ticed by recent leading architects and designers
will be discussed. Prerequisite: ARH/IND 111 or
Permission of Instructor. Co-requisite: ARH 256
or Permission of Instructor.

ARH 216 Design Studio 4 (4) This is the fourth
design studio for Architecture. This studio is a
continuation of ARH 215 and will require in-
depth analysis of the design problems and higher
expectation for design presentations. Students are
expected to apply knowledge of design concepts
and design process to “real-life” design problems.
Programming, site analysis, context, fenestra-
tion, materials, structure and design development
will be explored. Experimentation with space, form,
light and proportion will be stressed. Significant
trends in architectural and interior design, as prac-
ticed by recent leading architects and designers
will be discussed. Prerequisite: ARH 215.

ARH 222 Drafting Studio 3: Steel Frame (4)
A concentrated continuation of ARH 121 with
emphasis on the production of working drawings
for steel and concrete frame multistory structures.
Prerequisite: ARH 121

ARH 223 Drafting Studio 4: Team Approach
(4) A concentration on sophisticated detailing
employing the team approach. A team of students
will produce a coordinated set of working draw-
ings. The course will include a survey of me-
chanical, electrical HVAC and structural drawings.
Prerequisite: ARH 222

ARH 230 History of Western Architecture I (3)
A survey of western architecture from the Greek
civilization through the Baroque. Emphasis will be
on the study of style by the comparative method,
and on the relation between economic, religious,
political, and sociological conditions and the result-
ant building types, form, and space of each given period and geographical region.

ARH 231 History of Western Architecture II (3)
The completion of the survey of western architec-
ture covering the modern world from the termina-
tion of the Baroque period up through contem-
porary movements both in America and abroad.
Emphasis will be on the study of style by the
comparative method, and on the relation between

ARH 241 Mechanical and Electrical Systems:
An Introduction (3) Introductory survey of me-
chanical and electrical systems for buildings. Top-
ics will include heating, ventilating, air condition-
ing (HVAC), plumbing, fire protection, electrical
toj, and lighting systems for residential and
commercial buildings. Auxiliary electrical systems
such as security, public address, fire detection and
alarm systems will be briefly discussed. Coordina-
tion of these systems with existing architectural
plans will be emphasized. Instruction will involve
case studies of pre-designed buildings. The pri-
mary method of learning and evaluation will be
through student prepared drawings. Prerequisite:
ARH 121.

ARH 242 Environmental Control Systems I
(3) Understanding of man’s comfort requirements
and the design and selection criteria for heating,
ventilating, air conditioning, as well as water
supply and sanitation systems and acoustical
treatments.

ARH 243 Environmental Control Systems II (3)
Design and selection criteria for electrical systems,
lighting, and vertical transportation. Passive solar
principles will be considered. Prerequisite: ARH
242

ARH 250 Principles of Structures (3) Structure
as it affects design. A study of the loading of
structures and the resistance to those loads as they
apply to wood frame and steel frame structures.

ARH 256 Graphic Communications III (3)
An advanced course in perspective rendering.
Students are expected to apply perspective draw-
ing skills acquired in ARH 155 to generate color
renderings of building interiors and exteriors. Stu-
dents taking Architectural Design I are encouraged
to take this course concurrently and to use their
design solutions as a base for required rendering
projects in ARH 256. Prerequisite: ARH 155 or
Permission of Department.

ARH 261 Office Practice (3) A detailed survey
of important aspects of professional practice with
emphasis on legal instruments, specifications, and
cost estimating.

ARH 262 Building Codes (3) A detailed analysis
of the New York State Building Code.

ARH 266 Independent Project (1-6)

ARH 270 Digital Portfolio for Architecture &
Interior Design (1) A hands-on course to cre-
ate a digital portfolio. Students will utilize digital
cameras, scanners, image editing software, and
CD recording software and hardware to produce a
PowerPoint presentation on an autorun CD. Basic
computer literacy is required. Prerequisite: ARH or
IND major, completed 30 credits, or Permission of
Instructor.
ARH 271 Architectural CAD I (3) An introductory course in Architectural CAD (Computer Aided Drafting) utilizing 3D software (including AutoCAD). Topics include basic drawing, editing, and system commands with direct hands on experience. Professional details and drawings will provide the basis for graphic problems and solutions. Prerequisite: ARH/IND 120 or Permission of Department. Co-requisite: ARH/IND 215 or ARH 222 or Permission of Department.

ARH 272 Architectural CAD II (3) An intermediate level course in Architectural CAD (Computer Aided Drafting) utilizing 2-1/2 and 3-D software (AutoCAD). Topics include intermediate drawing, editing, and system commands with direct hands on experience, file management and multi-pen plotting. Professional details and drawings will provide the basis for graphic problems and solutions. Prerequisite: ARH 271 and ARH 222 (grades of B or better or Permission of Department)

ART 101 Drawing I (3) This course concentrates on developing basic drawing skills including perspective, proportion, tone, and composition. Basic mediums such as charcoal, conte, graphite, ink wash, etc. will be used. Subject matter varies and may include still-life, landscape, architectural and figurative elements. Students must achieve a grade of C or better in ART-101, Drawing I in order to continue in ART-102, Drawing II.

ART 102 Drawing II (3) This course refines the basic skills learned in ART-101, Drawing I. Emphasis is placed upon technical proficiency and in-depth exploration of the basic elements of drawing and design. Subject matter will be expanded to include nude model. ART-102 is open to students who have received a C or better in ART-101.

ART 103 Design I (3) A survey and application of the basic principles of 2-dimensional design and composition and an introduction to the design process and its use in visual problem solving. Students will also receive training in the use of drafting tools, measuring systems and methods of producing finished work. Students must achieve a grade of C or better in ART 103 Design I in order to continue in ART 104 Design II. Prerequisite: Art majors only or Permission of Instructor.

ART 104 Design II (3) A continuation and advanced application of the basic 2-dimensional design concepts and processes begun in ART 103. An introduction to basic 3-dimensional concepts. The course includes a cursory examination of career paths in the field of design and important historical design movements. Prerequisite: Student must have achieved a C or better in ART-103.

ART 105 History of Art I (3) Survey of painting, sculpture, and architecture from prehistoric times through the early Renaissance, with a consideration of major societal issues and ideas which may have influenced the development of forms and techniques in the visual arts.

ART 106 History of Art II (3) Continuation of ART 105, from the high Renaissance to the present.

ART 109 Principles of Drawing (3) Introductory course for non-art majors. An exploratory course that analyzes the components of drawing (line, shape, form, value, transition, texture, tension, balance, composition, etc.) Subject matter varies and may include still-life, landscape, architectural and figurative elements.

ART 142 Introduction to Computer Graphics (3) An introduction to graphic design in a digital environment. The course examines industry standard software applications for page layout, illustration, and photo manipulation. Requirement for Graphic Design majors. Prerequisite: Art Major/Permission of Instructor.

ART 152 Color and Concept Development (3) This course is an introduction to the visual thought processes used in the development of creative concepts and ideas, as well as an introduction to color theory and the emotional and spatial behavior of color. Focus is on the conceptual, verbal and technical skills needed to effectively communicate visual ideas. Prerequisite: ART Major or Permission of Instructor.

ART 201 Advanced Drawing and Painting I (3) Advanced studio experience in drawing and the use of a variety of media. Emphasis is on improving technical skills, compositional sophistication and experimentation with new or multimedia techniques. Individual creativity is encouraged through exploration of a variety of subject possibilities. Prerequisite: ART 102 or Permission of Instructor.

ART 202 Advanced Drawing and Painting II (3) Advanced studio experience in drawing and the use of a variety of media. A continuation of Art 201, with a greater emphasis on self-directed individual creative development. The students will be assigned a term project or series of related works to be produced in consultation with the instructor. Further in-depth exploration and refinement of drawing technique and compositional ability will be stressed. Students will participate in group critiques with other students and guest faculty. Prerequisite: ART 201
ART 203 Typography and Layout (3) Basic principles of typographic design and typesetting will be studied along with letterforms, their development and present trends. How to select fonts and create a hierarchy of projects will demonstrate how visual layout and typographic composition can be used to communicate ideas. Requirement for Graphic Design Majors. Prerequisite: Art Major Permission of Instructor.

ART 204 Intermediate Computer Graphics (3) An intermediate level course for students to develop the skills needed to create and manipulate images. The creative process and industry standard software functions are used to develop and edit images to communicate ideas graphically. Requirement for Graphic Design Majors. Prerequisite: Art 142.

ART 205 Figure Drawing I (3) An exploratory drawing course concerned with the human form including the nude model. Emphasis will include the techniques of drawing, use of mediums, and the awareness of anatomical correctness. Skeletal and muscular construction will also be introduced. Prerequisite: ART 101/ART 102 or Permission of Instructor.

ART 206 Figure Drawing II (3) Continuation of Figure Drawing I, with further emphasis on anatomical studies. In addition, the syllabus will stress figure work in the area of design (figures in environments, in landscapes, and as part of graphic composition); and in anatomy, a more in-depth concern with spatial movements, volume, and structures. Prerequisite: ART 205.

ART 211 Introduction to Ceramic Sculpture (3) An introduction to 3-dimensional space, form, scale, surface and image as they relate to the specialty of ceramic sculpture. Related clay forming and firing techniques will be covered as well as historical and contemporary trends. Prerequisite: ART 219 or Permission of Instructor.

ART 212 Ceramics Sculpture II (3) An advanced ceramic sculpture course, drawing on the skills, techniques and understandings explored in ART 211. ART 212 will provide the student with the opportunity to produce a body of complex, related ceramic work. Prerequisite: ART 211 or Permission of Instructor.

ART 213 Painting I (3) A studio course concerned with the study of acrylic and/or oil painting medium and its applications to the various techniques of traditional and non-traditional painting. All techniques discussed and demonstrated will be applied to concentrated studio projects. Prerequisite: ART 101/ART 102 or Permission of Instructor.

ART 214 Painting II (3) Advanced course work in painting with concentrated studio projects and problems involving lighting, spatial and environmental concepts. Students should develop technical understanding of the various components of painting, space, volume, and value, as well as various painting media such as oil, acrylic, watercolor, gauche, encaustic, and graphic design media. Prerequisite: ART 213 or Permission of Instructor.

ART 218 Art in Animation (3) An introduction to the history of animation and hands-on studio experience making a short animated presentation. Students will learn the artistic skills required for computer animation techniques using current animation software.

ART 219 Ceramics I (3) An introduction to hand-building techniques; the exploration of clay as an expressive material through various forming and decorating methods, as well as an introduction to throwing on the potter’s wheel.

ART 220 Ceramics II (3) A continuing exploration of handbuilding and decorating techniques. Prerequisite: ART 219 or Permission of Instructor.

ART 221 Modern Art and Its Backgrounds (3) A semester-long survey of the forms and techniques of late nineteenth and early twentieth century visual arts, with an examination of their relationships to one another, to past art, and to some of the major issues and ideas of their times.

ART 224 Design for Multimedia (3) This course focuses on the aesthetic and organizational skills required for designing interactive multimedia products. The course content includes the integration of the various elements of text, artwork, photographs, sound, and motion. Topics of discussion will include user interface design, interactivity, information mapping and intuitive navigation design. Prerequisite: ART 142 or Permission of Instructor.

ART 225 Watercolor (3) A studio course exploring traditional and non-traditional use of watercolor. Subject matter may include still-life, landscape, the nude figure. Prerequisite: Art majors or Permission of Instructor.

ART 226 Ceramic Processes I (3) An in-depth ceramics course with emphasis on exploring a variety of production techniques. Pottery processes covered include wheel throwing, slab and coil building, mold design, glaze and clay chemistry, primitive firing and reduction firing. Prerequisite: Art major or Permission of Instructor.

ART 227 Ceramic Processes II (3) Studio sequel to ART 226. Emphasis will shift to the production of a portfolio of related art work making use of previously acquired skills. Prerequisite: ART 226 or Permission of Instructor.

ART 240 Advanced Graphic Design (3) Practical and theoretical design concepts and their application to advanced communications problems and multi-piece campaigns will be studied. Projects will emphasize concept development and portfolio preparation. Required for Graphic Design majors. Prerequisite: Permission of Instructor.

ART 244 Visual Design for the Web (3) Visual design for the web examines the unique opportunities and capabilities of digital electronic art. Emphasis will be placed on the organization and the communication of visual information needed for web site design. Students will learn how to create and maximize visual assets for web design. Prerequisite: ART 142 or Permission of Instructor.
ART 291 Art: Cooperative Education (1) Designed to provide work experience directly related to the student's area of study in art. Internships and co-op job opportunities are available throughout the community. Assistance is provided by department faculty, however, the ultimate responsibility for obtaining a placement rests with the student. A learning contract containing specific education objectives that relate to both the work experience and the field of study is developed between the student and a faculty co-op coordinator.

ART 292 Introduction to Haudenosaunee Art (3) Introduction to a variety of traditional Haudenosaunee arts and crafts by Native American artists/instructors. The course will be presented by one to three instructors and will focus on selected traditional Native American media for example; sketching/painting, stone sculpture and metalwork. Students will create their own pieces, which will reflect their basic understanding of traditional Haudenosaunee tools, media and subject matter.

Automotive Technology

FOR MORE INFORMATION, CONTACT THE AUTOMOTIVE TECHNOLOGY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W176, (315) 498-7200

ATC 103 Automotive Fundamentals (4) Provides a foundation for students entering the automotive service field. It prepares the student with shop and tool safety, basic automotive maintenance procedures and pre-delivery inspection procedures. The internal combustion engine and related components are introduced in this course. Three class hours, and three hour lab. Prerequisite: MAT 114 or Permission of Instructor.

ATC 103L Automotive Fund Lab (0)

ATC 115 Automotive Electrical Systems (4) An introductory course applied to the automobile. DC and AC circuits including series, parallel and series parallel are investigated. Concepts of magnetism and inductance are studied and applied to starting and charging systems. Laboratory emphasis is on basis electronic test equipment for diagnosing basic vehicle accessories and systems. Three class hours and a three hour lab. Prerequisite: MAT 114 or Permission of Instructor.

ATC 115L Automotive Elect Sys Lab (0)

ATC 116 Automotive Electronics (4) An introductory course in semiconductor devices, circuits, digital concepts and microprocessors applicable to the modern automotive system. Laboratory emphasis is on test instrumentation and the application of troubleshooting techniques. Three class hours and a three hour lab. Prerequisite: ATC 115 or Permission of Instructor.

ATC 116L Automotive Electronics Lab (0)

ATC 131 Engine Concepts (3) A detailed study of the internal combustion engine. Topics include design criteria, theoretical combustion concepts, energy transfer, cylinder head design, intake and exhaust systems and efficiency principles. Service operations and measurement techniques are investigated in laboratory exercises. Two class hours and a three hour lab.

ATC 131L Engine Concepts Lab (0)

ATC 142 Fuel and Ignition Controls (4) Extensively explores fuel delivery and emissions control. The emphasis is on microprocessor control applications applied to fuel management ignition and related emissions devices. Principles of feedback control signals are investigated in laboratory exercises. Three class hours and a three hour lab. Prerequisite: ATC 116 or Permission of Instructor.

ATC 142L Fuel and Ignition Controls Lab (0)

ATC 190 Cooperative Education I (3) This course is designed to provide work experience directly related to the student's field of study. A learning contract, containing specific educational objectives, as they relate to the specific work experience and the student's field of study, is developed between the student, department coordinator, and the employer. There is a 120 hour minimum of work in the student's co-op experience. The student is required to keep a daily journal which provides relevant feedback to the department coordinator thereby ensuring a consistent monitoring of tasks performed during the work session. Prerequisite: ATC 115, ATC 103

ATC 207 Chassis Fundamentals (5) This course examines the design, construction and operation of basic vehicular suspension systems, braking systems, alignment geometry, wheel and tire fundamentals and steering systems. The emphasis is on service and diagnostic procedures are discussed in detail. Laboratory exercises consist of wheel balancing and alignment, proper brake system service practices, suspension component diagnosis and replacement, anti-lock troubleshooting techniques and related chassis services. Rotor and drum machining techniques are explored in detail. Four class hours and a three hour lab.

ATC 207L Chassis Fundamentals Lab (0)

ATC 222 Drivelines and Geartrains (5) A thorough examination of manual and automatic transmissions/transaxles. Clutch operations, drivelines and differentials are addressed. Detailed power flow analysis for manual and automatic geartrains is provided in lecture with practical applications derived from laboratory exercises. Vehicle manufacturer service and maintenance procedures are investigated in lab activities. Four class hours and a three hour lab. Prerequisite: ATC 243 or Permission of Instructor.

ATC 222L Drivelines and Geartrains Lab (0)
ATC 243 Advanced Engine Performance (4)
Modern engine control systems are discussed. Ignition systems and related diagnostics with an emphasis on computer controlled fuel management are examined. Laboratory topics include gas analyzers, oscilloscopes and scanning devices (DRBs). Three class hours and a three-hour lab. Prerequisite: ATC 142 or Permission of Instructor.

ATC 243L Advanced Engine Performance Lab (0)

ATC 271 Climate Control Systems (3) Fundamentals of refrigeration and heating are analytically discussed. Concepts of modern electronic air temperature control systems are developed in the lecture. Laboratory activities focus upon service and diagnostic methods. Proper evacuation and recharging techniques applicable to current EPA standards are developed. Two class hours and a three-hour lab. Prerequisite: ATC 116 or Permission of Instructor.

ATC 271L Climate Control Systems Lab (0)

ATC 290 Cooperative Education II (3) This course is designed to provide work experience directly related to the student’s field of study. A learning contract, containing specific educational objectives, is developed between the student, the Chairperson of Automotive Technology and the employer. There is a 120 hour minimum employment requirement in the student’s cooperative experience along with a course component. Tasks include advanced automotive service activities involving electronic diagnostics, and engine repair. The student is required to keep a daily journal of activities performed and periodic evaluations will be conducted by department faculty. Students will have assistance in the co-op placement, however, the ultimate responsibility for obtaining placement rests with the student. The Automotive Chairperson must grant prior approval for the cooperative experience, which must be directly related to the student’s curriculum. The work experience cannot be used to satisfy the requirement of another course. No experiential credit can be applied towards the co-op requirement. Does not fulfill the science requirement for Math/Science programs. Not recommended for students planning to take BIO-205. Three class hours; no lab. No prerequisite.

BIO-105 Exploring Biology (3) This one-semester course introduces biological concepts essential for an understanding of current issues such as the Human Genome Project, DNA Fingerprinting, the cloning of organisms, and AIDS. It is intended for students in non-science and non-health-profession majors; does not fulfill the science requirement for Math/Science or Computer Science students. Three class hours. Not open to students with credit in BIO-121 or any Biology course numbered 141 or higher. No prerequisite. Optional 1-credit lab available (BIO-105L); must be taken concurrently with BIO-105.

BIO-105L Laboratory in Basic Biology (1) Optional laboratory for BIO-105. Involves off-campus field trips plus weekly on-campus lab activities. May ONLY be taken concurrently with BIO-105 or Permission of Instructor. Co-Prerequisite: BIO-105. No pre-requisite.

BIO 106 Human Biology (4) This one-semester course provides basic knowledge of the major organ systems of human beings. Emphasis is on how the body functions normally. It is intended for non-science majors and is inappropriate for students preparing for Nursing, Respiratory Care, Surgical Technology and Physical Therapy Assistant. Does not fulfill the science requirement for Math - Science, and Computer Science students. Three class hours, two laboratory hours. Not open to students with credit in BIO-102 or BIO-107.

BIO 106L Human Biology Lab (0) Optional laboratory for BIO 106. May be taken either concurrently with BIO 106 or in a later semester. Three laboratory hours.

BIO-110 Intro to Microbes (3) An introduction to the nature of microorganisms, with an emphasis on topics of everyday significance. The roles of microbes in the environment, in food production and spoilage, and in health and disease will be explored, along with the basic biology of microbes. This general education science elective is intended for non-science, non-health professions students. Does not fulfill the science elective requirement for students in the Math/Science programs. Not recommended for students planning to take BIO-205. Three class hours; no lab. No prerequisite.

BIO 111 Microbiology for Surgical Technology (1) This course provides an introduction to Microbiology, emphasizing aspects related to safe practice in the surgical field. The infectious process, infection control, and the role of the immune system in health and disease will be covered, in addition to the structure and properties of bacteria, fungi, viruses, and other microbes. Open only to students in the SGT program. No prerequisite; corequisite requirement: SGT 101-102-103.

BIO-121 Introduction to Biology (4) This introductory one-semester Biology course introduces some core concepts of biology. Topics include the molecular and cellular basis of life, energy flow in biological systems, gene expression and regulation, inheritance, development, and DNA technology. This course is for students who need additional preparation before attempting BIO 151 (General Biology) or BIO 171 (Anatomy & Physiology 1). This general education science elective is intended for non-science, non-health professions students. Does not fulfill the science elective requirement for students in the Math/Science programs. Three class hours and two lab hours per week. No prerequisite.

BIO-131 General Ecology (3) A study of the principles of energy and material flow through ecosystems; includes the introduction of population dynamics and community organization. This class is available for MTS science elective credit...
and is also recommended for students in non-science majors seeking general education science elective credit. Three class hours. No prerequisite. Optional one-credit lab available (BIO-131L).

**BIO-131L General Ecology Lab (1)** A field and laboratory approach to ecological principles including energy and chemical flow through terrestrial and aquatic systems. Optional lab to be taken by current or former BIO-131 students. A Saturday field trip may be required, with an option for an equivalent Friday trip. No pre-requisite.

**BIO-151 General Biology I (4)** This course focuses on the molecular and cellular basis of life, including principles of inheritance, evolution, cellular respiration, and photosynthesis. The basic concepts are applied to a survey of bacteria, protista, fungi, and plants; plant structure and reproduction are also introduced. Three class hours and a two hour lab. This class is intended for Math/Science majors, and is the prerequisite for BIO-152. Recommended preparation: mastery of high school biology and chemistry, or equivalent.

**BIO-152 General Biology II (4)** This course focuses on animals and systems biology, including a survey of animal types and of the organismal biology of animals. Organisms’ methods of response and adaptation to the environment and to each other are also emphasized. Laboratory includes dissection of preserved animal specimens. Three class hours and 2 lab hours per week. BIO-152 assumes a basic knowledge of chemistry, cell structure and function, and the concepts explaining the genetic unity and evolutionary diversity of species. Prerequisite: BIO-151 or POI. The combination of BIO-121 and BIO-152 does NOT count as a sequence for the Math/Science degree.

**BIO-171 Anatomy & Physiology I (4)** First part of a two-semester study of the structure and function of the human body. Topics include homeostasis, basic chemistry, cell structure and function, tissues, and the following body systems: integumentary, skeletal, muscular, respiratory, and urinary. The cat is the primary dissection specimen in the laboratory. This course is for students preparing for Nursing, Respiratory Care, Surgical Technology, Physical Therapy Assistant, and other health-related professions. This course is inappropriate for students preparing for medicine or dentistry. It does not fulfill the lab science sequence requirement for most Math/Science students, but does fulfill the science elective requirement for Math/Science students. Three class hours, two laboratory hours. Prerequisite: BIO-171.

**BIO-220 Biology of AIDS (3)** Starting where introductory biology classes leave off, this course explores AIDS and the pathology of HIV, including the structure and origin of the virus, mechanisms of viral replication, routes of transmission, and consequences of infection. Methods of prevention and treatment also will be discussed, including the biomedicinal challenges to effective treatment. A review of current testing methods and the prevalence of the disease in various populations will also be discussed, along with the role of the immune system in disease control and progression. This class is appropriate for all students, including non-science majors, science majors, and students entering the health professions. Three hours of lecture; no lab. Prerequisite: BIO-105 or BIO-121 or BIO-151 or BIO-171.

**BIO-221 Pathology (3)** This course covers the nature, causes, and development of disease conditions, as well as the structural and functional changes that result from the disease process. The principal diagnostic tests and treatments used in the detection and control of diseases will also be considered. Open only to students in the Health Information Technology program. Prerequisites: BIO-171 and BIO-172 (Anatomy & Physiology I and II).

**Business**

**FOR MORE INFORMATION ABOUT BUSINESS COURSES, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.**

**BUS 100 Computer Keyboarding (1)** Students will learn the basic skill of “touch” keyboarding on electronic and computer keyboards in order to input information into a computer system. Students will learn alphabetic, numeric, and computer function keys. Three laboratory hours per week. Not open to students in Office Technology: Administrative Assistant, Word Processing and Office Technologies: Certificate or students with previous credit for BOT 153.
BUS 101 Introduction to Business (3) An introductory course designed to give the student an overview of the impact of business on society. The course is intended to aid the student in obtaining a clear understanding of the way in which contemporary business functions through the interrelationships of marketing, management, and finance. Not open to students with previous credit in BUS 121 and/or BUS 230.

BUS 102 Mathematics of Business and Finance (3) A study of mathematical concepts and processes as applied to business and finance. Students will develop skills required to perform with accuracy and facility mathematical operations integral to the interpretation and solution of business problems. Arithmetic operations, signed numbers, linear equations, percentage and statistical procedures, are applied to such topics as accounting, retailing, risk management, banking, and finance. This course is a core course for the Business Technology A.A.S. degree and may be used to fulfill a business or general elective requirement. Prerequisite: MAT 087 or equivalent or Permission of Instructor.

BUS 105 Financial Accounting (3) An introduction to accounting as a means of recording business activities. This course includes a study of the classification and recording of original business transactions, the preparation and evaluation of financial statements, and the application of Generally Accepted Accounting Principles. The course will incorporate appropriate computer technology in the instruction process. Prerequisite: MAT 087 or equivalent or Permission of Instructor.

BUS 105R Financial Accounting Applications (1eq) This course is designed to give additional instruction and application to the topics covered in Financial Accounting (BUS-105). The course includes the study of the preparation of journal entries, financial statements, merchandising activities, cash, accounts receivable, plant assets and payroll. Co-prequisite: BUS-105.

BUS 106 Managerial Accounting (3) An introduction to the fundamentals of managerial accounting emphasizing the collection, management and use of accounting information in the decision making process within an organization. Topics include a comparison of the different types of organizations and the impact on their financial statements, long-term debt and equity transactions reporting and analysis of cash flows, procedures necessary to determine product costs, break-even analysis, profit planning, and cost analysis. The course will incorporate appropriate computer technology in the instruction process. Prerequisite: BUS 105.

BUS 106R Managerial Accounting Applications (1eq) This course is designed to give additional instruction and application of topics covered in Managerial Accounting (BUS-106). The course includes a study of partnerships, corporations, bonds, long-term investments, statement of cash flows, job order and process costing, break-even and standard cost variances. Prerequisite: BUS-105. Co-prequisite: BUS-106.

BUS 117 Integrated Financial Systems I (3) Computers are one of the most important tools to the accountant and users of accounting information. This course will provide extensive hands-on experience to general ledger software. Skills acquired will include the ability to create, update and maintain general ledger master files, culminating in the preparation of computer-generated financial statements. Prerequisite/Co-prequisite: BUS 105, BUS 117 Should be used in place of BUS 105A and BUS 106A in a BUA curriculum.

BUS 118 Integrated Financial Systems II (3) Computers are one of the most important tools to the accountant and users of accounting information. This course will provide extensive hands-on experience to general ledger software. Skills acquired will include the ability to process receivables and payables in a mechanized environment, and verify the integrity of these transactions as they are posted to the General Ledger. Prerequisite: BUS 117, BUS 105 and CIS 100, Co-prequisite: BUS 106.

BUS 121 Marketing (3) An introductory course in marketing intended to make the student aware of the development and efficient distribution of goods and services for a targeted consumer segment. The course studies both consumer and industrial markets, using as the basis for study the product, the distribution, the pricing and promotional techniques.

BUS 124 Principles of Retailing (3) The principles of retailing involve all the activities necessary for the sale of goods and services to the ultimate consumer for personal, family or household use. This course examines the different types of retail institutions and dwells on store location, merchandise planning and control, pricing and promotion.

BUS 138 Supervision and Management (3) A practical course on the principles and techniques of management applied by first line supervisory and training personnel. Special emphasis is placed on plant operations and organization, training and developing supervisors, evaluation of performance and motivation, and supervisory leadership responsibilities.

BUS 147 Disney Communications (3) The Disney Communications course offers the Walt Disney College Program participant the opportunity to learn the concepts inherent in business communication and apply them in the workplace. The skills taught are applicable to a wide variety of business environments. Participants begin by identifying basic listening skills, various methods by which people process information, and inclusive communication approaches. Once students acquire these interpersonal skills, they will move on to more complex situational topics including meetings, presentations, and facilitated classes. This course does not fulfill curriculum requirements for COM 101 or COM 102. Not open to students who have completed BUS 212. Co-prequisite: BUS 292.
BUS 148 Disney Hospitality Management (3)
The Disney Hospitality Management course will explore the concept of competitive advantage in the hospitality industry. Competitive advantage has been defined in terms of the organization itself: core competencies within the organization, the people within the organization, the organizational culture or shared values, and knowledge or learning. This course will show how the people within the Disney organization, the shared values, and broad knowledge of several job roles enhance the Disney Company’s competitive advantage. Additionally, through recognition and review of several different job roles, students will gain an understanding of how a corporation sustains a total commitment to quality improvement and its impact on guest service. Co-requisite: BUS 292

BUS 201 Intermediate Accounting I (4) Intensive consideration is given to accounting theory and practice as it pertains to principle statement items. The course deals primarily with investments, receivables, inventories, fixed assets, and other material suitable to a second-year course in accounting. Prerequisite: BUS 106

BUS 202 Intermediate Accounting II (4) Intensive consideration is given to accounting theory and practice as it pertains to current and long-term liabilities, long-term investments in stocks, stockholders’ equity transactions, accounting for leases, Statement of Cash Flows, preparing statements from incomplete records and the analytical process as well as other selected topics. Prerequisite: BUS 201

BUS 203 Accounting Applications Using Electronic Spreadsheets (3) A continuation of the spreadsheet skills developed in CIS 100 and applications of these skills to advanced accounting problems. The topics include creation, modification and printing of spreadsheets and graphs; creating, debugging and executing macros; preparing data tables; the use of built-in functions, and “what-if” modeling. Appropriate current software will be utilized. Prerequisite: BUS 105 and CIS 100 or Permission of Instructor

BUS 205 Income Tax Accounting I (3) A course in individual and business taxes under the federal income tax system. The course includes instruction and practice in the fields of individual returns, includable and tax-exempt income, partnership and other information returns, other business property and depreciation deduction, deductible losses, capital gains and losses, involuntary conversions, installment sales, etc. There will be considerable practice in return preparation in all these areas, as well as instruction in same. Prerequisite: BUS 106

BUS 207 Cost Accounting (3) Basic principles of cost accounting are developed and applied to industrial situations. Topics include budgetary planning and control; income measurement and inventory valuation; accounting for costs of material, labor, and overhead; job-order, process, and standard costs systems. Prerequisite: BUS 106

BUS 212 Business Correspondence (3) Business communications and report writing. Theory is put into practice in the writing of representative types of business letters and reports. Methods of all types of business communications are studied, including oral presentation. Prerequisite: ENG 103 or Permission of Instructor.

BUS 219 Statistics I (3) Topics covering the descriptive and inferential aspects of statistics will include: frequency distribution, graphs, measures of central tendency and dispersion, probability, probability distributions, binomial and normal distributions, introduction to sampling theory, estimation theory, and hypothesis testing (mean, variance, proportions, etc.) Computer software will be used. A specific calculator will be required for this course. Credit will not be given for both MAT 151 and BUS 219 nor for MAT 118 if taken after BUS 219. Prerequisite: MAT 116 or MAT 141 or MAT 143 or Permission of Instructor.

BUS 220 Statistics II (3) A continuation of Statistics I to include the topics: linear and multiple regression, correlation, analysis of variance, non-parametric statistics, Bayesian Decision theory and time series (as time permits). Prerequisite: MAT 151 or BUS 219 or Permission of Instructor.

BUS 230 Principles of Management (3) A study of the management process with a survey of managerial and organizational theories. Specific topics will include planning, organizing, supervision, control, labor relations, and the functions of decision-making. Prerequisite: Sophomore standing, Permission of Instructor.

BUS 231 Human Resource Management (3) A study of the major areas of Human Resource Management which includes recruitment, selection, job analysis, training, job evaluation, wage and salary administration, and labor relations as well as administrative functions and responsibilities of the Human Resource manager. Prerequisite: Sophomore standing or Permission of Instructor.

BUS 235 Advanced Principles of Management (3) An advanced course in management concepts stressing the behavioral approach. This course involves a study of the interaction of workers at all levels of organization structure, motivation, performance evaluation, and other concepts vital to successful implementation of modern management practices. Prerequisite: BUS 230 and sophomore standing.

BUS 243 Business Law I (3) The fundamentals of legal liability, of the growth of our legal institutions, court systems. The principles of the law of contracts, negotiable instruments, and sales.

BUS 244 Business Law II (3) The legal aspects of business, covering agency and partnerships, corporations, and related business organizations (reference to government regulations of business and business torts).
BUS 247 Disney Human Resources (3) The Disney Practicum Course uses a directed working and learning experience to expand knowledge of successful organizational practices. This course is designed to meet a participant’s need for an integrated work-study internship program that provides transferable knowledge and skills to all participants. Class content is delivered through lectures, group discussions, learning activities, and situational studies. Students must have full or part time status with a minimum GPA of 2.0. The student is responsible for transportation to and from Florida. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Student must register for this course during the same semester they are enrolled in the Disney experience. This course cannot be taken concurrently with BUS 290. Prerequisite: Full or part time status; minimum 2.0 GPA.

BUS 248 Disney Organizational Leader (3) This course examines and applies the universal principles of leadership to the Disney culture. It is designed to build leadership knowledge and skills transferable to community and commerce. Instructional methods include: lectures, group discussions, self-assessment, project development and presentation, and situational studies. Co-requisite: BUS 292

BUS 290 Cooperative Work Study (3) A course designed to prepare students to work after graduation. A learning contract containing specific educational objectives that relate to both the work experience and the field of study is developed between the student and a faculty co-op coordinator. Course requirements include a minimum of 180 hours of work, the maintenance of a Work Journal to record hours worked and duties performed, other work as required by the instructor and a final term paper. The students performance will be evaluated by the co-op faculty coordinator on the basis of meeting the objectives in the learning contract and satisfactory evaluation by the employer. A letter grade will be awarded. No experiential credit is given for previous work in the field. The work experience cannot be used to satisfy the requirements of any other course.

BUS 292 Disney Practicum (9) The Disney Practicum Course uses a directed working and learning experience to expand knowledge of successful organizational practices. This course is designed to meet a participant’s need for an integrated work-study internship program that provides transferable knowledge and skills to all participants. Class content is delivered through lectures, group discussions, learning activities, and situational studies. Student must have full or part time status with a minimum GPA of 2.0. The student is responsible for transportation to and from Florida. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Student must register for this course during the same semester they are enrolled in the Disney experience. This course cannot be taken concurrently with BUS 290. Prerequisite: Full or part time status; minimum 2.0 GPA.

BUS 295 Business Policy Seminar (3) A capstone course that integrates concepts and skills learned in core business courses with the policy making process. Emphasis is placed on a systematic analysis of the factors upon which business strategies and business decisions are made. Major issues in the field of business are studied by means of course work, case study, field research, and computer simulation. Prerequisite: Sophomore standing and completion of Business Technology A.A.S. business core requirements or Permission of Instructor.

Chemistry
FOR MORE INFORMATION, CONTACT THE CHEMISTRY/PHYSICAL SCIENCES DEPARTMENT IN FERRANTE HALL, ROOM F353, (315) 498-2432.

CHE 093 Chemistry Fundamentals (3eq) A one semester non-credit course covering elementary concepts in chemistry. Intended for students with no previous knowledge of chemistry and little or no experience in science. Topics include the nature of elements and compounds, the states of matter, solutions and electrolytes, an introduction to organic compounds, measurements, units and conversion factors. Three class hours

CHE 103 General Chemistry I (4) A study of atomic structure, introductory chemical bonding, stoichiometry, kinetic molecular theory and the states of matter, solutions, ionic reactions, oxidation and reduction, and acid and base theories. This course presupposes a knowledge of intermediate algebra. Three class hours and three laboratory hours. Prerequisite: MAT 087 and college level reading

CHE 103L General Chemistry I Lab (0) Prerequisite: MAT 087 and college level reading

CHE 103R General Chemistry I Recitation (1eq) Optional recitation section for CHE-103. Provides the opportunity for students to apply the theories, concepts and problem-solving techniques presented in CHE-103.

CHE 104 General Chemistry II (4) A study of thermochemistry, kinetics, chemical equilibrium, electrochemistry, advanced concepts in chemical bonding, the chemistry of the representative metals and nonmetals, coordination complexes, basic organic chemistry, biochemistry, and nuclear chemistry. Three class hours and three laboratory hours. Prerequisite: CHE 103, MAT 094

CHE 104L General Chemistry II Lab (0) Prerequisite: CHE 103, MAT 094 or higher

CHE 104R General Chemistry II Recitation (1eq) Optional recitation for CHE-104. Provides the opportunity for students to apply the theories, concepts and problem-solving techniques presented in CHE-104.
CHE 151 Basic Chemistry for the Health Sciences I (3) A study of chemistry at an introductory level, intended for students in the paramedical sciences (nursing, dental hygiene, respiratory therapy, etc.). Topics include the nature of atoms, ionic and covalent bonding, nomenclature, chemical change and equilibrium, gas laws, properties of water and aqueous solutions, acids, bases and pH, and an introduction to organic and biochemical compounds. This course pre-supposes some knowledge of elementary algebra. Not open to Math-Science students. Prerequisite: College level reading and placement into MAT 087 or higher.

CHE 151L Basic Chemistry for the Health Sciences Laboratory I (1) Optional laboratory for CHE 151; illustrative experiments emphasizing the concepts, principles, and techniques presented in CHE 151. Three laboratory hours per week. Prerequisite or Co-requisite: CHE 151 and placement into MAT 087 or higher.

CHE 151R Basic Chemistry for the Health Sciences Recitation I (1eq) Optional recitation section intended for students concurrently registered in CHE-151. The recitation provides the opportunity for students to apply the theory, concepts and problem solving techniques presented in CHE-151.

CHE 152 Basic Chemistry for the Hlth Sciences II (3) A study of organic chemistry and biochemistry at the introductory level. Topics include the structure and properties of aliphatic and aromatic hydrocarbons, functional groups, carbohydrates, lipids, proteins, enzymes, vitamins, and drugs. Not open to Math-Science students. Prerequisite: CHE 151 or CHE 103 and Permission of Instructor.

CHE 152L Chemistry for the Health Sciences Lab II (1) Optional laboratory for CHE 152; illustrative experiments related to the material covered in CHE 152. Prerequisite: CHE 151 or CHE 103 and Permission of Instructor. Prerequisite/ or Co-requisite: CHE 152.

CHE 203 Quantitative Analysis (4) Includes traditional and modern methods of gravimetric and volumetric analyses, and elementary instrumental methods. Theory and equilibrium calculations will be emphasized as well as practiced. Three class hours and four laboratory hours. Prerequisite: CHE 104, MAT 114 or higher.

CHE 203L Quant Analysis Lab (0)

CHE 204 Quantitative Instrumental Analysis (4) Includes instrumental quantitative and qualitative analyses in the fields of electrochemistry, spectrophotometry, chromatography, nuclear magnetic resonance, and other selected topics. Three class hours and four laboratory hours. Prerequisite: CHE 203.

CHE 205 Organic Chemistry I (5) An introduction to the chemistry of the functional groups of aliphatic and aromatic compounds. Emphasis is placed on mechanisms of reactions and the relationship of structure to reactivity. Laboratory work is concerned with the synthesis, reactions, and identification of representative organic compounds along with experience in the necessary experimental techniques. Four class hours and four laboratory hours. Prerequisite: CHE 103 and 104 and college level reading.

CHE 205L Organic Chemistry Lab (0) Prerequisite: CHE 103 and 104 and college level reading.

CHE 206 Organic Chemistry II (5) A continuation of CHE 205 with more emphasis on mechanisms, structures, natural products, and the study of qualitative organic analysis. Four class hours and four laboratory hours. Prerequisite: CHE 205 and lab and college level reading.

CHE 206L Organic Chemistry II Lab (0) Prerequisite: CHE 205 and Lab and college level reading.

**Cinema**

**FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM A349, (315) 498-2266.**

CIN 211 Comedy Films (3) Studies the development of film comedy from its humblest origins to its most sophisticated forms. The course breaks down into studies of the physical, clowned tradition of comedy, and the more sophisticated verbal comedy. An emphasis on key comic performers, writers, and directors helps make this an intellectual study of why comedy is universally appealing.

CIN 212 Horror and Fantasy Films (3) A study of the classic myths of horror, with an emphasis on the literary origins of horror tales, and a close study of such significant books as Dracula and Frankenstein, with interpretations of why such terrifying concepts have continuously proven popular the world over, and a study of the way in which Hollywood motion pictures have both extended and distorted the varied tales.

CIN 213 The Animated Film (3) A study of film animation, its history and the way in which it is achieved, with a special emphasis on the relationship of the animated film to trends in modern art, and the philosophy, social, political, etc. - of the major animated filmmakers.

CIN 214 The Films of Alfred Hitchcock (3) A study of the man, regarded, by many, as the greatest filmmaker of all time, showing the way in which, despite his guise as light popular entertainer, Hitchcock created a body of films which are tied together by philosophic and artistic threads. A close study of the recurring themes and technical devices which mark his movies, from the earliest silent features to the most recent sound ones.

CIN 215 The Films of Woody Allen (3) A study of Woody Allen’s emergence from gagwriter to award winning filmmaker and short story writer. All of Allen’s motion pictures, as well as many of his writings, will be covered to trace the emergence of his unique point of view.
CIN 216 American Film Directors (3) This course allows students to study the contributions to the art of film of the great American film directors. In a given semester one director such as Stanley Kubrick, Quentin Tarantino, or Martin Scorses will be discussed in terms of his contribution to important genres, film techniques, and pop culture influences, among other possible topics. Students will view the director's as well as sample the literature from which the director chose his screenplays.

CIN 218 The American Hero in Film (3) This course will trace the development of the American Film Hero from early in the 20th Century to present. The course will concentrate on different genres in American film, depicting a variety of Heros, including: The Early War Film, the Western, the Gangster Film, The Vietnam Era, Film Noir as well as many others. Students will study the novels on which successful film adaptations have been based.

Communication (Speech)

FOR MORE INFORMATION ABOUT COMMUNICATION COURSES, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM A349, (315) 498-2266.

COM 101 Interpersonal Communication (3) This introductory course is designed to acquaint students with the communication skills needed to succeed both academically and socially. Course content includes communication theory, perception, verbal and non-verbal communication, effective listening, awareness of the self as communicator and relational communication. Emphasis is placed on class discussion as a tool for learning and practicing the skills presented in class.

COM 102 Public Speaking (3) Public Speaking is a course designed to acquaint the student with the basic skills of public discourse. Course content includes the importance of audience analysis and adaptation, how to choose an appropriate topic, organization, speech purpose and delivery. Word study, effective language use, effective non-verbal skills and critical listening skills are stressed.

COM 104 Persuasion in Everyday Life (3) In our modern age, persuasion finds its way into every aspect of our lives. From friends asking for favors, to politicians campaigning for votes, to advertisers pushing their products, we regularly fill the roles of the persuader and the persuaded. This course is an investigation of communication theories of persuasion, the devising of persuasive messages, and the consumption of persuasive messages in a variety of contexts. Class activities, discussions, readings, and assignments are designed to develop communication skills necessary for effectiveness as producers and consumers of persuasive communication.

COM 111 Social and Professional Etiquette (3) This course introduces students to the development and use of social and professional etiquette rules and customs as currently practiced in the United States. Emphasis is placed on understanding the communicative nature of etiquette and its uses in furthering social and professional interactions. This lecture/demonstration course will include practice in various verbal and nonverbal skills required in the current social and professional climate including instruction in netiquette. Additionally, students will be introduced to etiquette rules and customs from around the world and will practice using these as a way to prepare for the global marketplace. This course meets with LBR 111.

COM 113 Communication and Health (3) This course offers students the opportunity to learn and practice the unique communication skills needed in the health professions. Communication among professionals, between professional and patient, professional and client, professional and non-professional caregiver will be examined. Best practice in intrapersonal, interpersonal, group communication in the healthcare context will be discussed. How to effectively communicate in conflict situations, ethical considerations, and intercultural and multi-cultural communication are other topics included in this class.

COM 201 Intercultural Communication (3) This course seeks to improve Intercultural Communication Competence through learning about communication patterns between those with different cultural backgrounds. Topics include verbal and nonverbal differences in cultural expression, intercultural relationships, barriers to effective intercultural communication, methods for overcoming these barriers, stereotyping, and racism. Students will learn to integrate theory with practice and real-life examples. Prerequisite: Any 100-level Communication course or Permission of Instructor.

COM 202 Rhetorical Criticism (3) This is a course in the practical art of rhetorical criticism. The course focuses on the application of standard rhetorical critical methods to communication artifacts. Although rhetorical criticism has its roots in the evaluation of speeches, this course provides students the opportunity to evaluate a wide range of communication artifacts, ranging from speeches to films, music, art, and even architecture. Through rhetorical criticism, students learn to better understand the motives, strategies, and effects of strategic public communication. Class activities, discussions, readings and assignments are designed to develop communication, critical thinking, and analytical skills through an introduction to rhetorical criticism. Pre-requisite: Any 100-level Communication course or Permission of Instructor.

COM 203 Communication and Gender (3) A course designed to acquaint the student with the unique ways in which women and men communicate. The focus of this discussion-oriented class is on how gender influences verbal and non-verbal communication, listening, speaking and interpersonal relationships. Additional topics covered will include communication and gender in the workplace and the classroom as well as the influence of the media on gendered communication. Prerequisite: Any 100-level Communication course or Permission of Instructor.
COM 204 Advocacy and Opposition (3) Advertising, advocacy and public policy debates all require an understanding of the rhetorical nature of argumentation and persuasion. This course provides opportunities for students to develop that understanding through speeches, debates, group presentation and community interaction. Prerequisite: Any 100-level Communication course or PHI 107 or POS 100 or Permission of Instructor.

COM 205 Teamwork and Small Group Communication (3) This course is an in-depth study of the nature and process of teamwork and small group communication. Students will study the theory of small group process, the nature of small groups and group dynamics. The course will address small group/teamwork issues such as decision-making, creativity, computer mediated group communication, diversity and conflict management. Students will make small group/team presentations, as well as engage in small group/teamwork evaluation. Prerequisite: Any 100-level Communication course or Permission of Instructor.

COM 206 Voice and Articulation (3) This course is appropriate for students wishing to enter broadcasting, theater, or other careers where voice and articulation are important and for students who wish to enhance their ability to articulate American English. This lecture/demonstration course offers students practice in the use of the voice as a communication tool. Topics covered include: articulation, the aspects of the voice, pronunciation, the vocal mechanism and the International Phonetic Alphabet. Prerequisite: Any 100-level Communication course.

COM 207 Communication @ Work (3) This course is an introduction to the theory and practice of communication in the workplace. The focus of this class is interpersonal communication in a professional context. Topics covered include: meeting management, interview techniques, participation in team and group communication, preparation of professional presentations, managerial communication, diversity in the workplace, and listening skills. This course emphasizes the development of practical and critical skills. Prerequisite: Any 100-level Communication course or Permission of Instructor.

COM 209 Communication and Conflict Management (3) This course explores the nature of conflict interaction from a communication perspective. The course will examine attitudes, conditions, and perceptions that influence communication interaction and conflict. Students will be introduced to communication tools and techniques for effectively managing conflict in interpersonal relationships, groups, the workplace and organizations. Prerequisite: Any 100-level Communication course.

COM 290 Communication Seminar (3) This course is designed to introduce students to the power of communication in a variety of applications and contexts. The course introduces students to a range of communication theories, and provides opportunities to apply those theories to communication phenomena. Possible contextual focuses for the course could include: the rhetoric of social movements, strategic communication through song, the rhetoric of religion, family communication, or other emerging topics within the field. Class activities, discussions, readings, and assignments are designed to develop a better understanding of communication theories and skills through critical analysis of communication phenomena. Prerequisite: Any 100-level Communication course AND any 200-level Communication course, OR Permission of Instructor.

Computer Engineering Technology

CMT 101 Introduction to Computers and Applications (4) This course is an introduction to basic concepts underlying the computer and its applications in technology and science fields. The focus of the course is on studying the computer for acquiring and presenting information, using spreadsheet to solve problems, collecting and storing data, and word processing. Topics include: hardware and software computer concepts, an introduction to internet in acquiring and sharing information (WWW, User list, and Personal Message Centers), introduction to spread sheet applications in solving problems and charting, use of text editors to write documents (Word Processing), an introduction to technical presentations, and use of application programs for organizing data, and drawing charts and schematics. (Credits 4: Students who have complete CIS 100 or CMT 110 may not take this course for credit.) Prerequisite: MAT 079. Co-requisite: MAT 088/087 or Permission of Instructor.

CMT 102 PC Hardware, Operating Systems & Support (4) This is a course following the CompTIA A+ guidelines on the support and maintenance of desktop computer systems. The objectives of this course are to provide information on the support of desktop computers, the proper techniques to successfully maintain computers, and a thorough understanding of the relationship between computer hardware and the software that is used to control that hardware. The following concepts will be covered: Electricity and Power Supplies, Motherboards, Storage Devices, Installing and using Windows based Operating Systems, SCSI technology, Network and Internet connections, Spyware and Virus protection. Students who wish to obtain CompTIA A+ Certification will need to complete the exam through an external agency and fees will apply. (Three class hours and three laboratory hours)

CMT 102L PC Hardware, Operating Systems & Support (0)
CMT 110 Introduction to Computing (3) The primary objectives of this course are to introduce students to a text editor to write a simple document and to use a spreadsheet program to solve problems related to computer circuits. The topics include: use of a text editor to write and edit a technical document, use of a spreadsheet to solve digital designs, provide graphical solutions, and track data, and integration of data from the spreadsheet and graphics editor into a technical document. Two-hour lecture and two-hour lab. Co-requisite: MAT 101.

CMT 161 Digital Electronics for Telecommunications (4) This course will prepare students in digital electronics with topics related to number systems and codes, logic functions, and Boolean algebra. IC building blocks are used in applications ranging from logic gates to flip-flops, counters, registers, and arithmetic circuits. Algebraic reduction and mapping are used to minimize Boolean expressions and combinational logic circuits. Computer simulation of digital circuits will be used to verify actual hardware setups. Prerequisite: ELT 153 and MAT 107.

CMT 171 Digital Electronics (4) An introduction to digital and computer integrated circuits, emphasizing the concepts that are basic to any digital system: number systems, small-scale and mid-scale gates, programmable logic devices, sequential logic, combinational networks, Boolean algebra, truth tables, Karnaugh maps, state machine design, timing diagrams, and digital arithmetic. Three class hours and a three-hour lab. Prerequisite or Co-requisite: Intermediate Algebra or equivalent.

CMT 171L Digital Electronics Lab (0)

CMT 180 Computer Systems for Telecommunications Computer Systems for Telecommunications (4) This course is designed to train students in the organization, architecture, and hardware aspects of digital computer systems. Topics include an introduction to microprocessors, types and characteristics of different chips, motherboards, bus structures, memory, I/O interface devices, disk drives, video displays, and printers. Serial and parallel buses are discussed. Applications include the interfacing of peripherals, data communications between computers, and team project. Prerequisites: CMT 161, ELT 257.

CMT 190 Introduction to Microprocessors (4) An introduction to basic principles of microprocessor architecture and assembly language instructions. The content of the course is divided into three sections: microprocessor architecture, mnemonics and interfacing I/Os. The course is designed around an 8-bit microprocessor and its mnemonics. Topics included in the course are: overview of computers and micro-computers, microprocessor architecture, bus architecture, memory (RAM Memory, ROM, and EPROM) memory maps, I/Os, interfacing devices and introduction to the instruction set of the microprocessor. The third section, interfacing I/Os, introduces various I/O techniques such as parallel I/O, serial I/O and interrupts. Three class lectures, one-hour programming session, and two-hour lab. Prerequisites: CMT 171 or CSC 111 or equivalent.

CMT 190L Microprocessors Laboratory (0) This laboratory course reinforces the contents of microprocessor architecture and demonstrates interfacing applications. Experiments included in the laboratory are: use of the Z-80 instruction set, subroutines, stack, timing, wave generation, memory and I/O interfacing. Two-hour laboratory Co-requisite: CMT/CSC 190 or Permission of Instructor.

CMT 190R Microprocessor Recitation (0)

CMT 231 Introduction to Local Area Networks (4) This course will provide a comprehensive introduction to Networking fundamentals. Primary focus will be on logical and physical aspects of the Local Area Network, the OSI reference model, protocols, topologies, and heterogeneous internetworking. The course will look at issues organizations face while implementing Local Area Networks within their computing environments, and how networking technology changes the way we interact socially. The review of various technologies will include Client O/S platforms (DOS, Windows, & Linux), in both work and home networked environments. Discussion topics will include emerging technologies, and business/social considerations within the changing networked environment. Hands on lab assignments and group activity will be emphasized. Prerequisite: CMT 101 or CIS 100 or Permission of Instructor.

CMT 231L Introduction to Local Area Networks Lab (0)

CMT 278 Principles of Computer Programming (3) Principles of computer programming using the BASIC language, with programming techniques applied to the solution of various circuit analysis, electronic, and digital problems. (No previous knowledge of BASIC is required.) Two class hours and a two-hour laboratory. Prerequisite/Co-requisite: ELT 141 or Permission of Instructor.

CMT 278L Principles of Computer Programming Lab (0)

CMT 292 Microcomputer Systems (4) Concerned with 16-bit microprocessors of the Intel family and their applications based on the IBM PC. The topics are divided into three groups: 16-bit (80x86) microprocessor hardware, programming, and applications. The hardware topics include microprocessor architecture, memory and I/O addressing and interfacing, instruction timing and troubleshooting. The programming topics deal with instruction set, MS-DOS operating system, assembly language and its applications. Programs are developed using assembler and debugger on the PC. The applications include topics such as serial communication, peripheral interfacing and data acquisition. (Three hour lecture + one hour PS+ two hour lab). Prerequisite: CMT/CSC 190 or Permission of Instructor.
CMT 292L. Microcomputer Systems Lab (0)
CMT 292R Microcomputer Rec (1 eq)
CMT 294 Designing Embedded Sys-Microcontrollers (4) This is a project oriented course concerned primarily with designing embedded systems using microcontrollers in integrated development environments (IDE). The topics are divided into the following groups: Microcontroller Architectures focusing on a specific microcontroller (instructions set, and on-chip peripheral devices), Parallel I/O, Interrupts, Serial I/O, and Data Acquisition. Topics included in Parallel I/O are: basic concepts in data transfer, interfacing displays using simple I/O and the scanned technique, interfacing matrix keyboards, data transfer using handshake signals and interrupts. Serial I/O includes basic principles in serial communication protocols and standards. Data Acquisition includes A/D and D/A converters, their applications, and interfacing. These topics will be discussed in the context of on-chip devices such as timers, CCP modules, SCI, SPI, and A/D Converter. Students are expected to design an embedded system project. Software based on a high-level language such as C is integrated with the topics, and IDE will be used for program development and troubleshooting, and in-circuit emulation (ICE). Course meets for three lecture hours and three hours of programming each week. Prerequisite: CMT/CSC 190 and CMT 278 or equivalent.

CMT 294R Embedded System-Microcontrollers Recitat (0)

Computer Information Systems

FOR MORE INFORMATION, CONTACT THE COMPUTER STUDIES DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W230, (315) 498-2425.

*CIS 100 Principles of Information Systems (3) An introductory course in computer fundamentals, covering computer hardware, software, and business applications. A significant portion of the course is devoted to the use of modern applications software packages such as word processing and spreadsheet software. The course involves extensive hands-on exposure to both time-sharing and microcomputer systems. Other topics include the evolution of the information-based society, the information processing cycle, and the processing capabilities of computers.

*CIS 101 Computer Concepts: An Introduction (1) This course provides Computer Information System majors with an introduction to computer concepts and terminology to prepare them for subsequent courses. Topics covered will include binary, and hexadecimal number systems, analog and digital signals, data storage, transmission and processing methods, and networking. Topics will be covered at an introductory level. The course will be taught primarily online to introduce CIS majors to the experience of the electronic community. One lecture hour per week. Required for CIS majors enrolled in CIS 100. Co-requisite: CIS 100 or Permission of Instructor.

CIS 102 Internet Basics (3) An introductory course in the usage of the Internet, intended for non-majors and majors with little or no Internet experience. Students will learn how to use web browsers, search engines, and email. Different types of web-delivered media will be presented and discussed, in additional to a general history of the Internet. Several issues will also be addressed, such as content evaluation, legality, ethics, and virus protection. Prerequisite: None

CIS 103 Computer Communications Using Internet (1) Basic computer communications concepts are introduced. Course content includes the use of technology for communications, information retrieval, and verification. The local computer network and email system will be introduced and heavily used to create a virtual student community. In addition, the responsibilities of electronic citizenship and techniques for proper behavior using shared resources will be learned and practiced.

CIS 106 An Introduction to Digital Media (3) This introductory-level course provides a basic hands-on approach for the production and assessment of a team-based digital media project. Utilization of the components found in various software programs will allow students to select a digitally-based group project utilizing various aspects of audio, video and digital media. A culminating project will be distributed via DVD, the Internet/World Wide Web, or some other appropriate channel/medium. A basic knowledge of computers and some background in music and/or musical theory would be helpful but is not required.

*CIS 120 Advanced Principles of Information Systems (3) The continuation of CIS 100. Topics include graphics, simple software and hardware management, operating systems, presentation graphics, database applications and current issues in computing and information science impacting on today's society. Hands-on modules include projects with current operating systems, a database management system and a collaborative project integrating concepts and techniques learned over the semester. Prerequisite: CIS 100 or Permission of Instructor.

*CIS 125 Principles of Information Systems II (4) This course is the second course in sequence for CIS majors that will expand concepts and knowledge from CIS 100 and go further into computing principles and advanced application use. Topics include image editing tools, software and hardware management tools and techniques, operating systems, presentation graphics, database applications and current issues in computing and information science impacting on today's society. Hands-on modules include projects with current operating systems, a database management system in a collaborative project throughout. Prerequisite: CIS 100 or passing grade on computer placement test or Permission of Instructor.
CIS 130 Foundations of the Internet (4)
Students will be introduced to Internet communication concepts and principles. Topics include networking basics, protocols, UNIX commands, file management, remote access, and file transfer. Additionally, students will learn beginning HTML, editors, image editing for web optimization, and web page content evaluation. Students will be given a network account for publication of their web pages. Students will be expected to have knowledge of basic computer skills.

CIS 151 Technology and Organizations (3) This is a course on the impact of technologies related to work and organizations. It addresses both the unintended and intended outcomes of technology. Students examine the changing nature of time demands, the relationship between the organization and its members, the “labor saving” device, quality of work life, computer misuse, repetitive strain injuries, and other topics.

CIS 230 Web Site Design & Development (4) This course will expand upon CIS-130 and will focus on principles of design in the authorship of Web pages. As the focus shifts from basic Web page creation to designing full Web sites, so too will the tools shift from HTML editors to WYSIWYG editors. A topic of discussion will be the issue of accessibility. Further development topics include intermediate to advanced HTML code, intermediate graphics manipulation, JavaScript, Flash and other multimedia, and an introduction to dynamic content. Prerequisite: CIS-130.

CIS 231 Advanced Web Servers (4) Students will learn advanced web management techniques, with an emphasis on server-side issues. Students will add interactivity to their web sites through the use of forms and server side scripting. A further exploration of dynamic content will be included. Additionally, students will work with server side databases, including stored procedures. Finally, students will configure and manage a web server, including virtual hosting, troubleshooting and security. Prerequisite: CIS-130 and a programming course or Permission of Instructor.

CIS 271 Internetworking I (4) An introduction to the fundamentals of networking. Students will learn the fundamentals of installing, programming and troubleshooting a network based on the OSI (Open System Interconnection) model. Students will be introduced to IP and TCP/IP addressing, including subnet addressing. The hardware components of basic networks, including router will be covered, along with basic network topologies and designs. Prerequisite: CIS 100, CIS 120 and CIS 130 or Permission of Instructor. 3 hours lecture, 2 hours lab. 4 Credits

CIS 271L Networking I Lab (0)

CIS 272 Internetworking II (4) The continuation of CIS 271. The students will be introduced to advanced networking concepts. Topics include LANS, WANS and other types of regional net-works. Students will learn to segment networks with bridges, routers and switches. Students will also be instructed on configuring and monitoring various types of networks. After successful completion of this course, students will be qualified to pursue a number of industry-standard certifications, including Cisco Certified Networking Associate (CCNA) and Computing Technology Industry Association (CompTIA) Networking certifications. Prerequisite: CIS 271. 3 hours lecture, 2 hours lab. 4 Credits.

CIS 272L Internetworking II Lab (0)

CIS 286 Systems Analysis and Database Design (3) A capstone course for Computer Information Systems majors, this seminar type course will require the student to integrate techniques and concepts learned from other courses. A thorough, concise study of a simulated environment will be used to do a system design including documentation and an actual data base design. Data gathering, planning, process-mapping, design and cost/benefit analysis will be utilized. A modern, structured, data base language will be used for implementation. Prerequisite: CIS 100, CIS 120 or Permission of Instructor.

CIS 291 Information Technology Support I (4) This course will prepare students to work with users of computer software and hardware. Topics include basic hardware components, configurations, installations, troubleshooting, preventative maintenance, safety concerns, and customer service issues. Software issues such as installation and upgrading, BIOS configurations and settings, diagnostic tools and maintenance also be covered. This detailed hands-on approach will prepare students to take the A+ certification examination administered by the Computer Technology Association (CompTIA). There will be no experiential credit granted for this course. Students will receive 3 hours of instruction and 1 lab hour per week. Prerequisite: CIS-120, CIS-130, or Permission of Instructor.

CIS 292 Information Technology Support II (4) A continuation of CIS-291, this capstone course will prepare the student for working with, and training users in the use of modern software and hardware. Students will learn hardware and software maintenance techniques, including advanced troubleshooting, network and desktop security, and software maintenance. In addition, students spend 30 hours during the semester as an unpaid intern at a local business or non-profit organization. Troubleshooting hardware and software problems, doing technical research, and learning about the organization they’re working at. There will be both individual and team assignments. There will also be no experiential credit granted for this course. Students will receive 2 hours of instruction, and perform 4 hours of internship practicum per week. Prerequisite: CIS-291 or Permission of Instructor.
CSC 110 Program Design and Development (4)
This is a language dependent introduction course on computer program design and development. Emphasis is on the identification and solution of business problems through systems of computer programs. Programs are described and designed through such tools as program flowcharts, structure charts, and pseudocode. Within this framework, programming languages are treated as tools which can be selected, as appropriate, to implement the designs.

CSC 111 Fundamentals of Computing I (4)
This course provides the foundation for a program of study in computer science. It introduces the discipline of computing and the roles of professionals. A contemporary high-level language with appropriate constructs for structured design and structured types is presented. It integrates an introduction to algorithm design, and understanding of abstraction applied to date types and structures, and an appreciation of imperative and object-oriented programming. Programming assignments are an integral part of this course. Prerequisite: CSC 110 or CIS 121 or Permission of Instructor.

CSC 111L Fundamentals of Computing I Lab (0)

CSC 112 Fundamentals of Computing II (4)
This course develops the discipline of computing and the roles of professionals by introducing software engineering early in the learning process. This course formally presents abstract date types (ADTs). The ADTs presented are stacks, queues, lists, trees, graphs and tables. Simple sorting and searching techniques, along with their efficiency are studied. The use of pointers and recursion is covered. Programming assignments are an integral part of this course. Prerequisite: CSC 111

CSC 112L Fund of Computing II Lab (0)

CSC 162 Visual Basic I Programming (4)
This course covers the manner in which the computer is used to solve problems. Lectures cover the style and techniques necessary to solve problems using the Visual Basic programming language. Object-oriented programming (OOP) will be covered. This course will allow students to take advantage of the many new capabilities of building applications in a graphical user interface (GUI).

CSC 162L Intro to Visual Basic Programming Lab (0)

CSC 190 Introduction to Microprocessors (3)
An introduction to basic principles of microprocessor architecture and assembly language instructions. The content of the course is divided into three sections: microprocessor architecture, mnemonics and interfacing I/Os. The course is designed around the Z-80 microprocessor and its mnemonics. Topics included in the course are: overview of computers and microcomputers, Z-80 microprocessor architecture, bus architecture, memory (R/W Memory, ROM, and EPROM), memory map, I/Os interfacing devices and introduction to the Z-80 instruction set. The third section-interfacing I/Os-introduces various I/O techniques such as parallel I/O, serial I/O, and interrupts. Two class lectures and one hour for assembly language instructions. Prerequisite: CMT 171 or CSC 111. The course is open to students from all disciplines.

CSC 190L Microprocessors Laboratory (1)
This laboratory course reinforces the contents of microprocessor architecture and demonstrates interfacing applications. Experiments included in the laboratory are: use of the Z-80 instruction set, subroutines, stack, timing, wave generation, memory and I/O interfacing. Two-hour laboratory. Co-requisite: CMT/CSC 190 or Permission of Instructor.

CSC 190R Microprocessor Recitation (1eq)

CSC 211 Computer System Organization (4)
This course emphasizes the organization and operation of real computer systems at the architectural level. The mapping of statements and constructs in a high-level language onto sequences of machine instruction is studied, as well as the internal representation of simple data types and structures. Topics include the fetch/execute cycle, bus structures, memory hierarchy, addressing modes, and subroutines. Alternative architectures, such as vector and parallel models, are presented. Three lecture hours per week. Prerequisite: CSC 111, MAT 161

CSC 221 Software Engineering (4)
This course is the capstone course for the AS degree in Computer Science. The course focuses on software engineering and requires a major software project. Topics include: object-orientation, software design tools and techniques (such as data flow diagrams, structure charts, CRC cards, algorithms, pseudocode), software reuse, software test strategies, and documentation standards. Prerequisite: CSC 112

CSC 222 Game Programming (4)
This course is an introduction to game programming techniques and gaming development. Topics include 2D graphics and code generated animation, sound technologies, interactivity, and multi-player games. Prerequisite: CSC 111 or CSC 264 or Permission of Instructor.

CSC 250 Client/Server Operations (3)
An introduction to the operating system for intra and internets. Students will be introduced to the architecture and systems software behind a client/server environment, and learn how to configure, monitor and manage a network. Specific topics include internet protocols, shells, scripts and daemons. The Unix operating system will be used to illustrate a modern multi-user system. This course in intended for students wishing a higher level understanding of operating systems and students enrolled in the Web Technology Certificate. Prerequisite: CIS-130, or CMT-231 or CIS 271
CSC 263 C++ Programming (4) An introduction to the C++ language which provides software developers with an "extendible" language in which abstract data types suitable for a given application can be created and then used as naturally as built-in data types. While based on the C programming language, C++ provides data and function encapsulation, function overloading, inheritance, strong typing, and other features needed for object-oriented programming (OOP). This makes C++ a true high-level language suitable for professional software engineering. The language constructs and OOP methods are introduced with a series of examples of increasing sophistication which are the basis of project assignments. Four lecture hours and one optional recitation hour per week. Prerequisite: CSC 110 or Permission of Instructor.

CSC 263L C++ Programming Lab (0)

CSC 264 Java Programming (4) Java is a different type of object-oriented language in that it supports a minimal set of programming language constructs that reflects the technical advances in programming methodology over the last fifteen years. This course presents Java expressions, variables, methods, classes, objects, abstraction, overloading, inheritance and applets. Prerequisite: CSC-110 or Permission of Instructor.

CSC 265 Visual Basic Programming II (4) This course builds upon the fundamental topics explored in CSC-162. More advanced topics involving object oriented programming (OOP) will be studied. This includes Graphical User Interface (GUI); File and Database Management; ActiveX controls; Networking; Internet and World Wide Web applications; Multimedia applications; and Dynamic Data Structures. Prerequisite: CSC-162 or Permission of Instructor

CSC 280 C#.Net Programming (4) This course focuses on the language and programming fundamentals of the C# language and object-oriented programming, in the context of the .NET development environment. Topics covered will include: The .NET platform including common language runtime and framework, Visual Development Environment, Object-Oriented Programming, C# Language and Application Structure, basic GUI constructs, and basic concepts of XML. This course may not be used to fulfill a Liberal Arts elective. Prerequisite: CSC 112 or Permission of Instructor.

Counseling
FOR MORE INFORMATION, CONTACT THE COUNSELING DEPARTMENT, (315) 498-2382.

CNI 175 Career Exploration (3) This course is intended to help students explore the process of choosing, preparing for, and advancing in a career. The course has an emphasis on the long-range and continual process of career decision making, career growth, and the exploration of a chosen life work and its lifestyle. Students will use the information and resources of the Counseling Center to describe the world of work: its structure and organization, the demands imposed upon individuals, and the rewards and benefits it bestows. Elective for all curricula. Not open to students who have taken GEN 154.

CNI 270 Job Search Skills (1) Intended to help students develop job search techniques by using a systems approach to job hunting. Emphasis will be given to the development of job-hunting philosophy and to self-assessment so that students can identify their strengths. Sources of job leads will be covered, together with methods of investigating these leads. Resume preparation, letters of application, interview techniques, and follow-up letters will be covered in depth. On-the-job strategies will be discussed. Recommended for full-time sophomore students or students about to enter the job market.

OCC 101 College Seminar (1) A course in coping skills designed to facilitate student success in College. This course will emphasize student attitudes and adjustment to the college environment through dynamic student/faculty interaction.

Criminal Justice
FOR MORE INFORMATION, CONTACT THE CRIMINAL JUSTICE DEPARTMENT IN MAWHINNEY HALL, ROOM A181, (315) 498-2341.

CRJ 101 Justice System (3) A comprehensive overview of the relationships among police, courts, prosecutors and corrections as they interact to deal with criminal behavior. Required of all Criminal Justice majors. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 102 Introduction to Criminal Law (3) An in-depth study and historical approach to the development and understanding of criminal law. A survey of the basic elements required to classify occurrences as crime. Classification of crimes with respect to the segments of society they affect. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.
CRJ 106 Juvenile Delinquency (3) Combines an orientation to the causes, treatment, and prevention of juvenile delinquency emphasizing the contributing factors of child abuse, school failure and low self esteem. An examination of the methods of handling juvenile offenders by the police, interviewing techniques, screening and referrals to social agencies are covered. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 107 Women and Crime (3) Women and Crime is designed to acquaint the student with issues affecting women involved in crime and the Criminal Justice System. The etiology, extent and nature of female crime will be discussed. The involvement of women in each phase of the criminal justice system from arrest, sentencing, and corrections will be studied. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 108 Police Community Relations (3) Designed to explore the interpersonal relations of police officers (male and female) as they deal with various unique and identifiable community ethnic and racial groups. The traditional role expectations of Law Enforcement will be assessed in light of changing community demands for protection and service. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 112 Introduction to Law Enforcement (3) The history and development of law enforcement in modern society and the various systems of police control; philosophical aspects of police service with an overview of crime and police problems; the processes of justice and constitutional limitations on law enforcement; organization and jurisdiction of local, state, and federal agencies; survey of professional career opportunities. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 122 Introduction to Corrections (3) An introductory course focusing on the development, organization, and effectiveness of corrections. The legal rights of the probationer, the inmate, and the parolee are examined in detail, providing both the student and practitioner the basis for understanding future developments in corrections. Observations are made as to the effectiveness of modern rehabilitation techniques, obstacles to correctional progress, and strategic errors made in correctional reform. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 132 Introduction to Security (3) Historical background of security, nature and scope of private security functions in a modern society, the basic principles of physical security guard services - contract or proprietary, internal loss prevention, defensive systems, electronic devices, fire prevention and safety, the security function in the corporate structure, bomb procedures, hospital security, disaster planning, polygraph procedures, loss prevention and retail theft, career opportunities in the security profession. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 142 Criminal Investigation (3) Investigative methodology in the field of crime, modus operandi, sources of information, crime scene search and recording, collection and preservation of physical evidence, interviews and interrogation, scientific aids, observation and description, case preparation, testimony in court. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 201 Criminology (3) Historical and contemporary viewpoints as to the causes of crime are discussed and debated to allow the student a complete understanding of the complex question as to “how the offender should be treated.” Social factors, crime in the community, and cross cultural references are presented along with case studies of criminals and their motivation for behavior. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 202 Ethics in Police Work (3) An analysis of the problems involved in formulation of ethical standards for police departments; the legal and social basis of such standards of ethics; various considerations relative to public service involved in such a formulation; its effect upon the rights of individuals and groups and upon the ultimate concepts of police service. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 204 Criminal Justice Management (3) Evolvement of theories of organization and administration of justice agencies; structure of management; relationship of line, staff, and auxiliary functions; administration of staff units; planning and research functions; staff conferences and completed staff work; communications; personnel administration; decision-making; policies; administrative survey techniques and projects. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 206 Juvenile Justice System (3) The main focus of CRJ 206 will be Family Court proceedings. It will explore the circumstances surrounding what happens to a youngster from being taken into custody to adjudication and placement. It will cover the child's passage from detention through Family Court proceedings, i.e., intake, probation and referral to community agencies. Types of placements will be explored, i.e., public vs. private institutions, their criteria for accepting children and the need for follow-up counseling and/or family therapy upon the youth's release and return to society. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.
CRJ 207 The Sexual Trafficking of Children (3)
An examination of the devastating effects of child pornography and the sex trade of children in the U.S. and other countries. An attempt to understand the motivation of the pedophile and his use of children for sexual gratification, his chances of being rehabilitated, and the possible causes of his behavior. Speakers with special expertise in counseling the offender will make presentations - personnel from the Rape Crisis Center, City and Sheriff's Department Abused Person Units and others. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 208 Managing Delinquents in Detention (3)
A presentation of methods of modifying and controlling surface behavior of aggressive youth in detention. Students will learn how to communicate with disturbed and confused individuals. The course will also enhance student's awareness of the complex aggressions which block the channels of communication when a human being is frightened or frustrated. Students will explore methods of controlling the acting out behavior of an incarcerated individual so as to maintain personal dignity and to develop a sense of rapport with the person incarcerated. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 210 Terrorism and the Criminal Justice System (3)
This course introduces the student to the study of terrorism. It will focus on both domestic and foreign varieties of this unique form of organizational crime and its implications for the American criminal justice system. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 212 Organized Crime and Society (3)
A systematic exploration of theoretical and practical issues pertinent to organized criminal activity. The organizational structures of traditional and non-traditional groups are studied as well as the historical background beginning in the nineteenth century. The impact on law enforcement is thoroughly reviewed with special emphasis on illegal drug trafficking. The relationships between drug use and crime is examined from the legal and societal viewpoint. Additionally, the relationship between the political environment and organized crime, including the infiltration of legitimate business, is studied. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 213 Criminal Law (3)
A study of the scope, purpose, definition, and classification of crimes. Consideration is given to the more common offenses under the Penal Law. A concern for criminal intent, acts of omission and commission, arrest and search and seizure along with an introduction to the Criminal Procedure Law is emphasized. The rules of evidence and their application to proper law enforcement will also be discussed. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 216 White Collar Crime (3)
An examination of major issues and current problems that are associated with occupational and non-occupational criminal behavior. Public policy and methods of prevention are explored and a review is conducted of various celebrated investigations which include examples of corporate crime, state authority crime and computer crime. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 217 Crime and the Media (3)
The media has a significant impact on the criminal justice system. This course will investigate the interplay among various aspects of the media and the criminal justice system. Students will have the opportunity in class to examine products of the media that relate to police, courts and corrections. The media's portrayals of a diverse population and the subsequent impact on the functioning of the criminal justice system will be explored. The course will analyze the legal and ethical issues faced by both the media and the criminal justice system in the administration of justice in the United States. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 218 Drugs and the Criminal Justice System (3)
An examination of the impact of drugs on the criminal justice system including the police, courts and corrections. The history of drugs and alcohol prohibition will be studied within the context of traditional crime and organized crime. Other topics will include the drug problem in relationship to the crime rate, national criminal justice policy strategies and the infiltration of legitimate enterprises by criminal drug organizations. Students will research relevant topics and report their findings as well as their conclusions based upon their research. This course has a criminal justice focus and will not fulfill the New York State mandate for drug and AIDS education for teaching certification of education majors. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 235 Private Investigation (3)
Explores the entire scope of procedure and methods necessary in understanding the complex mechanism involved in the field of Private Investigation. Private Investigation will examine the world of the “Private Eye” and what laws govern these activities. An in-depth study will be made in intelligence gathering, the polygraph, records and reports, undercover work, surveillance, employing photography as evidence, and the use of actual case histories to illustrate various techniques available to the Private Investigator. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 240 Capstone Course in Criminal Justice (1)
This capstone course is the culmination of the criminal justice student's academic experience. It serves to synthesize the knowledge gained from each course taken within the criminal justice cur-
curriculum and better prepare the graduate to continue on to upper-division studies in the discipline or for entry-level career positions in the criminal justice system. Among other requirements the student will develop and prepare a research project that will result in an end of semester presentation to the class. Prerequisites: Criminal Justice matriculation, Permission of Instructor and completion of 42 credits hours including all required Criminal Justice courses, ENG-103, ENG-104, and COM-102.

CRJ 241 Special Investigations (3) Investigate methodology in the field of crime. Special attention is given to the various aspects of homicide investigation. Also covered is the area of organized crime, forgery, and white-collar crime. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 243 Criminalistics I (3) The collection, preservation, analysis, and interpretation of physical evidence of various types, including latent fingerprints, footprints, tire tracks, tool marks, blood, hair, fabrics, etc.; narcotic identification, fingerprint classification, photography, spectrographic analysis, court presentation, and expert testimony. This course is designed to aid in the training of investigators. It does not qualify one as a criminalist or laboratory technician. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 244 Criminalistics II (3) Concerned with advance microscopic and chemical methods of crime detection. Blood analysis, drugs, blood alcohol, explosives, poisons, ultraviolet and infrared examinations, advanced optical and instrumental methods of analysis are covered. Special problems and topics of interest in criminalistics are covered. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 252 Internship (3) A practicum designed to broaden the educational experience of students through appropriate observational work assignments with governmental agencies and private firms. Students may choose to select an internship from either Law Enforcement, Corrections, or Community Service in related Justice agencies. Prerequisite: ENG and RDG placement must be at college level or Permission of Instructor.

CRJ 254 Criminal Justice Issues (3) The examination of selected problems affecting various criminal justice agencies by group and individual, oral and written presentations. Divergent and controversial viewpoints will be presented to provoke individual thought and discussion. Students limited to one issues course only. CRJ majors-prerequisite: ENG and RDG placement must be at college level or Permission of Instructor. Final semester sophomores only.

Economics

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCES DEPARTMENT IN MAWHINNEY HALL, ROOM A385, (315) 498-2301.

ECO 103 Contemporary Economic Problems (3)
A one semester non-mathematical course that considers current economic issues from the perspectives of background, implications, and strategies for resolution. Topics to be considered will vary each semester, depending upon the current economic situation. Topics will be chosen jointly by students and instructor. Open to all students. Three hours elective credit in Social Sciences. No Prerequisite.

ECO 104 Personal Finance & Consumer Economics (3)
This course introduces aspects of financial planning and consumer practices. Topics covered include: investment alternatives (e.g., stocks, bonds, mutual funds), money management, tax planning, insurance, obtaining credit, real estate purchases, and the purchasing and financing of consumer goods and services.

ECO 160 Poverty, Inequality and Discrimination (3)
An interdisciplinary course which studies and distinguishes poverty, discrimination and inequality. Various kinds of inequality are examined: racial, ethnic, religious and systems of inequality based on sex/ gender and age. Current statistics are presented and discussed. The history of stratification is examined. Reasons for continuing unequal and unjust systems are examined and analyzed. Other societies which are egalitarian and stratified are compared.

ECO 203 Introduction to Economics-Macro (3)
An introductory survey of mainstream theory, with application to real world events and to public policy decisions affecting the allocation of resources and distribution of goods and services. Topics covered include the economists’ way of thinking, supply and demand analysis, consumer behavior, producer behavior, market performance under various market structures, markets for factors of production, public policy and micro-economic issues. Prerequisite: MAT 087/088 or equivalent.

ECO 204 Introduction to Economics-Micro (3)
An introductory survey of mainstream micro-economic theory, stressing its application to real-world events and important issues of public policy. Topics covered are from the areas of: The economic way of thinking; supply and demand analysis, consumer and producer behavior, production markets; factor markets; international trade; government policy. Prerequisite: MAT 087/088 or equivalent.

ECO 207 International Economics (3)
A study of: (1) the theories of trade-comparative advantage and the factor proportions theory; (2) trade policies - tariffs, quotas and subsidies; (3) trade liberalization and trade blocks - EEC & NAFTA; (4) multi-national corporations and labor/capital movements and technology transfers. (5) Exchange rate systems and (6) the impact of trade and monetary arrangements on developing countries will also be studied. Prerequisite: ECO 203 or ECO 204 or Permission of Instructor.
ECO 209 Money and Banking (3) A study of the nature and functions of money and finance, this course outlines the institutional framework of the American financial system, describes and explains the special roles played within the system by commercial banks and the Federal Reserve System, explores the interrelationships between the monetary sector and the rest of the economy and the ways in which monetary policy may be used to assist in the attainment of society’s economic goals. Prerequisite: ECO 203 or Permission of Instructor.

Education

FOR MORE INFORMATION, CONTACT THE HUMAN SERVICES AND TEACHER EDUCATION DEPARTMENT IN MAWHINNEY HALL, ROOM A181, (315) 498-2341.

EDU 155 Developmental Care of Infants and Toddlers (3) An overview of methods of fostering the development of infants and toddlers emphasizing the caregiver role in planning environment and interacting with children. In order to complete some assignments, students must have a child under three years of age available for observation and interaction. Prerequisite: English and Reading placement at college level.

EDU 158 Infant-Toddler Development (3) This course examines all domains of infant and toddler development including: prenatal development, language development, cognitive development, motor development, and social/emotional development. Atypical development and the importance of early intervention will also be presented and discussed. In addition, the observation and caregiving skills necessary for a quality infant and toddler program will be presented. In order to complete assignments, students must have a child available to observe. Prerequisite: English and Reading placement at college level.

EDU 170 Development of Children From 5-12 Years (3) A specialized course in child development which studies the emotional, social, cognitive and physical development of the child from five to twelve years. Students will examine theories and research about child development and learn to recognize and understand child behavior, using a variety of observational methods. Students will plan developmentally appropriate experiences for the school-age child, and develop basic interaction, guidance and supervision skills. The influence of the family and society as well as school-age settings will also be explored. In order to complete assignments, students must have children within this age range available to observe. Prerequisite: English and Reading placement at college level.

EDU 172 Classroom Management (3) This course explores guidance theories, applications, goals, techniques, and factors that influence teacher expectations and classroom management issues. The effects of culture and student diversity on the classroom environment will also be explored. Classrooms serving children ages 2 - 12 years will be addressed. Prerequisite: English and Reading placement at college level.

EDU 174 Teaching Fieldwork Instruction and Seminar (1) This course offers pre-service teachers orientation to the field of childhood education. Students will work at least 30 hours per semester under the supervision of an experienced teacher in an educational setting. The weekly seminar provides an opportunity to discuss and evaluate field experiences with fellow students and the course instructor. A medical exam, fingerprinting and Child Abuse Central Registrar Clearance may be required. Prerequisite: HUM/EDU-180 and either HUM/EDU-182 or PSY-204.

EDU 180 Early Childhood Education: an Intro. (3) This course is designed to introduce prospective early childhood (Birth-2) and childhood (1-6) education teachers to the historical, philosophical and cultural approaches to the study of early childhood education. Students will examine current issues and challenges and begin development of their professional education skills and beliefs. A field component will be required. Prerequisite: English and Reading placement at college level.

EDU 182 Child Development: Observation/Assessment (3) This is a specialized course in child development which studies the emotional, social, cognitive and physical development from the prenatal period to pre-adolescence. Students will use observation and assessment techniques to build an understanding of growth and development. Multiple influences on child development and learning including the sociocultural context of development will be explored. Prerequisite: English and reading placement must be at college-level proficiency.

EDU 184 Early Childhood Field Instr & Seminar I (5) The first level fieldwork course gives students an orientation to the early childhood education profession, goals and objectives. Under the supervision of an experienced early childhood teacher/caregiver, each student develops basic interaction, guidance, and supervision skills. The weekly seminar is used to discuss fieldwork experience and teacher/caregiver skills. A medical exam, fingerprinting and Child Abuse Central Registrar clearance are required. Prerequisite: HUM/EDU 182: Co-requisite: EDU 281.

EDU 230 Human Services With Diverse Populations (3) This course examines the domestic and global contexts of diversity, the impact of ethnicity, race, gender, ability/disability, socio-economic class and sexual orientation on our lives. Students will develop self-awareness regarding their own feelings, assumptions and behaviors in relation to others different from themselves and will explore how these impact their personal values, belief system and interactions with others. Prerequisite: English and Reading placement at college level.
EDU 275 Cultural Foundations/Education (3)
This course focuses on philosophical, historical and cultural approaches to the study of education in the United States. Current educational concerns that affect teaching and schools will be studied. An anti-bias perspective will be emphasized. Students will be required to complete a field component. Prerequisite: PSY-204 or PSY-207 or HUM/EDU-182.

EDU 280 Language & Literacy Dvlpmnt in Children (3) This course examines the development of language an literacy in young children from birth through the primary years. Students will explore theoretical foundations of early literacy development and the implementation of various modules to effectively support young children as readers and writers. Other topics include: working with families to support early literacy development, selecting quality children's literature, assessing early literacy development, integrating literacy throughout the curriculum and adaptations for individual children in diverse and inclusive settings. Prerequisites: HUM/EDU 182 or PSY 204 or PSY 207.

EDU 281 Curriculum Development (3) The theoretical basis for setting educational goals and planning developmentally appropriate experiences for children from birth to eight (with emphasis on the later years) is studied, along with methods of planning, supervising, and evaluating these experiences. Prerequisite: HUM/EDU 182 or PSY 204 or PSY 207.

EDU 282 Home, School, Community (3) This course examines the contexts in which children develop, including family, school, and community, and how teachers can work together with parents and community resources to foster the optimum development of children. Prerequisite: HUM/EDU 182 and PSY 103 or SOC 103 or Permission of Instructor.

EDU 283 Early Childhood Field and Seminar II (3) The second-level fieldwork course builds on the competencies developed during the first level. Particular attention is given to planning, supervising, and evaluating curriculum experiences that are developmentally appropriate and integrated. These are implemented in the students' fieldwork classrooms. The weekly seminar is used to discuss fieldwork experiences and teaching concepts and skills. A medical exam, finger printing and Child Abuse Central Register clearance are required. Prerequisite: HUM/EDU 184 or Permission of Instructor.

EDU 285 Early Child Special Ed: Intro (3) This course provides an introduction to special education in early childhood and the early primary grades. The legal foundation of special education, public laws, the New York State Special Education process and contemporary models and issues in the field of special education will be examined. Students will explore the causes, characteristics and educational implications of disabilities. The course will also focus on selection/modifying appropriate teaching strategies in inclusive early childhood environments and in early primary classrooms. Strategies for working effectively with families and early childhood special education professionals in the context of early childhood programs will also be examined. Exploration of personal competencies and ethical issues in special education will be explored. A field component is required. Prerequisite: HUM/EDU 182, PSY 204 or Permission of Instructor.

Electrical Engineering Technology
FOR MORE INFORMATION, CONTACT THE ELECTRICAL TECHNOLOGY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W131, (315) 498-2451.

ELT 100 Foundations of Electronics (4) An introductory course in instrumentation and laboratory skills for technology students. Various aspects of electrical circuit measurement techniques are investigated in the laboratory, with emphasis placed on component identification, signal tracing, soldering and troubleshooting. Each student will be required to purchase one electronics kit for assembly in the laboratory, as designated by the instructor. Three class hours and a two-hour laboratory. Co-requisite: MAT 087 or Permission of Instructor.

ELT 100L Instrumentation Concepts and Applications Lab (0)

ELT 131 Electrical Circuits (4) In this course students learn to analyze DC and AC passive circuits using Ohm’s Law, Kirchhoff’s laws, and Superposition. RC and RL circuits are analyzed for impedance and phase angles; Troubleshooting, analysis by computer simulation using simulation software, and telecommunication applications are stressed throughout. Prerequisite: MAT 107, CMT-110

ELT 131L Electronic Circuits for Telecommunications Laboratory (0)

ELT 141 Circuits I (4) Course topics include the introduction and use of DC & AC voltage sources along with resistors, capacitors & inductors in series, parallel & series/parallel circuits. Circuits are analyzed using Ohm’s law, Watt’s law and Kirchhoff’s current and voltage laws. The course concludes with the application of the basic concepts to high pass, low pass, band pass and band stop filters. Laboratory exercises emphasize the construction, analysis, measurement and trouble shooting of basic RLC circuits using state of the art laboratory equipment and computer simulation software. The use of algebra, complex numbers, engineering notation and scientific calculators are also covered. Lecture hours and Lab hours are required in this course. Prerequisite: Intermediate Algebra or equivalent. Corequisite: MAT 143 or equivalent.
ELT 141L Circuits I Lab (0)

ELT 142L Circuits II Lab (0)

ELT 142 Circuits II (4) ELT 142 Circuits II is an advanced course in DC and AC circuit theory. Topics addressed in this course review and expand on the concepts from Circuits I (ELT 141). New topics include Thevenin’s, Norton’s and superposition theorems, mesh and nodal analysis, magnetism, and fundamental power concepts. Laboratory exercises emphasize circuit construction, analysis and measurement using advanced laboratory equipment. Lecture hours and Lab hours are required for this course. Prerequisite: Completion of ELT 141 with a grade of C or better, and MAT 143 or equivalent.

ELT 142 Circuits II (4) Designed to introduce students to the basic principles that govern the function and operation of the programmable logic controller (PLC). It focuses on the common input and output devices that are typical in sequential and process control applications. Topics include: PLC applications, logic concepts and ladder diagrams, CPU, memories, input/output devices, safety issues, maintenance techniques, I/O and memory addressing, ladder logic programming language, design of relay operated process, and proper installation methods. Three lectures and three hour labs. Prerequisite: CMT 171, ELT 141 or Permission of Instructor.

ELT 215L Program Logic Control Lab (0)

ELT 215 Program Logic Control Lab (0)

ELT 257 Electronic Communication (4) Students practice the analysis and application of advanced electronic circuits as applied to the telecommunications industry. Topics include frequency response of active filters, oscillators; amplitude modulation, frequency modulation, phase locked loops; pulse modulation concepts; and introduction to television; theoretical and hands-on troubleshooting of test circuits, and analysis by computer simulation software. Prerequisite: ELT 153

ELT 258 Advanced Electronics (4) Applications of solid state devices in systems, emphasizing power and industrial control circuits. Included are thyristors, operational amplifiers, timers, voltage regulators, opto-electronics, and motor control. This course may be modified in response to rapid technological changes, to ensure that the most important devices are included. Three class hours and a three-hour laboratory. Prerequisite: ELT 142 and 261

ELT 161 Lab (0)

ELT 161 Electronic Circuits I (4) Introduction to semiconductor theory, devices and circuits. Voltage and current relationships in diodes, light-emitting diodes and indicators. Diode applications in power supplies and electronic circuits. Discrete and integrated circuit voltage regulators. Basic amplifier concepts and integrated circuit operational amplifiers. Three class hours and a three-hour laboratory. Prerequisite: ELT 141

ELT 161 Electronic Circuits I Lab (0)

ELT 153 Introduction to Electronics (4) In this course students are taught the characteristics of amplifiers using opamps with respect to amplification, dB, frequency response, and input and output impedance. Opamp applications such as inverting and non-inverting amps, summing amps, averaging amps, and comparators are introduced with emphasis on the uses of these devices in the telecom industry. Electro-optical devices, such as LEDs, laser diodes, and photodiodes, are studied including uses in the telecom industry. Diodes and transistors are conceptually introduced. Transformers are introduced in connection with power supplies. Diodes are applied as switches in linear and switching power supplies. The frequency response of passive networks and amplifiers is measured. Cutoff frequencies, rolloff, bandwidth, and magnitude and phase are discussed and visualized via Bode plots. Troubleshooting and analysis by computer simulation software is stressed throughout. Prerequisite: ELT 131, PHY 101

ELT 153 Introduction to Electronics (4) ELT 153

ELT 180 HVAC Electrical Theory and Application (3) This course teaches the fundamental concepts of troubleshooting residential and light commercial HVAC electrical system problems. Technicians learn and practice proven diagnostic techniques that they can apply immediately. The goal of the course is to provide technicians with both the skills and confidence necessary to tackle any electrical system malfunction, with emphasis on rapid discovery of the failed component and root cause determination. Prereq: Minimum of one year of field experience in servicing and maintaining residential and light commercial HVAC equipment, or Permission of Instructor.

ELT 258 Advanced Electronics Lab (0)

ELT 260 Independent Study Project (1) Any project suitable for individual or small group self-study, and approved by the Department, may be pursued. Students must be highly motivated and self-directive. The instructor will meet weekly with the students and serve as a resource person. Prerequisite: Variable (Consult Department Chairperson)

ELT 261 Electronic Circuits II (4) Circuit applications of typical discrete and integrated semiconductor devices found in common electronic equipment. Devices studied will include bipolar junction and field-effect transistors, solid state switches, controlled rectifiers and opto-electronic couplers. Three class hours and a three-hour laboratory. Prerequisite: Completion of ELT 161 with grade of C or better

ELT 261L Electronics II Lab (0)

ELT 265 Communication Systems (4) This course focuses on radio communications circuits and systems, including tuned amplifiers, mixers, carrier signal modulation, transmission, demodulation, transmission lines and antennas. Emphasis is placed on circuits and concepts common to many types of systems. Circuits of super heterodyne receiver systems are investigated in the laboratory. Three class hours and a three-hour laboratory.
ELT 265L Commun Systems 1 Lab (0)
ELT 268 RF Fundamentals for Technicians (3)
Deals with basic concepts in Radio Frequency band. Topics included are: transmission media such as coaxial line, and wave guide relationships for impedance, VSWR, gain, and loss in magnetic and electric fields and “s” parameters. Basic theory and operation of the spectrum analyzer and network analyzer will be discussed. Experiments related to the slotted line and measurement techniques for passive RF components such as couplers and dividers will be demonstrated. The basic operations of the pin, attenuator, divider, and coupler are included in the course. Prerequisite: ELT 142 and 161

ELT 285 Power Systems I (4)
Review of AC circuit concepts including Kirchhoff’s Laws, Vector Algebra, Phasor diagrams, Magnetism and transformer operation. Polyphase systems including three phase generation, wye and delta connections. Three-phase power. AC and DC rotating machinery. Three class hours and a three hour laboratory. Prerequisite: Completion of ELT 142 with a grade of C or Better

ELT 285L Power Systems I Lab (0)
ELT 289 Cooperative Education (3)
Designed to provide work experience directly related to the student’s field of study. A learning contract, containing specific educational objectives related to work experience and the student’s field of study is developed by the student and the faculty co-op coordinator. Course requirements include a minimum of 180 hours of work in the student’s field of study, maintenance of a daily log of hours worked and duties performed, attendance at three two-hour on campus seminars, and a work-related final project. This will allow the student to earn 3 credit hours. The student can earn a total of six credit hours with additional 180 hours of work experience (without seminars) and an extended final project. The student’s performance will be evaluated by the faculty co-op coordinator on the basis of the objectives in the initial learning contract with a grade of Satisfactory or Unsatisfactory. NOTE: The number of credit hours must be determined at the time of registration. Prerequisite: Approval by the ELT Department and Co-op Education Office

ELT 299 Advanced Topics (4)
Topics are selected to respond to the particular needs of students and the special preparation needed for career opportunities as they exist at the time of the course offering. Laboratory experience is included if appropriate for the topics. The number of class and laboratory hours is determined by the scope of the topics, with one credit hour for each 15 hours per semester of lecture and one credit hour for 30 to 45 hours of laboratory per semester. Open to sophomore students only. Prerequisite: Permission of Instructor.

Electronic Media Communications
FOR MORE INFORMATION, CONTACT THE ELECTRONIC MEDIA COMMUNICATIONS DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W150, (315) 498-2321.

EMC 101 Introduction to Electronic Media (3)
Designed to present an overview of electronic media as public communication. Stresses the importance of broadcasting, cable, and satellite communications at the local and national level. Federal regulation and responsibilities of broadcast licenses are studied, as well as the relationship of broadcasting to the audience, advertising, and public relations. Guest lecturers from industry, corporate communications, and educational broadcasting are scheduled. Open to all students.

EMC 144 Audio/Video Production: An Introduction (4)
This course is designed to give the student a basic overview of audio and video production. Theory and terminology are introduced through lecture and hands-on application. The student will be introduced to the skills necessary to operate audio and video equipment in studio settings and begin to develop visual and aural literacy. This course is a requirement for all other Electronic Media Communications production courses. Five lecture/production hours per week. Prerequisite: Electronic Media Communications majors or Permission of Instructor.

EMC 155 Digital Audio Production (4)
This course is intended to give the student a practical as well as a theoretical approach to digital audio production. Emphasis is placed on the use of digital audio in sound recording, audio editing, multi-track mixing, and audio processing. The student will be exposed to audio production/editing procedures and techniques. Pre-requisite: EMC 144; Electronic Media Communications majors or Permission of Instructor.

EMC 159 Television Studio Production (4)
This course stresses the importance of effective aural and visual communication, teamwork, and problem-solving skills necessary for success in the process of television studio production. Television studio production techniques and disciplines are explained, demonstrated, and applied. This course builds on basic production techniques and skills developed in EMC 144 Introduction to Audio/Video Production by engaging the student in more demanding assignments and more sophisticated production work. Particular emphasis is placed on developing critical thinking and analytical skills, as they apply to production. Five lecture/production hours per week. Prerequisites: EMC 144; Electronic Media Communications majors or Permission of Instructor.

EMC 160 Ration Station: an Introduction (3)
This radio course is designed to introduce the student to the terminology, technology, concepts, and structure of radio broadcast stations. Topics covered will include FCC rules and regulations, station organization, sales, ratings, promotions, control room operations, departmental interrelationships, technological applications and industry trends. Prerequisite: EMC 144. EMC majors only.
EMC 169 Video Field Production (3) This course is designed to introduce the student to the technical and creative requirements of single-camera, video field production. Topics include camera operation, lighting, audio recording for field production and linear (tape to tape) editing, as well as all aspects of pre-production, including story development, scripting, shot list and storyboard creation, site surveys and production planning for location field production. Prerequisite: EMC 144, EMC Majors or Permission of Instructor.

EMC 190 Internship I (3) This course is designed to provide work experience directly related to the student’s field of study. The student, working with the faculty co-op coordinator, will develop a learning contract containing specific educational objectives as they relate to that work experience and the student’s field of study. Course requirements include a minimum of 120 hours of work in the student’s field of study; maintenance of a daily log which includes hours worked and duties performed; participation in resume, cover letter, and interviewing workshops; regular meetings with faculty coordinator; and a final work-related project determined by the faculty member.

EMC 249 Electronic News Gathering: an Intro. (3) This course is designed to introduce students to the concepts and practices of professional news gathering for electronic media. The role of news in radio and television is explained, with emphasis on identifying and contrasting basic forms of news delivery: 24-hour news, local/network newscasts, breaking news, live updates, etc. Through classroom exercises, students will learn and practice the techniques of determining a story’s newsworthiness, researching, copywriting, interviewing, producing, writing to the image and editing a virtual news story. Additional importance will be placed upon ethics and professionalism in electronic news. Prerequisite: EMC 169, EMC majors only.

EMC 251 Sportscasting I (3) This course is designed to present an in-depth study of the world of Sports Communications, concentrating specifically on Fall and Winter Sports (intercollegiate and scholastic levels). Special emphasis will be placed on basketball, baseball, softball, and lacrosse. Radio/TV students will become familiar with the techniques used to research, produce, facilitate, report and analyze sporting events. Special training and actual “hands-on” experience in reporting/producing OCC and area college/high school sporting events is scheduled. Guest lectures from the Sports Communications field are also scheduled. Prerequisite: EMC 154 and EMC 159. EMC Majors or Permission of Instructor.

EMC 252 Sportscasting II (3) This course is designed to present an in-depth study of the world of Sports Communications, concentrating specifically on Spring and Summer (intercollegiate and scholastic levels). Special emphasis will be placed on basketball, baseball, softball, and lacrosse. Radio/TV students will become familiar with the techniques used to research, produce, facilitate, report and analyze sporting events. Special training and actual “hands-on” experience in reporting/producing OCC and area college/high school sporting events is scheduled. Guest lectures from the Sports Communication field are also scheduled. Prerequisite: EMC 154, EMC 159. EMC Majors Only or Permission of Instructor.

EMC 259 Digital Video Editing (4) This course is designed to enable the student to become proficient in the technical and creative aspects of nonlinear digital video editing and its role in the production process. Editing concepts such as story building and pacing, techniques such as continuity and parallel editing and examples of single-camera, post-produced programs are discussed and analyzed. Planning for post-production and media management are emphasized. Three lecture/two production lab hours per week. Prerequisite: EMC 169, EMC majors, or Permission of Instructor.

EMC 260 Radio Stations Operations (3) This course provides the basic principles of contemporary radio station programming, focusing on formatting concepts and strategies, marketing, promotion, production, news operations, and the practical applications. Emphasis will be placed on the student’s application of programming strategies through the use of OCC Internet Radio. Prerequisite: EMC 160, EMC majors.

EMC 265 Sound Design & Prod for Digital Media (3) This course is designed to introduce students to the technical and creative aspects of loop-based audio production and how it is used in many types of digital media productions. Students will analyze and create audio to be used in media projects ranging from radio programming, television/video programming, DVDs and websites. Prerequisite: EMC 155, EMC majors, or Permission of Instructor.

EMC 269 Television News Production (4) This course focuses on the skills necessary to create content and produce a weekly television newscast. Methods of news delivery are analyzed, and students will put into practice the theories learned in EMC 249. Students will conduct effective research, practice effective interviewing techniques, and produce, report, and write copy for television news. Students will work in teams to produce a live weekly newscast. Emphasis will also be placed on ethics and professionalism, as well as legal consideration, as they pertain to producing and developing electronic news. Five lecture/production hours. Prerequisite: EMC 249 or Permission of Instructor, EMC majors only.
EMC 275 Producing for Radio (4) This course is a culmination of audio theory and practical skills learned by students in previous radio courses. Students will produce original programming in the areas of news and public affairs, documentaries, sports, college/community interest, and arts and entertainment. Emphasis will be placed on the student's ability to provide informational, educational, and entertainment programming for the college Internet radio station. Three lecture/two production lab hours per week. Prerequisite: EMC 260, ENG/JRN 157.

EMC 276 Media Streaming (3) This course is designed to introduce students to the theory and practice of streaming media via the Internet and telecommunications networks. Students will be required to properly encode and compress audio and video to be used in the streaming process. Various types of video and audio file formats are covered, as well as compression standards. The deployment of media servers, live web casting, and multiple media player formats will be discussed. A final project will include the encoding and streaming of audio and video media for a website. Prerequisite: EMC 155, EMC 259, EMC majors or Permission of Instructor.

EMC 286 DVD Authoring (4) This course provides a hands-on approach to the conceptualization, design, production, and assessment of video projects completed on DVD. The course will focus on strategic planning (including scripting and flow charts), creation of video and audio content, proper encoding of media, file management, creation of interactive menus, proper linking of all media assets within the DVD, and outputting projects to a DVD disc. Topics of discussion will include the history, characteristics, various types, and user interactivity of the DVD format, as well as various types of digital media files and managing those files on a network. Three lecture, two production lab hours per week. Prerequisite: EMC 155, EMC 259, EMC Majors Only or Permission of Instructor.

EMC 289 Television Producing and Directing (4) This course is designed to build upon and improve the student's studio production skills, to further an understanding of the multi-camera production process, and to become proficient in directing a multi-camera, multi-source studio production. Emphasis is placed on the correct use of television directing terminology. The aesthetic principles of producing, set and lighting design, sound, visualization, and continuity are identified and applied. Five lecture/production hours per week. Prerequisite: EMC 155; Electronic Media Communications Majors only.

EMC 290 Internship II (3) This course is designed to provide work experience directly related to the student's field of study. The student, working with the faculty co-op coordinator, will develop a learning contract containing specific educational objectives as they relate to that work experience and the student's field of study. Course requirements include a minimum of 120 hours of work in the student's field of study; maintenance of a daily log which includes hours worked and duties performed; participation in resume, cover letter and interviewing workshops; regular meetings with faculty coordinator; and a final work-related project determined by the faculty member.

Emergency Management A.A.S.

FOR MORE INFORMATION, CONTACT THE PUBLIC SAFETY TRAINING CENTER IN THE J. STANLEY COYNE HALL, ROOM E100,(315) 498-6046 OR WWW.PSTC.SUNYOCCC.EDU.

EMG 150 Principles of Emergency Management (2) Principles of Emergency Management is intended to provide information that will enable persons just entering the profession or expanding their roles to have the ability to work with emergency management issues. The course provides an overview of the characteristics, functions, and resources of an integration of resources and capabilities. Emphasis will be placed on how this system is applied to all hazards for all government levels, across the four phases and all functions of emergency management. Prerequisite: Open to EMG students only or Permission of Instructor.

EMG 152 Public Safety Critical Incident Management (1) Public Safety Critical Incident Management provides students with information relevant to public safety forces (fire, police, and emergency medical services) roles and responsibilities when responding to an emergency. Additionally, the course provides information dealing with support service agencies and the concerns and roles of private business and local government in supporting public safety forces in emergency situations. The course provides information to encourage cooperation of all groups and agencies at the scene of an emergency, with a key component focusing on the goals and critical tasks of each public safety agency operating at a given scene. Prerequisite: Open to EMG students only or Permission of Instructor.

EMG 160 Developing Volunteer Resources (1) Developing Volunteer Resources allows students to learn the necessary skills to be able to make appropriate volunteer assignments, structure programs to maintain or increase the skill levels of volunteers and motivate volunteers to both maintain readiness and operate effectively during emergency situations. Prerequisite: Open to EMG students only or Permission of Instructor.

EMG 162 Resource and Donations Management (2) This course is designed to provide Resource Mgmt. Coordinators with the knowledge and skills they need to perform resource management functions within the overall framework of the emergency operations center (EOC). This performance-based course is intended to introduce local officials (i.e., representatives of local governments and leaders of local voluntary organizations) to the concept of donations management and their roles and responsibilities in the donations management process. Prerequisites: Open to EMG students only or Permission of Instructor.
EMG 150 Emergency Management Situation. Prerequisite: both emergency and non-emergency situations, participants will be able to apply creative solutions to the appropriate type of decision-making style. And their root causes so as to be able to determine the problem-solving aspects of disaster operations. Multi-level partnership, the course emphasizes how these roles and responsibilities relate to those accepted national mitigation strategies. The course provides students information helpful in the coordination of public safety agencies, local businesses, and professional organizations. Also provided in the course is information on funding mitigation efforts through public and private sources.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite</th>
<th>Description</th>
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<tbody>
<tr>
<td>EMG 165</td>
<td>Hazardous Waste Operations &amp; Emerg Rspns (2)</td>
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<td>This course provides a comprehensive overview, covering all facets of hazardous waste management and emergency response. Topics include practical exercises and training, which may be applied to business, industry, construction and institutions, including Federal and State rules and regulations, handling procedures and proper operation of a designated waste facility, storage, labeling, manifesting, shipment, employee training, proper use of safety equipment, emergency response procedures (spills response and clean up), cost effective waste reduction, and environmental reporting procedures. This course is offered as a one week 40-hour course over the winter intersession and will provide 40-Hour Hazardous Waste Operations &amp; Emergency Response (HAZWOPER) certification as specified in OSHA 29CFR 1910.120.</td>
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<td>EMG 170</td>
<td>Public Information Officer Basic Course (3)</td>
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<td>The Public Information Offices basic course provides students with the skills needed to perform public information duties as they relate to emergency management. The course focuses on the definition of the job of the public information officer. The course assists participants with building the skills needed for this position, such as oral and written communication, understanding and working with the media and the basic tools and techniques PIOs need to do the job. Prerequisite: Open to EMG students only or Permission of Instructor.</td>
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<tr>
<td>EMG 178</td>
<td>Emergency Response Planning (3)</td>
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<td>Planning an essential function of an effective emergency management program and services a tool for emergency professionals in improving disaster management and public safety policies. The Emergency Response Planning course provides emergency management and public safety personnel with the knowledge, skills, and ability to develop or enhance their Comprehensive Emergency Management plans. The course will highlight the importance of building an integrated system for emergency planning that uses multi-agency teams to address mitigation, preparedness, response, and recovery. Prerequisite: EMG 150</td>
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<tr>
<td>EMG 180</td>
<td>Emergency Management Leadership (2)</td>
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<td>The Emergency Management Leadership course is designed to provide students with the skills necessary to lead and influence other in the demanding setting of emergency management by increasing their range of skills in a variety of interpersonal areas: conflict management, use of power group dynamics leadership and influence. Students are taught to clearly identify problems and their root causes so as to be able to determine the appropriate type of decision-making style. Using a suggested process of problem solving, participants will be able to apply creative solutions to both emergency and non-emergency situations, in an emergency management situation. Prerequisite: EMG 150</td>
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<tr>
<td>EMG 182</td>
<td>Basic Incident Command System (1)</td>
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<td>The Basic Incident Command System course is designed to increase the participants’ knowledge and understanding of the Incident Command System. Utilizing both lectures and small group activities participants will acquire the ability to organize and manage an incident through implementing the ICS. The material covered during the course includes an introduction to the principles and features of ICS, organizational overview, incident facilities, incident resources and common responsibilities of key ICS positions. Prerequisite: EMG 152</td>
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<tr>
<td>EMG 184</td>
<td>Emergency Response to Terrorism</td>
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<td>The purpose of this course is to introduce students to the basic concepts and operations applicable in a disaster environment (particularly for major disasters) and enhance understanding of what the proper roles and responsibilities of various local and state emergency management officials are, why they matter, and how these roles and responsibilities relate to those carried out by the Federal government. To foster multi-level partnership, the course emphasizes the problem-solving aspects of disaster operations as well as associated coordination requirements. Prerequisite: EMG 150</td>
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<tr>
<td>EMG 252</td>
<td>Disaster Response and Recovery Operation (2)</td>
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<td>The course addresses the important roles of the emergency program manager or other local government representatives in mitigation. It provides the emergency manager direction on how to implement into a locality recognized and accepted national mitigation strategies. The course provides students information helpful in the coordination of public safety agencies, local businesses and professional organizations. Also provided in the course is information on funding mitigation efforts through public and private sources.</td>
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EMG 262 Intermediate Incident Command System (2) The Intermediate Incident Command System course is designed to increase the participants' knowledge and understanding of the Incident Command System. Utilizing both lectures and small group activities, participants will acquire the ability to organize and manage staffing. The material covered during the course includes organization and staffing, organizing for incidents and events, incident resource management, air operations and incident and event planning. Prerequisite: EMG 182

EMG 270 Multi-Hazard Emergency Response Planning For Schools (1) This course will provide participants with the basic information and tools needed to develop effective plans for the wide array of potential emergencies that schools may face. Participants completing the course will be able to explain the importance of effective planning to others and lead individuals in their schools and community through the process of developing an effective multi-hazard program.

EMG 278 Emergency Operations Center Management (2) The EOC Management course provides students with the knowledge and skills they need to design, initiate, build and operate an Emergency Operations Center. The curriculum is designed using a performance-based approach, which emphasizes learning activities that are easily transferable to the job.

EMG 280 Emergency Exercise Program Management (3) The Emergency Exercise Program Management course is intended to provide participants with the knowledge and skills to develop and conduct disaster exercises that will test a community's emergency operations plan and operational response capability. Prerequisite: EMG 150

EMG 282 Advanced Incident Command System (2) The Advanced Incident Command System course is designed to increase the participants' knowledge and understanding of the inherent flexibility of the Incident Command System to manage major or complex incidents. Utilizing both lectures and small group activities, participants will require the ability to organize and manage major or complex incidents. The material covered during the course includes command and general staff duties and responsibilities, unified command, major incident management and area command structures. Prerequisite: EMG 262

EMG 284 Terrorism Response Planning (2) This course will help emergency planners, first responders, and others at all levels to review their preparedness efforts and response capabilities to a terrorist incident. It will also assist participants in the ongoing re-evaluations of their threats, their current emergency operations plan and the implications of a terrorist incident on continuity of critical services and long-term recovery. Prerequisite: EMG 178

English

FOR MORE INFORMATION, CONTACT THE ENGLISH
DEPARTMENT IN MAWHINNEY HALL, ROOM A319, (315) 498-2313.

ENG 099 Basic Composition (3eq) A developmental writing course for students who need more individualized instruction and intensive practice in composing and editing short expository prose than is provided in ENG 103. Prerequisite: Standard diagnostic tests, verbal scores, writing samples, and/or recommendation of instructor. This course does not satisfy Freshman English credit requirements. (Additionally) tutoring in the Writing Skills Center may be required. This foundational course provides (3) equivalent credit hours toward your full-time load and is based on (3) equivalent credit hours; it carries (0) credit hours of academic credit.

ENG 103 Freshman Composition & Literature I (3) Develops the skills and forms necessary for writing college-level expository prose. Methods for developing content, organizing information and ideas, and presenting that material to a reader clearly, concisely, and coherently, will be taught. Various readings may be used as a source of models and ideas. Prerequisite: Satisfactory diagnostic tests, verbal scores, and/or writing samples.

ENG 104 Freshman Composition & Literature II (3) Teaches students to comprehend, respond to and use the ideas of others in their own writing. Skills such as analytic and critical reading and writing, summarizing, and paraphrasing are developed through the study of literature. Term paper form will also be taught. Prerequisite: ENG 103.

ENG 108 Creative Writing - Drama/Script (3) Students will write and revise original scenes and short scripts for the stage or screen, learning to use dialogue, character development, plot, structure, action, and setting. Critical readings as well as viewings of classic and contemporary plays or films will be assigned, and attendance at area professional theatre or film performances may be required. NOTE: Instructor will specify whether course is Drama or Script for semester. Prerequisite: ENG 104

ENG 121 Introduction to Journalism and the Mass Media (3) Designed to increase students' awareness of the mass media and its impact on society: development of the media, including writing types and styles; ethical and social problems; study and practice of journalistic writing, analysis of major news media with emphasis upon newspapers. Prerequisite: ENG 103

ENG 123 Newspaper Production (1) Familiarizes students with all aspects of newspaper production and provides practical application of journalism theories with participation in the activities of the student newspaper. Students attend weekly meetings, write articles, etc. Includes one-half hour seminar/discussion.
ENG 157 Electronic Media Writing (3) This course helps students to master the diverse writing styles and formats used in writing for broadcast on radio, television and cable. These include public service announcements (PSAs), station IDs, promotional announcements, script formats, commercials, news copy and program materials. Emphasis is on developing broadcast copy style, distinguishing words directed toward the ear and the eye. Prerequisite: ENG 103.

ENG 203 World Literature I (3) The course sequence (203-204) chronologically surveys major works of Western literature and its relationship to the cultural trends of the period. A wide and varied range of readings are available to the student. The survey should lead to an awareness of the objectives and forms of literary art and to a knowledge of Western culture as great writers have mirrored it. Course covers the period from the Ancients to the Renaissance. Prerequisite: ENG 103, ENG 104.

ENG 204 World Literature II (3) A continuation of ENG 203 from the Renaissance to the present, which may include works from Petrarch, Shakespeare, Cervantes, Flaubert, Sartre, and the moderns. Either semester may be taken independently. Prerequisite: ENG 103, ENG 104.

ENG 206 Creative Writing-Poetry (3) An intensive introduction to the fundamentals of writing and revising original poetry. Techniques used by traditional and contemporary poets will be studied. A brief introduction to prose and dialogue may also be included. Prerequisite: ENG 103, ENG 104 and Permission of Instructor.

ENG 207 Creative Writing-Fiction (3) A course for the writing and revision of original fiction, both segments and complete stories. The styles and techniques of classical and contemporaneous writers will be studied. A brief introduction to dialogue and poetry may be included. Prerequisite: ENG 103, ENG 104.

ENG 210 Dramatic Literature II (3) A study of modern drama from Ibsen to the present. Either semester may be taken independently. Prerequisite: ENG 103, ENG 104.

ENG 211 Intermediate Composition (3) Instruction in précis and research writing with emphasis on the expository techniques of analogy, analysis, and definition. Prerequisite: ENG 103, ENG 104.

ENG 212 Intermediate Composition (3) Instruction in précis and research writing with emphasis on the expository techniques of analogy, analysis, and definition. Prerequisite: ENG 103, ENG 104.

ENG 213 Children’s Literature (3) Examines literature for children from the preschool level through the middle school level. Topics covered include history and development, research skills, criticism, major authors, and major forms: poetry, picture books, fables, myths, legends, sacred writings, epics and romances, folktales (fairy tales), fiction, and non-fiction. Emphasis is on the teaching of the knowledge and critical skills needed to locate, comprehend, analyze, evaluate, and present the literature. Prerequisite: ENG 103, ENG 104.

ENG 215 Mythology (3) The first concern of the course is the survey of Greek and Roman mythologies, their origin, development, interpretation, and use by both classical and modern writers. In addition, some attention is given to Norse and Celtic mythologies, their relationships to classical mythology and use in British literature. Prerequisite: ENG 103, ENG 104.

ENG 216 Celtic Culture: An Introduction (3) Celtic culture interacts with English tradition at many levels. This course introduces the student to that culture (language, literature, archaeology, art, music) of both the ancient and modern Celtic-speaking lands: ancient Britain and Gaul, modern Ireland, Scotland, Wales, Brittany, Cornwall and the Isle of Man. Special attention is given to extensive medieval literary texts, the Tain Bo Cuailnge of Ireland and Mabinogi of Wales. Course work includes directed, individual study projects. Prerequisite: ENG 103, ENG 104.

ENG 217 Science Fiction (3) A chronological examination of science fiction from early 19th Century to the present, with brief references to classical precursors. The themes of science fiction will be explored through various literary genres. Prerequisite: ENG 103, ENG 104.

ENG 219 Acting I: Dramatic Literature in Performance (3) An introductory course in the theory and technique of acting. Each student will participate in various training techniques, including pantomime, acting exercises, improvisations, analysis and interpretation of roles, freeing the imagination, developing concentration, voice production, body movement, scene and character study. Each student will rehearse and perform in scenes consisting of one, two or more characters. Writing character analyses and critiques will also be taught. Prerequisites: ENG 103, ENG 104.

ENG 221 English Literature I (3) A critical and historical survey of English literature from Beowulf to the Romantic Age. Although the literature is presented historically the central emphasis of the course is on the works themselves. Prerequisite: ENG 103 and ENG 104.

ENG 222 English Literature II (3) A critical and historical survey of English literature from the Romantic Age to the present. Either semester may be taken independently. Prerequisites: ENG 103 and ENG 104.
ENG 223 American Literature I (3) A critical study of major American writers of the 19th Century. The literary works are viewed in their relationship to the cultural movements and intellectual history of American civilization. Prerequisites: ENG 103 AND ENG 104

ENG 224 American Literature II (3) A study of major American writers of the 20th Century. The literary works are viewed in their relationship to the cultural movements and intellectual history of American civilization. Prerequisites: ENG 103 and ENG 104

ENG 225 Literature of the Black American I (3) A study of major African-American writers from the 18th to the 20th centuries. Emphasis is on the evolution of the novel as a form. Students read poetry, novels, short stories, and plays in order to develop their critical appreciation of literature, as well as understand the unique condition of Black people in America. The first semester surveys literature written by Black authors from the slave poets (1750’s) to the modern renaissance of Afro-American literature (1950’s). Prerequisites: ENG 103 and ENG 104

ENG 226 Literature of the Black American II (3) A study of major African-American authors of the 1960’s to the present. Though the main focus of the course is on understanding literature in general, the themes of the works emphasize the special condition of Black people in America. Either semester may be taken independently. Prerequisites: ENG 103 and ENG 104

ENG 227 Writing for Emerging Technologies (3) Fast-paced and widespread developments in technology have changed the way people distribute, access, and understand information. With the Internet serving both as a medium for text and a delivery system for other kinds of digital content, competitive employees in the marketplace must be able to provide clear and effective pieces of web-based communication and other kinds of documents. This course will discuss the issues surrounding the new technology. Topics covered in the course include First Amendment law and the Internet, “repurposing” stories across platforms, and clear writing techniques. This course is offered online only. Prerequisite: ENG 104

ENG 228 The Novel I (3) A study in chronological sequence of selected works of the chief European and English novelists of the 17th and 18th centuries, with emphasis on the evolution of the novel as a form. Students will read the works of individual authors and acquaint themselves with the social and political changes of the relevant period. Prerequisites: ENG 103 and ENG 104

ENG 229 The Novel II (3) A study of major European and English novelists of the 19th and 20th centuries. Emphasis is on the evolution of the novel as an art form and the relationship of the novel to its social, ideological, and historical setting. Either semester may be taken independently. Prerequisites: ENG 103 and ENG 104

ENG 230 Women’s Literature (3) A reading, discussion, and writing course that covers several time periods and genres to focus on the unique problems and accomplishments of women writers. Analyses of literary works will focus on gender and the cultural climate in which the studied writers worked. Prerequisites: ENG 103, ENG 104

ENG 233 Shakespeare I (3) Concentrates on Shakespeare’s early development as a dramatic poet. The first semester will be concerned with the evolving poetic techniques of “apprentice” plays. Sonnets will be included. Also, those dramatic techniques Shakespeare begins to master, whether in tragedies, comedies, histories, or problem plays, will be studied. Shakespeare’s themes and his ever-maturing expression of them will form the major aspect of the course. Prerequisites: ENG 103 and ENG 104

ENG 236 Poetics of the Film-The Talkies (3) A study of the period of the “talkies” as a contemporary art form, concentrating on its uniqueness as well as its relationship to existing literary genres. Either semester may be taken independently. Prerequisite: ENG 103, ENG 104.

ENG 239 American Folklore (3) This course investigates types of folklore found in the United States, including aspects such as definition, classification, origin, variation, and function in contemporary culture. It explores how traditions (oral, customary, and material folklore) develop within any group of people who share a common interest, experience or background, whether it be race, ethnicity, region, occupation, class, family, age, gender, sexual orientation, disability, special interest, etc. Through readings, films, and discussion focused on examples of diverse groups, students will learn how the lore of a group both expresses and shapes the experiences, concerns, and values of the group. Students will collect, classify, analyze, and share the traditions of their own groups as well. Learning to recognize the dynamics of folklore within their own groups, students will gain the skills necessary to understand and respect the traditions of groups other than their own. Prerequisites: ENG-103 and ENG-104

ENG 241 American Autobiography As Literature (3) A survey of American autobiographies during the nation’s 200 years. The class will examine the cultural issues raised by each autobiographer’s quest for identity, and investigate the ways autobiographers shape their lives in words. Prerequisites: ENG 103 and ENG 104

ENG 245 New Immigrant Literature (3) This course examines literature reflecting the American experience of immigrants and expressing their search for roots and cultural identity, both in the U.S. and in journeys back to their homelands. The class will explore cultural issues raised in fiction, poetry, drama, and memoirs of writers from a number of countries. Discussion and writing assignments will focus on both analyzing the literature and on examining the students’ experiences. Prerequisite: ENG 103-104.
ENG 250 Voices of Diversity (3) Studies of the pride and prejudice encountered by minority groups in American culture, as expressed in literature and film. At least three of the following “voices”, their songs and their out cries, will be heard each semester: the gay and lesbian voice, the Asian-American voice, the Hispanic voice, the Jewish voice, the new immigrant voice, the Native American voice, the voices of the homeless, the drugged, the disenfranchised and other minority voices. Prerequisite: ENG 103 and ENG 104.

ENG 251 Writing for the Media (3) Elements of writing news stories; style and structure; news sources; types of stories. Discussion and criticism of various kinds of writing for the media, with emphasis on newspapers; consideration of publicity writing. It is recommended that students take ENG/JRN 121 first. Prerequisite: ENG 103 and ENG 104, and ability to type.

ENG 252 The New Non-Fiction and Popular Writing (3) A survey of contemporary attempts to use the techniques of fiction writing in works of non-fiction and an examination of some outstanding examples of journalistic feature writing, magazine writing, and criticism. Students will have the choice of writing critical reviews or doing non-fiction and related writing. Includes study of one relevant documentary motion picture and one full-length non-fiction work. Prerequisite: ENG 103 and ENG 104.

ENG 259 Report & Technical Writing (3) A course that provides training in the preparation of professional and technical written reports. Attention is paid to the development of the student's ability to design a coherent report, to organize ideas, and to understand and use specific forms, stylistic conventions, and standard language. Prerequisite: ENG 103 and ENG 104.

ENG 270 American Nature Writing (3) American Nature Writing examines themes in nature writing in fiction, non-fiction, poetry, drama, and film. The approach is essentially chronological with studies that focus primarily on nineteenth and twentieth century American writing including regional investigation of the Adirondack and Catskill areas in New York State. The course will target ecology related issues. Prerequisites: ENG 103 and ENG 104.

ENG 276 The American West: A Film Study (3) Can be taken either for English or History credit. Studies the settlement of the American West as it has been reflected in popular literature and films, focusing on the distinction between the actual frontier experience and the way that experience has been presented to us in our entertainment. Special emphasis on the Plains Indian, the mountain men, and the cowboys. Prerequisite: ENG 103, ENG 104.

ENG 282 Introduction to Critical Theory (3) The goal of this course is to introduce students to several schools of critical theory widely used in literary analysis, including deconstruction, post-colonialism, feminism, Marxism, semiotics, and psychoanalysis. By the end of this course, students will be familiar with the major arguments and questions of the schools studied. This coverage will include where ideas intersect across schools, key debates at the heart of critical analysis, and practical applications. Most usefully, students will complete the course by performing analytical tasks in at least two critical schools. Prerequisites: ENG 103 and ENG 104.

English as a Second Language

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNEY HALL, ROOM A319, (315) 498-2313.

ESL 091 Academic Listening (3eq) Students will receive instruction and intensive practice in listening to authentic academic materials derived from a number of subject areas. The focus will be on improving comprehension of lecture material, expanding vocabulary, and taking effective notes in simulated classroom situations. Prerequisite: LOEP Placement Test. For ESOL students only.

ESL 093 Academic Reading (3eq) This course is designed to help speakers of other languages learn to navigate college-level English language textbooks. Students will be introduced to strategies to help them identify main and sub-points in a text, how to use a text to test-taking purposes, and how to read charts and graphs. Special attention will be paid to pronunciation and comprehension of vocabulary. Materials used in the class will be drawn from across disciplines. Prerequisite: LOEP Placement Test. For ESOL students only.

ESL 115 English As a Second Language II (3) Designed for non-native speakers of English. Emphasis is on building verbal English skills and in using standard English as a written medium. Focus in on developing sentences and paragraphs that are organized and grammatical, and fluent. This course does not satisfy Freshman English Requirements. For ESL students only.

ESL 116 Composition for International Students (3) A course in short composition for native speakers of other languages, with emphasis on individualized instruction, paragraph development and organization, intensive practice in the proofreading skills required of English grammar, and attendance English vocabulary development. Prerequisite: ESL 115 or placement test.
ENS 201 Digital Logic Design (3) An introductory course in digital logic designed for Electrical and Computer Engineering students. Topics include: number systems, Boolean algebra, minimization of Boolean expressions, combinational and sequential networks, state machine design, and networks for arithmetic operations. Prerequisite: MAT 161 or Permission of Instructor. Co-requisite: MAT 162

ENS 201 Digital Logic Design (4) An introductory course in digital logic designed for Electrical and Computer Engineering students. Topics include: number systems, Boolean algebra, minimization of Boolean expressions, combinational and sequential networks, state machine design, and networks for arithmetic operations. Prerequisite: MAT 161 or Permission of Instructor. Co-requisite: MAT 162

ENS 2011 Digital Logic Design Lab (0)

ENS 207 Engineering Mechanics I (statics) (3) Basic concepts, vector algebra, forces and moments about a point and a line. Free body diagrams, equilibrium conditions in two and three dimensions. Plane trusses, frames and machines. Forces in beams and cables. Application of friction in machines. Centroids and moments of inertia of lines, areas, and volumes. Principal axes and principal moments of inertia, Mohr’s circle. Prerequisite: PHY 105

ENS 207R Eng Mechanics I Recitation (0)


ENS 210 Electrical Circuit Analysis (4) A first course in basic circuit theory. Topics covered include: circuit definitions, voltmeter and ammeter relationships for circuit elements, Kirchhoff’s laws; resistive circuit analysis including loop and nodal analysis, network theorems; transient behavior of R-L, R-C, and R-L-C circuits; sinusoidal steady-state analysis and phasors; introduction to active devices such as transistors and operational amplifiers and applications of network theorems to circuits with active devices. Prerequisite: PHY 205

ENS 212 Mechanics of Materials (3) First course in the development of the mechanics of deformable bodies, primarily for engineering students. Topics include: theories of stress and strain, deformations, Hooke’s law, axial loads, shearing loads, bending loads, Mohr’s Circle, shear and bending moment diagrams, elastic stability and deflection of beams. Prerequisite: ENS 207. Co-requisite: MAT 264
ENV 110 Field Exper in ETG (1) A one credit field course designed for those students contemplating a career in Environmental Technology. The class will visit active, unrestricted sites currently undergoing remediation for soil and/or water contamination. Sampling protocols and proper field note taking will be practiced. Two classroom sessions and two all day field trips during the fall semester.

ENV 165 Hazardous Waste Operations & Emerg Rspns (2) This course provides a comprehensive overview, covering all facets of hazardous waste management and emergency response. Topics include practical exercises and training, which may be applied to business, industry, construction and institutions, including Federal and State rules and regulations, handling procedures and proper operation of a designated waste facility, storage, labeling, manifesting, shipment, employee training, proper use of safety equipment, emergency response procedures (spills response and clean up), cost effective waste reduction, and environmental reporting procedures. This course is offered as a one week 40-hour course over the winter inter ses sion and will provide 40-Hour Hazardous Waste Operations & Emergency Response (HAZWOPER) certification as specified in OSHA 29CFR 1910.120.

ENV 201 Internship in Environmental Tech/Geoscience (2) This course is designed for students in their last semester of the ETG AAS degree program, enabling them to gain real world experience with a private consulting firm or government agency. Students will spend a minimum of 40 hours working with a qualifying business or agency and attend two three-hour seminars. Prerequisite ENV 104

Fire Protection Technology

FOR MORE INFORMATION, CONTACT THE PUBLIC SAFETY TRAINING CENTER IN THE J. STANLEY COYNE HALL, ROOM E109, (315) 498-2671.

FPT 111 Firefighting Standards (3) This course will introduce the student to basic firefighting techniques and equipment. The course will follow the National Fire Protection Association 1001 Level I Standard. The student will be required to successfully complete both written and practical national accreditation exams.

FPT 112 Firefighting Standards II (3) This course will introduce the student to advanced firefighting techniques and equipment. The course will follow the National Fire Protection Association 1001 Level II Standards. The student will be required to successfully complete both the written and practical national accreditation exams.

FPT 121 Fire Service Supervisor (3) This course will follow the guidelines of the National Fire Protection Association 1021 Levels I and II Fire Officer Training and Professional Qualifications. Supervision, motivation, leadership, discipline, communication and problem solving will be studied individually and in-group activity. Prerequisite: Permission of Instructor

FPT 141 Fire Service Instructor (3) This course will focus on the information and skills necessary for fire service instructors to meet the requirements of NFPA 1041 Levels I and II. Beginning with analysis of the challenges, safety issues and legal considerations fire instructors will face. Students will consider dimensions of the learning process as well as strategies and approaches for planning, delivering, managing and evaluating fire service training.

FPT 150 Introduction to Fire Protection (3) A survey course dealing with the broad field of fire suppression. Included are statistics of fire loss, agencies involved in fire protection, basic organization and functions of a fire department, private fire protection, fire prevention methods, and a review of current and future fire protection problems.


FPT 152 Fire Fighting Tactics and Strategy (3) Deals with the effective utilization of manpower, equipment, and apparatus. Emphasis will be placed on fire-planning, fireground organization, large fire tactical problems, command functions, utilization of staff personnel, communications procedures, water supply problems, and strategic considerations of community protection during large fires or major emergencies. Prerequisite: FPT 150

FPT 153 Legal Aspects of Fire Protection (3) A study of the police power; considerations of liability, negligence, rights and responsibilities of fire department members while performing their duties. The law of arson and its specific application, an examination of the various court systems. A study of the See v. Seattle decision and its effect on fire prevention activities.

FPT 155 Hazardous Materials (3) A study of the chemical and physical characteristics of hazardous materials such as explosives, flammable and combustible liquids, oxidizing and corrosive materials, compressed gases and radioactive materials. Emphasis will be placed on storage, handling, and fire control procedures. Prerequisite: CHE 156 or Permission of Instructor.
FPT 156 Fire Hazards and Their Control (3) A study of common and special fire hazards of both the causative and contributive types. Identification and evaluation of degree of severity are stressed, together with appropriate means of control of hazards. Relevant local and national codes and standards are emphasized.

FPT 157 Fire Hydraulics (3) A course in incompressible fluids covering principles of fluid statics and dynamics, pipe friction, flow measurements, orifice calculations, pumps and other hydraulic devices. Applications are related to fire protection systems and equipment. Public water system design with reference to American Insurance Association standards will be covered. Prerequisite: PHY 152.

FPT 158 General Chemistry for Fire Science (3) A study of general chemistry from the viewpoint of hazardous materials. Aspects of combustion are studied in detail. A prerequisite for advanced Fire Science course dealing with hazardous materials. No laboratory. Evenings only.

FPT 159 General Chemistry for Fire Science (3) A study of general chemistry from the viewpoint of hazardous materials. Aspects of combustion are studied in detail. A prerequisite for advanced Fire Science course dealing with hazardous materials. No laboratory. Evenings Only.

FPT 160 General Physics for Fire Science (3) A one-semester study of selected topics in general physics for students enrolled in the Fire Science curriculum. Includes topics in mechanics, fluid mechanics, electricity, heat. No laboratory. Three class hours. Prerequisite: MAT-101.

FPT 162 Introduction to Safety (3) A survey course covering a wide range of safety topics applicable to business, industry, construction and institutions. Included are the history and objectives of the safety profession; specific activities such as hazard evaluation, accident analysis and record-keeping; and specialized topics such as material handling, workers compensation, fire protection and industrial hygiene. The course will enhance the knowledge of those with limited experience in safety while providing a basic understanding of the role of the safety profession for those with no experience.

FPT 163 Introduction to Safety Management (3) Introductory course on the Management of Safety in business for students who have had CRJ/FPT 162 (or direct experience) in safety. It is designed to provide an overview of the basic concepts of Modern Safety Management Systems that are used to develop and maintain an effective safety program. It will aid present and future safety managers in developing a formal safety program. In particular, the following sections are covered: Introduction, Basic Safety Concepts and Methods, Principles of Safety Management, and Special Techniques, Problems and Auxiliary Functions. The students will prepare class assignments to reinforce their understanding of the concepts presented and gain actual experience in developing a formal Safety and Health program.

FPT 164 Introduction to Industrial Hygiene (3) Covers the fundamentals of industrial hygiene and occupational safety. Provides basic information on the recognition, evaluation and control of hazardous chemicals and agents in the workplace. Topics cover the measurement of hazardous materials in the work environment, toxicology, responses to toxic agents, ventilation, noise, government regulations, medical surveillance, and protection equipment.

FPT 250 Fire Department Administration (3) A study of the administrative aspects of Fire Department operation. Included for study are basic administrative and management procedures, personnel administration, budget keeping, record systems, operational study techniques, public relations, line and staff functions, supervisory responsibilities, and related subjects. Emphasis will be placed on current administrative problems, and methods of developing solutions to these problems. Prerequisite: FPT 150.

FPT 251 Fire Protection Systems (3) A study of fire detection and extinguishing devices and systems of both automatic and manual types. Included for study are fire extinguishing agents, portable extinguishing equipment, fixed systems of various types, and detection and signaling systems. Stress will be placed on the operating characteristics, advantages and limitations, and methods of inspection and testing.

FPT 252 Fire Investigation (3) This course deals with the proper methods of investigating fires, of both the accidental and incendiary types. The fundamentals of arson investigation are covered including handling of evidence, liaison with the police services in criminal fires, and interrogation of witnesses. Also included are use of photography and scientific aids to investigation. Prerequisite: FPT 150 or Permission of Instructor.

FPT 253 Fire Prevention and Inspection (3) This course deals with the establishment of an effective community fire prevention program. Included for study are the organization of a fire prevention bureau, necessary codes and ordinances, establishment of an effective inspection program, record keeping procedures, handling of orders and complaints, and development of an adequate public education and information program.
Food Service Administration

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

FSA 100 Food Service Sanitation (1) Designed and approved by the National Restaurant Association Education Foundation so that students may become certified in Sanitation and Safety. The course is an intensive study of proper sanitation and safety through purchasing, storage, preparation, service of food, and hiring of personnel. Must be taken prior to/with FSA 103

FSA 102 Basic Nutrition (3) Basic principles of nutrition in regard to energy, protein, mineral, and vitamin requirements. Study of adequate diets and dietetics in relation to general health and diseases and the food requirements for all ages from prenatal to adult years. Optimum diets and diets of various national, social, and economic groups are studied. Three class hours.

FSA 103 Basic Food Preparation (4) Students are introduced to the fundamentals of basic food production for hotels, restaurants, and institutions. Included is a history of the culinary arts, exposure to sanitation, hygiene and safety standards, operation of equipment, and cooking procedures. Demonstration of the preparation of foods will be provided by the instructor followed by student preparation in such categories as hot foods, cold foods, and baking. Prerequisite or Co-requisite: FSA 100

FSA 103L Basic Food Prep Lab (0)

FSA 104 Quantity Foods/Preparation, Production and Service (4) Designed to elaborate on the techniques of food preparation and service. Emphasis will be placed on practical application of cooking techniques and dining room service for various types of food service facilities. Students will function in all positions of employment, gaining skills in such areas as quantity food production, menu development, waiter/waitress service, food estimation, intermediate management responsibilities, inventory principles, and food production systems analysis. Prerequisite: FSA 100, FSA 103 or Permission of Instructor.

FSA 104L Quantity Food Preparation Lab (0)

FSA 107 Cooking Basics (3) This course is designed to provide content information and skill practice in the basic fundamentals of cooking and baking. Areas of cookery to be covered are: baking-cookies, desserts and bread products; hot food preparation: vegetables, soups, stews, saute', stir fry, pasta and grains. Nutritional food selection, menu planning and the cultural influences on the American diet will also be emphasized. A lab fee is required. This course is not open to students matriculated in the Food Service Administration/Restaurant Management, Hotel Technology or Professional Cooking Curricula.

FSA 201 Food Service Management (3) A continuation of the study of management functions as they relate to the food service industry. This second level course covers the principles of personnel management and product merchandising necessary for the successful operation of food service facilities. Prerequisite: BUS 230 or Permission of Instructor

FSA 202 Food Service Cost Controls (3) A detailed study of how to set up and maintain cost control systems. The course focuses on important areas such as how to gather and use cost control information, profit planning, and the economics of the food service industry. Prerequisite: BUS 105, BUS 113

FSA 204 Purchasing, Storage and Handling (3) A study of the fundamental principles and practices of purchasing, storing, and handling of food items and supplies needed in restaurants, hotels, and institutions. The student will acquire working knowledge of such concepts as standards, grades, specifications, methods of ordering, requisitions, and the use of production records, proper receiving procedures, storage methods, issuing, and proper temperatures and holding items.

FSA 206 Diet Therapy (3) A continuation of the study of nutrition. The student will develop an understanding of the factors which make dietary modifications necessary for the treatment of disease, the principles of calculation, preparation, and service of modified diet, and the role of the diettian in relation to total dietary care of an individual. Prerequisite: FSA 102

FSA 207 Meal Planning and Equipment Selection (3) Designed to provide the student with the knowledge and skills necessary to properly plan a menu and the physical food service layout to produce and serve that menu. Topics to be covered will relate to traditional, specialty and “trendy” menu types along with the proper production and service layout. The student will create a business plan for establishing a food service operation.

FSA 210 Catering and Advanced Culinary Arts (4) This course is designed for students who have successfully completed a basic food preparation principle course. The course will provide the fundamentals for operating and working in a catering organization. Through the operation of an on-campus curriculum based catering organization, the student will rotate through all positions within a catering business. Students will also develop skills in special areas of food preparation such as hors d’oeuvres, baking and pastry. American and International cuisines.

FSA 210L Catering & Adv Cul Arts Lab (0)

FSA 212 Creative and Functional Culinary Arts (1) This culinary arts course will cover the use of key main ingredients in the preparation of appetizers, soups, salads and entrees. Mise en place, production issues, equipment selection and use, taste, color and selection of appropriate ingredients for each student to properly present his/her culinary creation will be emphasized. A materials fee will be charged. Prerequisite: FSA 103, or advanced level culinary skills and Permission of Instructor.
FSA 214 Patisserie I (1) This culinary arts course teaches concepts, skills and techniques for preparing dessert items. Topics to be covered include: individual pastries and desserts, decorative chocolate and sugar, pate choux and finishing of cakes. A materials fee will be charged. Prerequisite: FSA 103, or advanced level culinary skills and Permission of Instructor.

General Studies

FOR MORE INFORMATION, CONTACT THE GENERAL STUDIES DEPARTMENT IN MAWHINNEY HALL, ROOM A293, (315) 498-2332.

GEN 152 Human Adjustment (3) A learning experience through which students may derive a better understanding of themselves, their relationships to others, and how they adjust to their environment. Students learn about the process of adjustment and are introduced to concepts and skills that promote adjustment. Current theories in psychology provide the framework for discussion of topics that include self-concept, identity, personality, aging, sex role, stress and health, and maladjustment.

GEN 154 Comparative Vocational Planning (3) Designed to introduce students to methods of occupational planning and to expose them to available career choices. Integrated concepts include an evaluation of individual capabilities, preferences and goals.

Geography

FOR MORE INFORMATION, SOCIAL SCIENCE DEPARTMENT IN MAWHINNEY HALL, ROOM A385, (315) 498-2301.

GEG 101 Introduction to Geography (3) The purpose of this course is to provide an introduction to the basic concepts and methodology of world regional geography. Because geography incorporates aspects from multiple disciplines, we will examine geographic regions; introduce relative location, population characteristics, cultural features, physical environment, resources, and major cities, economic development and historical perspectives. Furthermore, through individual projects, each student will introduce him or herself to world affairs and how events in one place can influence events in distant locations. Finally, basic geographic concepts will be introduced to help explain the variable character of the humanized earth.

GEG 203 Economic Geography (3) Economic Geography investigates how the global economic system works within a spatial framework. It focuses on the production, distribution and consumption of wealth in society and why wealth is not evenly distributed globally, regionally and locally. Topics covered include the shift from Command Economy to Market Economy in the former communist bloc; the American era of Fordism and the Dollar; the shift to Flexible Specialization/Production and its impact on laborers today; and the new space-economy dominated by strategic alliances, sourcing, free trade zones and trading blocs. A global perspective will be used to discuss the topics in the course.

Geology

FOR MORE INFORMATION, CONTACT THE CHEMISTRY AND PHYSICAL SCIENCE DEPARTMENT IN FERRANTE HALL, ROOM F353, (315) 498-2432.

GEO 103 Physical Geology (4) An introduction to the basic principles of the earth sciences - geology, geochemistry, and geophysics - and their relation to materials and processes acting upon and within the Earth's crust. Consideration is given to rocks and minerals, structures and deformation of the Earth's crust, earthquakes, volcanism and the work of the wind, running water, ground water, the oceans and glaciers upon the Earth's surface. This course, together with GEO 104, satisfies the sequential laboratory science requirement of the Math-Science curriculum and also satisfies the requirements of those curricula demanding science or laboratory science courses. Three one-hour lectures or equivalent and one three-hour laboratory per week. No prerequisite.

GEO 103L Physical Geology Lab (0)

GEO 104 Historical Geology (4) A detailed study of the Earth's geologic history relative to the development of continents and life forms, includes study of the biologic evolution and geotectonics. Geomorphic and stratigraphic principles are utilized in the interpretation of geologic history. Laboratory includes work with fossils and geologic maps. Field trips emphasize regional geology. It is intended that this course follow GEO 103, and taken in this way satisfies the sequential laboratory science requirement of the Math-Science curriculum. It also satisfies the requirements of those curricula demanding science or laboratory science courses. Three one-hour lectures or equivalent and one three-hour laboratory per week. Prerequisite: GEO 103 or GEO 105 or GEO 106 or Permission of Instructor.

GEO 104L Historical Geology Lab (0)

GEO 105 Oceanography (3) Introductory survey of oceanography relating the physical, chemical, geological, biological, meteorological, and engineering aspects of the field, and engineering aspects of the field. This course satisfies the science elective requirement of the Math-Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week. No prerequisite.

GEO 105L Oceanography Laboratory (1) Includes investigation of ocean waters in terms of physical and chemical properties and the interactions of the water on air, sediments, coastal areas, and life forms. This course is intended for those who wish to deepen their understanding of oceanography and/or who have a laboratory science requirement to satisfy. One three-hour session per week. Prerequisite/Co-requisite: GEO 105 Lecture.
GEO 106 Environmental Geology (3) Introduction to the everyday geological problems of our world community, topics which are covered include population growth, natural resources, water pollution, waste disposal, energy sources, and environmental health hazards. Selected other topics of concern are earthquakes, landslides, and flood dangers. The course satisfies the science elective requirement of Math-Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week. No prerequisite

GEO 106L Environmental Geology Lab (1) Application of geological tools to the solution of environmental problems. Use of maps and aerial photographic interpretation and other analytical methods in seeking data on environment. Field trips include trips to local environmental problem and industrial sites. This course is intended for those who wish to deepen their understanding of environmental geology and/or who have a laboratory science requirement to satisfy. One three-hour laboratory per week. Prerequisite or Co-requisite: GEO 106 Lecture

GEO 205 Hydrology (4) This course covers the source, distribution, movement and sensitivity of surface, soil and groundwater in a geologic context. Topics include surface water, vadose zone, and groundwater hydrology (both regolith and fracture flow) along with some groundwater modeling. The lab experience focuses on field trips and characterization of a local aquifer. This course prepares the student for entrance into government or consulting positions and graduate programs in the hydrologic sciences, environmental technologies and the geologic sciences. Prerequisite: PHY 103, MAT 143 or higher

GEO 205L Hydrology Lab (0)

GEO 290 Geology of the Bahamas (3) A two-week, three credit course of fieldwork in biology and geology in a tropical marine setting. Environments, present and past, to be studied by snorkeling and walking include; beach, intertidal, coral reef, and associated shallow water habitats. Studies include evening lectures and independent research projects. Location: The Gerace Research Center, San Salvador Island, Bahamas. San Salvador is at the eastern end of a chain of 700 islands and cays that form the Commonwealth of the Bahamas. Requirements: The program is open to undergraduate and graduate students. No prior coursework is required to participate; however, some background in general biology, geology, or oceanography is helpful.

HEA 206 Studies in Health and Wellness (1) This course is a study of the six dimensions of wellness. The connection between lifestyle choices and health outcome in relation to the wellness continuum is emphasized. Health behaviors addressed include: stress management, diet, substance use, sex and sexuality, exercise, hygiene, and other health practices associated with disease. Strategies and resources which enable students to make informed choices about their behaviors will be explored. There is no prerequisite to this course.

HEA 207 Personal Health (3) An in-depth course for those students seeking greater knowledge in health. Covered are a broad range of topics similar to those discussed in PEH 206 and PEH 210, but in greater detail.

HEA 208 Human Sexuality (3) This course examines the developmental and social aspects of Human Sexuality as developed within the individual and within relationships. Topics include sexual anatomy and physiology, reproduction, sexual development, childbirth, sexual diversity, sexually transmitted diseases, various sexual problems and dysfunction and an exploration of community resources.

HEA 209 Drugs and Wellness (3) This course is designed to introduce students to the physiological, psychological, and sociological effects of drug use, abuse, and dependency on wellness. Topics covered enable students to make informed decisions about drug use including: over-the-counter drugs, prescription drugs, herbal remedies, dietary supplements, caffeine, tobacco, alcohol and illicit drugs. In addition, community resources that assist individuals with drug dependence will be identified to assist individuals with wellness. There are no prerequisites for this course.

HEA 212 Health and Safety Awareness for Teacher Education (1) This course is designed for those students planning to transfer to a four-year institution to pursue NYS teacher certification or for those in related fields a brief overview will be given of such topics as: identification and reporting suspected child abuse and maltreatment; prevention of child abduction; abuse prevention of alcohol, tobacco and other drugs; instruction in fire and arson prevention and school violence prevention intervention. Stress reduction and conflict resolution/mediation are also addressed. Additional fees are required for mandated training in Child Abuse Reporting and School Violence Prevention and Intervention (Project S.A.V.E.)
HEA 213 Managing Stress for Health and Well Being (3) A study of the fundamental theories and applications of the mind-body phenomenon. The interconnectivity of the physical, mental, emotional, and spiritual aspects of the human condition will be discussed. Other topics include stress reaction and its relationship to specific illnesses and diseases and intervention strategies. Relaxation techniques are introduced and practiced.

Health First Aid
FOR MORE INFORMATION, CONTACT THE PHYSICAL EDUCATION DEPARTMENT IN HEALTH AND PHYSICAL EDUCATION BLDG., ROOM H202, (315) 498-2282

HFA 203 Standard First Aid and Personal Safety (2) Taught under American Red Cross standards leading to certification; this course is designed to develop safety consciousness and train individuals in the skills and emergency procedures necessary to render assistance to others. (Does not meet Health or Physical Education activity requirements.)

HFA 204 Cardiopulmonary Resuscitation (1) Taught under American Red Cross standard leading to professional-rescuer certification in CPR, this course enables students to provide appropriate initial care for breathing and cardiac emergencies in adults, infants and children. Included in the course: two-rescue CPR, use of a resuscitation mask and bag-valve mask, and special rescue situations. The course is intended for public safety personnel, athletic trainers, lifeguards, emergency response team, and health care professionals. (This will not fulfill the Physical Education Health requirement.)

HFA 214 CPR Recertification (0) Taught under American Red Cross guidelines. This course is for public safety personnel, lifeguards, athletic trainers, emergency response team members and health care professionals who need to update and recertify in professional rescuer skills. Prerequisite: current CPR card issued within one year or Permission of Instructor.

HFA 215 Community CPR and First Aid (1) Taught under American Red Cross guidelines. This course leads to certification in Community CPR and First Aid and stresses the basic steps to follow in recognizing and caring for breathing and cardiac emergencies for adults, infants and children. Includes first aid skills for soft tissue injuries, bleeding control, splinting and other sudden illnesses. Appropriate for home and working environments. This course is not intended for professional rescuers. There are no prerequisites for this course.

Health Information Technology
FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

HIT 101 Introduction to Health Information Technology (3) This course introduces the Health Information Technology student to the health care delivery system including maintenance and acquisition of health data/information. History of the profession and the role of the American Health Information Management Association (AHIMA) will be covered. Health information management including numbering and filing methods, storage and retention of health records, design and maintenance of medical forms, quantitative analysis, and indices will be included. In addition the role of accreditation and regulatory agencies will be reviewed. Three hours lecture and one hour laboratory. Co-requisite: CIS 100

HIT 102 Legal Aspects of Health Information (3) This course is designed to provide the student with an overview of the legal and regulatory requirements for the maintenance, retention, and dissemination of health information and the role of medical documentation in legal proceedings. Major topics include: federal, state and JCAHO regulations; facility bylaws rules and regulations; the federal and state legal system; authorizations and consents, release of information, concepts of liability; civil procedures; and the role of risk management.

HIT 103 Health Information Systems in Non-Hospital Settings (3) This course is designed to familiarize the student with health information systems in the non-hospital settings. Specific areas to be covered will include, but are not limited to Ambulatory Care, Long-term Care, Home Care, Hospice, Psychiatric Care, and public health services. Health information functions, as well as quality assurance, risk management and utilization management will be covered. Prerequisite: HIT 101. Co-requisite: HIT 102, HIT 223.

HIT 110 Coding and Classification Systems I (3) This course is designed to familiarize the student with coding and classification systems used in health information management. Emphasis will be on outpatient coding, classification, and reimbursement systems including CPT, HCPCS, APG's, and RBRVS. Students will become familiar with both manual and automated systems. Prerequisites: HIT 101, BIO 171 or Permission of Instructor.

HIT 120 Medical Terminology (3) This course will provide a detailed study of the meaning of medical terms that relate to medical science and human anatomy. Medical specialties including pathology, radiology, and pharmacology, as well as abbreviations used in the health care field will be covered. In addition to definitions, pronunciation and spelling will be emphasized.
HIT 121 Medical Transcription I (3) This course is designed to introduce and familiarize the student with the transcription of health care documentation using electronic technology. Topics include careers, equipment and the ethical and legal responsibilities of the medical transcriptionist. Students apply grammar, punctuation, medical terminology and word processing skills to transcribe basic medical documents for various settings. Prerequisite: BOT 153 or equivalent or placement in English 103. Co-requisite: HIT 120 or Permission of Instructor.

HIT 201 Health Statistics and Reporting (3) The course reviews descriptive and vital statistics, reporting requirements, definitions and formulas for computing hospital and public health statistics. It will include the management of health information in relation to data collection, analysis and presentation. Topics will include the collection, analysis and display of data for quality assurance, utilization review, risk management and reimbursement. Prerequisite: HIT 101 and HIT 103 (MAT 087, if required)

HIT 202 Management of Health Information Service (3) This course introduces the student to the management functions: planning, organizing, directing, controlling and personnel supervision as they relate to the health information services. In addition to Health Information Services the roles and functions of Quality Assurance/Improvement, Risk Management, and Utilization Management will be included. Prerequisite: HIT 201

HIT 205 Computer Applications in Health Information Management (3) This course is designed to familiarize the student with computer applications used in health care facilities with emphasis on those used in health information management. Students will be instructed on the design, implementation and evaluation of automated systems. Quality controls, security and confidentiality will also be covered. Prerequisite: HIT 210

HIT 210 Coding and Classification Systems II (4) This course is a continuation of HIT 110. It is designed to familiarize the student with coding and classification systems used in health information management. Emphasis will be on Inpatient coding, classification, utilizing ICD-9-CM. Reimbursement systems including DRGs, negotiated rates and capitated payments will be discussed. Students will become familiar with both manual and automated systems. Students costs for required texts for this course are approximately $150. Class consists of three hours of lecture and two laboratory hours. Prerequisite: HIT 110 or Permission of Instructor. Co-requisite: BIO 221

HIT 221 Medical Transcription II (3) This course is a continuation of Medical Transcription I (HIT 121) and is designed to develop more advanced transcription skills. Medical Transcription II improves a student's capacity to transcribe medical reports for a broad range of clinical disciplines. Students enhance their understanding of medical and anatomical terminology. The development of medicolegal reports and medical committee minutes are also covered. Prerequisite: HIT 121, BOT 154

HIT 223 Clinical Practicum I (1) This course is designed to give students the opportunity to observe health information departments and systems in non-hospital settings. Students are assigned on a rotating basis to a variety of health related sites, including health regulatory agencies, ambulatory care, long-term care and other non-hospital facilities for a total of 40 hours. Co-requisite: HIT 101, HIT 103

HIT 225 Clinical Practicum II (3) Students in the health information technology program are required to complete a clinical practicum at the technical level. The main purpose of this practicum is to integrate the didactic (lecture) component with the clinical (practice) components. Students will utilize the knowledge they have gained from the classroom lectures and laboratory experiences in the clinical setting. Each student will spend 15 days (120 hrs.) in a health care facility. The student is responsible for the arrangement and costs of transportation to and from the clinical site. Prerequisite: HIT 101, HIT 102, HIT 110, HIT 223

HIT 227 Clinical Practicum III (3) This course is a continuation of HIT 225 and is designed to give students practical experience in health information management and supervisory issues. Students will utilize the knowledge they have gained from the classroom lectures and laboratory experiences in the clinical setting. Each student will spend 15 days (120 hrs.) in a health care facility. The student is responsible for the arrangement and costs of transportation to and from the clinical site. Prerequisite: HIT 225. Co-requisite: HIT 202, HIT 205.

HIT 230 Advanced Seminar in Health Information Technology (1) This course is designed to review and integrate previous HIT courses and clinical experiences. Exploration of career opportunities, preparation of resume, job search and interviewing for positions in health information technology will also be covered. This consists of a three hour lecture which meets for five weeks. Co-requisite: HIT 227
HIS 101 World History I (3) World History I is the first course in a two-course sequence tracing the rise of world civilizations. The course examines social, political, intellectual and economic development of world civilizations from their emergence to 1600 C.E. This course examines the rise of civilizations in Europe, Africa and Asia, the development of world religious traditions, and the growing conflict between world civilizations.

HIS 102 World History II (3) World History II is the second course in a two-course sequence tracing the rise of world civilizations. The course examines the 19th social, political, intellectual and economic development of world civilizations from 1600 C.E. to the present. The course examines the growth of the nations state, imperialism, the decline of monarchy and the World conflicts of the 20th century.

HIS 103 History of Western Civilization (3) A survey of western civilization and culture emphasizing political, economic, social and intellectual developments. Students are introduced to contemporary source materials and to interpretive works of the major historians. Ancient World to the Age of Reason.

HIS 104 History of Western Civilization (3) A continuation of HIS 103 from the Age of Reason to the present.

HIS 105 Early American History (3) A survey of early American history emphasizing political, social, and intellectual trends. Students are introduced to works of major historians and to various interpretations of American history. The course will cover early American history from its beginnings through the early National period.

HIS 106 American History in the 19th Century (3) A continuation of HIS 105, covering American history from the early National period through the 19th century.

HIS 107 Modern American History (3) America in the twentieth century, covering the major trends and movements in modern American history. A continuation of HIS 105, HIS 106.

HIS 119 Economic Transformation of the United States (3) A one-semester course that analytically relates the economic institutions and forces that have contributed to the development of the American economic structure. The emergence of these institutions will be related to the growth process through an amplification of the national banking system, the ramifications of trade (both domestic and external), the business cycle, the emergence of organized labor, social reform, and public policy. The interrelationship of these institutions will be studied, in their historical perspective. Three-hour elective credit for Economics, History, or Social Science (same as ECO 119). No prerequisite.

HIS 125 American Social History: A Film Study (3) A study of United States social and cultural movements since the late 19th century, with special emphasis on minority groups - Native Americans, African Americans, women, workers, immigrants, dissenters. In addition to lectures and books, the course will rely extensively on the use of media to illustrate the course of American history. No prerequisite.

HIS 207 History of North American Indian (3) A survey of American Indian history with emphasis upon pluralistic beginnings, the culture of American Indian groups, Indian-White contacts, the impact of Federal Indian policy, and persistence and change in American Indian culture. No prerequisite, though it would be preferable to have taken HIS 105 and 106.

HIS 208 History of the Iroquois (3) This course will cover the history of the Iroquois peoples. It will describe the historical origins and development of the Iroquois Confederacy, and delve into issues that have impacted on the confederacy over the years. Current legal problems, such as land claims, gaming, and taxing authority battles will be analyzed and discussed.

HIS 209 History of American Women (3) A chronological and topical study of women as a group and as members of different social classes, from the colonial period to modern America. Women's contributions to American social, cultural, economic, and political life are emphasized along with their struggle for civil, legal, and political rights.

HIS 210 History of Women and Medicine in America (3) A study of American medical theories and practice from the 18th century to the present. Emphasis is given to changing views of women's sexuality, women as patients, and as medical practitioners within the context of social and cultural history. Prerequisite: HIS 209 strongly recommended, or Permission of Instructor.

HIS 211 Russian History (3) A survey of Russian history from the earliest times, emphasizing the Byzantine religious and cultural heritage. Students are acquainted with the Kievan Rus, the Moscovite Rus, and eventually with the Imperial Russia. Special attention is given to the serf problem and to the revolutionary movement.

HIS 212 Russian History (3) Begins with the reign of the last Tsar, continues with the revolution; war, communism, and the civil war; the “NEP” period and Soviet consolidation; Soviet Union under Stalin; the USSR and the second World War; the Cold War Era.
HIS 223 African American History I (3) This course examines chronologically and topically the development of African-Americans from Africa, emphasizing the West African kingdoms, through the Civil War era. West African culture an social life will be discussed in order to show how that culture was exploited by Europeans in the development of the slave trade. Students will spend several weeks studying the development of the institution of slavery and how slaves psychologically adapted to that lifestyle. The course also emphasizes the development of free black communities in America during this period and the motivations for and efforts of African and non-African Americans to end slavery. The course concludes with a discussion of the reality and myth of Black participation in the Civil War and Reconstruction. Prerequisite: ENG 103.

HIS 224 African American History 1890 to the Present (3) This course examines chronologically and topically the development of African Americans from the post-Civil War era to the present. Students will examine African American responses to the legal institutionalization of segregation, self-help, education and the vote. Between discussions of Black participation in World Wars I and II, students will investigate the Harlem Renaissance and the development of jazz and the blues. Following a discussion of the Civil Rights Movement, the course will conclude with a discussion of Black conservatism.

HIS 226 History of the Civil Rights Movement (3) This course examines chronologically the efforts by African Americans to obtain full civil rights from the pivotal period of 1940-1955 to the present. The course focuses on first-hand recollections of the Movement by African and non-African Americans, documentary and popular film representations of the Movement and federal and state government responses to the Movement. The class discussions will seek to dispel the myths about the Movement while exposing the stereotypes, distortions, and romanticism that surround the Movement. An integral part of that discussion will be the evaluation of the strategies utilized by those advocating and those opposing the movement for civil rights. The course concludes with an extensive discussion of Black conservatism and efforts to "turn back the clock" on civil rights gains.

HIS 230 Families in American History (3) A chronological and thematic analysis of families from the seventeenth to the early twentieth century. The course focuses on familial contributions and responses to social, cultural, and economic change, with attention to class, ethnic, racial, and regional diversity. Typical topics include: images of the family and its life course; changing concepts and patterns of courtship; marriage; sexuality; parenting; childhood and adolescence; impact of industrialization and urbanization; alternate family life-styles; and effects of demographic change.

HIS 261 The Civil War (3) This course will examine the American Civil War (1861-1865) in its many aspects. Such topics as the origins of the crisis, the break-up of the Union, the major military campaigns, the actions and motives of Lincoln, Grant, Lee, Davis, and other key players will be explored, as well as the legacy of the war for future generations of Americans. Though military affairs will be emphasized, social, political and economic topics will be covered as well. There will be an extensive use of media.

HIS 276 American West:Film Study (3) This course can be taken either for English or History credit. We will study the settlement of the American West as it has been reflected in popular literature and films, focusing on the distinction between the actual frontier experience and the way that experience has been presented to us in our entertainment. Special emphasis will be placed on the Plains Indian, the mountain men, and the cowboys.

HIS 290 A History of Documentary Film (3) A study of the historical and cinematic development of the documentary film from its earliest beginnings to the present time. The course will explore the nature of non-fiction film, describe the different styles of documentary filmmaking that evolved over time, and then analyze the relationship of documentary film with selected historical periods. Students will view classic documentaries in class such as Robert Flaherty’s Nanook of the North (1922), Frederick Wiseman’s Titicut Follies (1967), and Errol Morris’ The Thin Blue Line (1989). They will learn the skills to evaluate documentary film from an historical and aesthetic point of view and develop a keen sense of historical appreciation of the past through the review and study of documentary film.

HIS 292 Collision of Cultures: America and Europe (3) This course will explore the collision of cultures that resulted from the voyages of Columbus and the European contact with the American continents. The life and career of Columbus and the Spanish conquest of the new world will be covered. The impact of this conquest on both European and American cultures and on subsequent world history will be examined.
Human Services

FOR MORE INFORMATION, CONTACT THE HUMAN SERVICES AND TEACHER EDUCATION DEPARTMENT IN MAWHINNEY HALL, ROOM A181, (315) 498-2341.

HUM 151 Introduction to Human Services Theory (3) This course introduces students to career fields in Human Services and other helping professions. Topics include human needs, human development, and the effects of family, culture, social systems and diversity on the development of the individual. Students will learn how to apply this knowledge to working with people, and they will clarify their personal and professional values and career goals. Prerequisite: English and reading placement must be at college-level proficiency.

HUM 153 Human Services Skills & Resources (3) This course introduces the student to professional helping relationships and teaches the beginning interpersonal skills and techniques essential for effective human services workers. Students will be introduced to the range of community resources for human services. Students will also explore career goals, select a Human Services track and begin the process of identifying a field internship placement for HUM 164 Social Work / Field Instruction I. Prerequisite: English and reading placement must be at college-level proficiency.

HUM 159 Chemical Dependencies (3) This course provides a study of the field of alcohol and other drug abuse, including: pharmacology, causes, legal aspects, intervention and prevention, psychological and psychological dimensions of chemical dependency within the general framework of treatment services. The roles of the professional and non-professional in intervention, counseling, and treatment will be examined. Emphasis will be placed on prevention treatment and alternatives to alcohol and other drug abuse and the related self-destructive behaviors. Prerequisite: HUM 151, HUM 153 and student must place at the ENG 103 level. Credit will not be given for both this course and HEA 209.

HUM 162 Introduction to Social Work Practice (3) The student is introduced to generic social work methods, aspects of practice, the concepts of generalist, social systems interventions and comprehensive social work service to individuals, small groups, and the community. Prerequisites: HUM 151 and either HUM 153 or HUM 160, or Permission of Instructor.

HUM 164 Social Work Field Instruction and Seminar (5) The field practicum is the first of a two-semester sequence of supervised experience enabling students to develop competency for the delivery of social work services at the Associate Degree level. The in-depth learning experience allows the student to integrate the knowledge base of social work with the actual practice of helping people. A medical exam and professional liability insurance fee may be required. Prerequisite: Permission of Instructor.

HUM 203 Child Welfare and Social Work (3) This course presents the student with an overview of the child welfare system, particularly as it pertains to working with children and families within the discipline of social work and the community at-large. Utilizing a strengths-based empowerment perspective in child welfare, the course will provide basic knowledge and understanding of the historical and ongoing development of the child welfare system, explore current services offered in child welfare agencies and examine practice decisions based on several social work methodologies. The impact of culture norms and the social marginalization of populations will be discussed as they relate to the definitions of abuse and the welfare of children and families. Prerequisites: HUM 151 and HUM 153 or Permission of Instructor.

HUM 226 Group Skills for Alcohol and Substance Abuse Counseling (3) This course is designed to present a variety of theoretical approaches to group techniques applicable to counseling alcoholics, addicts and adult children. Experiential exercises for practicing group techniques and skills will be utilized including screening clients and setting up a group. There will be an emphasis on managing group processes such as norm development dealing with reluctance and resistance and other disruptive techniques. The emphasis of the course is on group leader preparation and training.

HUM 227 Issues in Alcohol and Substance
Abuse Treatment Programs (3) This course is a survey of issues related to the treatment approaches in alcohol and drug treatment programs. Treatment of special populations, child abuse reporting domestic violence, treatment in correctional institutions, specialized addictive treatment modalities and employee assistance programs will be covered. Issues related to the role of the professional in alcoholism and substance abuse treatment will be discussed. Other topical issues will be introduced based on course and current trends in the field. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 228 Teenage Alcoholism and Substance Abuse (3) This course is designed to give basic knowledge regarding adolescent alcohol and drug abuse. The causes, treatment, and prevention of substance abuse and the bio-psycho-social development of adolescents will be studied. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 229 Alcohol/Addictions and Family Systems Treatment Programs (3) This course is designed to provide an in-depth look at the affects of alcoholism and substance abuse on the family system. The unit of study is the family. Topics include a variety of approaches for assessing the family, designing intervention and treatment programs, addressing co-dependency treatment issues, including family roles. Personal and professional development is studied, especially the influence of codependency. Also included are the models of healthy, troubled and dysfunctional family patterns.

HUM 230 Human Services With Diverse Populations (3) This course examines the domestic and global contexts of diversity, the impact of ethnicity, race, gender, ability/disability, socio-economic class and sexual orientation on our lives. Students will develop self awareness regarding their own feelings, assumptions and behaviours in relation to others different from themselves and will explore how these impact their personal values, belief system and interactions with others. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 260 Social Work Interviewing and Counseling (3) This course addresses the functions, roles, and techniques essential for effective social work/human services work. It encompasses social work values, knowledge and skills in the interviewing and the counseling relationship. Prerequisite: HUM 151 and HUM 153 or Permission of Instructor.

HUM 261 Social Work Policy (3) This course examines the history of social welfare and institutionalized social services and the impact on social workers and other helping professionals. Topics include: child welfare, public health, racism, sexism and the evolution of social work as a profession. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 263 Social Work Field Instruction and Seminar II (5) The field practicum is the second of a two semester sequence of supervised experience enabling the students to develop competency for the delivery of social work services at the Associate Degree level. The in-depth learning experience allows the student to integrate the knowledge base on social work with the actual practice of helping people. A medical exam and professional liability insurance fee may be required. Prerequisite: Permission of Instructor.

HUM 265 Aging and the Family (3) This course is an introduction and overview of the process of aging, including interactions between the biological, psychological, social, and economic aspects of aging in our society. Areas such as nutrition, health, housing, employment and retirement will be explored with an emphasis on the interdependence of all these areas. The present status of the elderly and possible changes that might prevent or remedy the problems they face in today's society will be discussed. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 267 Families in Crisis: Human Services Intervention (3) This course is a study of families in crisis and crisis intervention as the major treatment methodology. Focus is on specific developments and situational crisis which interfere with family functioning and coping abilities. Social service institutional services and the role of the crisis counselor will be discussed. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 268 Social Work With Alcohol and Substance Abuse (3) This course is an inter-disciplinary approach to social work and substance abuse counseling. Students will explore substance abuse treatment issues and theories, as well as the current alcohol and substance abuse service delivery system. The course will introduce the student to the knowledge and skills needed to assess, diagnose and treat substance abusing clients from a social work perspective. Prerequisite: HUM-151 and 153 or Permission of Instructor.

HUM 269 Social Work and People With Disabilities (3) This course will include a brief history of disabilities in our society, definitions and discussion of various disability groupings, providers, services and interventions as well as many of the current issues that individuals with impairments and disabilities face today. It considers the impact of the Americans with Disabilities Act of 1900 (ADA) and its effect on public awareness and attitudes. Prerequisite: HUM 151, 153 or Permission of Instructor.

HUM 270 Assertiveness Training (1) The purpose of this course is to learn the theory of assertiveness training and a method for developing skills in assertive communication, to conduct oneself in an effective, direct appropriate manner in interpersonal situations, especially at work. Teaching approaches include lecture, discussion, modeling, role rehearsal, videotaping, etc. Prerequisite: English and Reading placement must be at college level proficiency.
Interior Design

For more information, contact The Architectural Technology Department in Whitney Applied Technology Center, Room W352, (315) 498-2687

IND 110 Design Studio 1 (4) This is the first of two design studio foundation courses. Students explore elements of design and their relationships in two and three dimensions. Concepts include design vocabulary, design process positive and negative space, hierarchy, proportion, symmetry, movement, rhythm, composition, and unity. Architectural concepts of space and form, organizations, circulation, scale, structure, volume, fenestration and materials are introduced. Co-requisite: ARH/IND 120 and 154 or Permission of Instructor.

IND 111 Design Studio 2 (4) This is the second of two design studio foundation courses. Students continue to explore elements of design and their relationships in two and three dimensions. Design concepts and process are discussed in detail. Architectural and interior design concepts of space, organizations, circulation, scale, structure, volume, massing, fenestration and materials are analyzed and discussed. Prerequisite: ARH/IND 110. Co-requisite: ARH/IND 155 or Permission of Instructor.

IND 120 Drafting Studio 1: Wood Frame (3) This course will develop basic architectural drafting skills (manual). The student will demonstrate an understanding of these skills through the development of a set of architectural drawings for a wood frame house or similar structure. Students will be required to buy basic architectural drafting equipment.

IND 140 Wood Frame Construction (3) This is a lecture course covering the materials and methods of contemporary residential construction. The characteristics, properties, performance and application of exterior and interior materials and systems used in wood frame construction will be discussed.

IND 141 Interior Finish Systems & Furnishings (3) This course concentrates on a comparative analysis of commonly used floor, wall, and ceiling finish systems for residential and commercial building interiors. Furnishings, furniture and office landscape systems will also be discussed. Prerequisite: ARH/IND 140.

IND 154 Graphic Communications I (3) A free-hand drawing course designed to help the drafter/designer appreciate forms, texture, and composition. Basic instruction in pencil techniques, perspective principles. A basic course designed to help the drafter/designer develop a style of architectural rendering. Co-requisite: ARH 110 and IND 120 or Permission of instructor.

IND 155 Graphic Communications II (3) A continuation of IND 154 with emphasis on perspective drawing and introduction to shades and shadows. Various media are introduced including colored pencils and markers. Prerequisite: IND 154 or Permission of Department

IND 215 Design Studio 3 (4) This is the third design studio for Interior Design. Students are expected to apply knowledge of design concepts and design process to “real-life” design problems. Programming, aesthetics of interior spaces, context, fenestration, materials, furniture, structure, and design development will be explored. Experimentation with space, form, light, and proportion will be stressed. Significant trends in interior and architectural design as practiced by recent leading interior designers and architects will be discussed. Prerequisite: ARH/IND 111 or Permission of Instructor. Co-requisite: IND 256 or Permission of Instructor.

IND 216 Design Studio 4 (4) This is the fourth design studio for Interior Design. This studio is a continuation of IND 215 and will require indepth analysis of the design problems and higher expectations for design presentations. Students are expected to apply knowledge of design concepts and design process to “real-life” design problems. Programming, aesthetics of interior spaces, context, fenestration, materials, furniture, structure, and design development will be explored in depth. Experimentation with space, form, light, and proportion will be stressed. Significant trends in interior and architectural design, as practiced by recent leading interior designers and architects will be discussed. Prerequisite: IND 215 or Permission of Instructor.

IND 256 Graphic Communications III (3) An advanced course in perspective rendering. Students are expected to apply perspective drawing skills acquired in IND 153 to generate color renderings of building interiors and exteriors. Students concurrently taking Design Studio 3 are required to take this course and to use their design solutions as a base for required rendering projects in IND 256. Prerequisite: IND 155 or Permission of Department.

IND 266 Independent Study (1)

Journalism

For more information, contact the English Department in Mawhinney Hall, Room A313, (315) 498-2266.

JRN 121 Introduction to Journalism and the Mass Media (3) Designed to increase students’ awareness of the mass media and its impact on society: development of the media, including writing types and styles; ethical and social problems; study and practice of journalistic writing, analysis of major news media with emphasis upon newspapers. Prerequisite: ENG 103. Can be taken simultaneously with ENG 104.

JRN 123 Newspaper Production (1) Familiarizes students with all aspects of newspaper production and provides practical application of journalism theories with participation in the activities of the student newspaper. Students attend weekly meetings, write articles, etc. Includes one and one-half hour seminar/discussion.
JRN 157 Electronic Media Writing (3) This course helps students to master the diverse writing styles and formats used in writing for broadcast on radio, television, and cable. These include public service announcements (PSAs), station IDs, promotional announcements, script formats, commercials, news copy, and program materials. Emphasis is on developing broadcast copy style, distinguishing words directed toward the ear and the eye. Prerequisite: ENG 103 and ENG 104.

JRN 227 Writing for Emerging Technologies (3) Fast-paced and widespread developments in technology have changed the way people distribute, access, and understand information. With the Internet serving both as a medium for text and a delivery system for other kinds of digital content, competitive employees in the marketplace must be able to provide clear and effective pieces of web-based communication and other kinds of documents. This course will discuss the issues surrounding the new technology. Topics covered in the course include First Amendment law and the Internet, “repurposing” stories across platforms, and clear writing techniques. This course is offered online only. Prerequisite: ENG-104.

JRN 251 Writing for the Media (3) Elements of writing news stories; style and structure; news sources; types of stories. Discussion and criticism of various kinds of writing for the media, with emphasis on newspapers, consideration of publicity writing. It is recommended that students take ENG/JRN 121 first. Prerequisite: ENG 103 and ENG 104, and ability to type.

JRN 252 The New Non-Fiction and Popular Writing (3) A survey of contemporary attempts to use the techniques of fiction writing in works of non-fiction and an examination of some outstanding examples of journalistic feature writing, magazine writing, and criticism. Students will have the choice of writing critical reviews or doing non-fiction and related writing. Includes study of one relevant documentary motion picture and one full-length non-fiction work. Prerequisite: ENG-103, ENG-104.

JRN 253 Newspaper Editing Laboratory (2) Open to senior members of the student newspaper. Provides practical application of editing theories. Students must be familiar with all aspects of newspaper production and will train and direct one of the staffs of the student newspaper appropriate. Students attend weekly staff and editorial meetings. Includes weekly seminar discussions; four individual consultations with the instructor; a short evaluative paper.

JRN 255 Writing for Electronic Media (3) This course helps students master the diverse writing styles and formats used in writing for broadcast, on radio, television and cable. These include public service announcements (PSAs), station IDs, promotional announcements, script formats, commercials, news copy and program materials. Emphasis is on developing broadcast copy style, distinguishing words directed toward the ear and eye. Prerequisite: ENG 103 and ENG 104.

Labor Studies

LBR 111 Social and Professional Etiquette (3) This course introduces students to the development and use of social and professional etiquette rules and customs as currently practiced in the United States. Emphasis is placed on understanding the communicative nature of etiquette and its uses in furthering social and professional interactions. This lecture/demonstration course will include practice in various verbal and nonverbal skills required in the current social and professional climate including instruction in netiquette. Additionally, students will be introduced to etiquette rules and customs from around the world and will practice using these as a way to prepare for the global marketplace. This course meets with COM 111.

LBR 210 Contract Bargaining I (3) A basic course designed to equip students with a conceptual understanding of the collective bargaining process. Among the topics are the nature of the collective bargaining process, the scope of bargaining, collective bargaining structure, wage patterns, and impasse procedures.

LBR 212 Union Administration (3) This course applies organization theory to the administration of unions and analyzes the requirements placed upon union officers in the conduct of their responsibilities. The course investigates the role of the shop steward, executive board, officers and union staff in their relations with the members, with employer representatives, and with the public.

LBR 215 Contemporary Labor Problems (3) A survey of the major challenges that confront the labor movement in the 1970s. Students are briefed on the background of each problem and discuss and analyze a broad range of solutions proposed by the experts.

LBR 225 Contract Administration (3) A study of union administration; the underlying structure and the relationship of its members, locals, and national organizations; the implementation of the collective bargaining contract in its day-to-day administration. Emphasis will be placed on the basic principles of grievance procedure.

LBR 230 Labor and the American Economy (3) A general introduction into the development and structure of the American economy, examining the activities that people carry on - producing, saving, spending, paying taxes - to satisfy their individual and collective economic needs and desires. Emphasis is given the topics of special concern to working people such as employment and unemployment, price stability, and the governmental role in the economy.

LBR 240 International Affairs and Labor (3) American unions and their relationship to international organizations affecting labor such as the International Labor Organization and International labor trade and multinational corporations; and labor's stake in U.S. foreign policy.
LBR 241 Arbitration (3) A study of the function of arbitration in labor-management relations, including preparation for arbitration, the conduct of the hearing, evidence and proof, and the standards used by arbitrators in reaching a decision. Students will participate in mock arbitration hearings.

LBR 251 Social Behavior and Work (3) This course deals with human relations and leadership skills most frequently used in union and work settings. It is designed to provide students with fresh insights into human relations through the study of current concepts in sociology, psychology and other behavioral sciences.

LBR 254 Labor Law (3) A survey of the major areas of labor law, including union rights and permissible employer responses in organizing campaigns, protected activities under the NLRA, ground rules for collective bargaining, arbitration and enforcement of collective agreements, strikes and secondary boycotts, and public sector problems.

LBR 255 Labor History (3) A review of the major developments in American labor history form colonial times to the present with special emphasis on the changing goals of labor, early union efforts, the evolution of labor legislation, the development of the AFL and the CIO, the changing relationship between employer and employee.

LBR 256 Dispute Resolution (3) An introduction to dispute resolution theory and practice with special emphasis on its applications in the field of industrial and labor relations. The course examines the nature and sources of conflict in various areas of industrial society and the role of negotiations, mediation arbitration and fact-finding in the resolution of disputes.

LBR 259 Public Sector Collective Bargaining (3) An introduction to public sectors collective bargaining which focuses on public sector law as well as unique features of bargaining in this sector. Special attention will be given to the theory of bargaining as well as tactics and strategies employed in the process.

LBR 273 Health Hazards in the Workplace (3) A survey course on occupational health and safety. The course includes history of occupational health and safety at federal, state and city levels; analysis of specific health hazards, links to environmental health issues, and relationships to workmen's compensation and other disability coverage.

LBR 280 Oral and Written Communications (3) One of the most important skills a trade union leader must have is the ability to communicate effectively with other union members, employers, government representatives, and the public at large. These courses interweave the various kinds of speaking and writing the student might find useful in his work as a student and as a leader in his organization. Topics include: organizing ideas and preparing a written outline, writing a business letter, preparing a resolution or petition, writing minutes of a meeting, taking notes at meetings or lectures, speaking from an outline, basic parliamentary procedures.

LBR 287 Labor, Government, and Politics (3) A survey of the ways the political process affects labor, the nature of government operations, political lobbying, pressure groups and political parties.

LBR 299 Internship (3) A combined work and classroom experience involving placement with local labor or business organizations in the industrial and labor relations field. Student will combine work experience with seminars to identify learning objectives in the work experience and measure growth of labor relations skills.

Library

FOR MORE INFORMATION, CONTACT THE LIBRARY IN COULTER HALL, ROOM A112, (315) 498-2335.

LIB 100 The Art of Inquiry (1) An introduction to library research. Students will consider the purpose and methods of inquiry, examine the types and varieties of library materials, and become familiar with the arrangement of these materials in the library. Students will become proficient in the use of catalogs and indexes, printed and electronic.

LIB 105 Strange Frequencies: Deciphering Manufactured Information (3) This course is a critical examination of how information is manufactured, distributed and used in the Digital Era. Emphasis will be on assessing the impact of digital technologies on the production, presentation and use of information. Topics include but are not limited to: convergence of information producing organizations, data smog, doublespeak, information anxiety, information ethics, "it's an ad, ad, world," media bias, mediated reality, mediated voyeurism, push technology, misinformation, disinformation, rhetoric vs. reason, customizing information and the Internet/Web as content providers.

Mathematics

FOR MORE INFORMATION, CONTACT THE MATHEMATICS DEPARTMENT IN MAWHINNEY HALL, ROOM A205, (315) 498-2228.

MAT 079 Pre-Algebra (3eq) Concepts and techniques associated with pre-algebra mathematics. Topics include: arithmetic of fractions, decimals, proportions, and percents and an introduction to signed number operations. This course will emphasize both skill development and an application of these skills to real world situations. NOT OPEN TO STUDENTS WHO HAVE COMPLETED MAT 073. Prerequisite: whole number arithmetic.

MAT 085 Math Skills and Applications (1eq) Provides learning reinforcement for students enrolled in the areas of arithmetic, elementary algebra, or intermediate algebra. Both mathematical skills and applications will be emphasized. Students may enroll in this course only with a math diagnostician's recommendation. This course will be offered in a workshop format as needed or as requested by other disciplines requiring math skills (i.e. Nursing, health related professions, Economics).
MAT 087 Beginning Algebra (3eq) Concepts and techniques associated with beginning algebra. Topics include: Real number systems, algebraic operations, linear equations, coordinate systems, powers and roots, polynomials and factoring. Prerequisite: Arithmetic skills.

MAT 088 Beginning Algebra and Applications (4eq) This course is designed for students who have no previous exposure to algebra. The skills and applications component provides students with an opportunity to practice newly acquired skills and use these skills to solve practical problems. Topics include: Real number systems, algebraic operations, linear equations, coordinate systems, powers and roots, polynomials and factoring. Prerequisite: Arithmetic skills or students with no prior knowledge of Algebra.

MAT 106 Mathematical Applications I (4) The first course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include trigonometric functions, vectors, units of measurement and approximate numbers, fundamental concepts of algebra, functions and graphs, systems of linear equations, determinants, factoring and fractions, quadratics, variation and geometry (areas and perimeters of common plane figures, volumes and surface areas of common solids). The scientific calculator will be used throughout the course. Open to Telecommunications Technology majors only. This course is not applicable as an elective for any other degree granting program. Prerequisite: Beginning Algebra or Equivalent.

MAT 107 Mathematical Applications II (4) The second course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include exponents and radicals, exponential and logarithmic functions, ratio, proportion and variation, oblique triangles, graphs of sine and cosine functions, complex numbers and their applications inequalities, introduction to statistics and a non-rigorous introduction to calculus. A scientific calculator and computer software will be used throughout the course. Open to Telecommunications Technology majors only. This course is not applicable as an elective for any other degree granting program. Prerequisite: MAT 106.

MAT 112 Nature of Mathematics (3) The purpose of this course is to improve problem-solving skills and extend students' understanding of the nature of mathematics. The topics include: problem-solving, number theory, Euclidean and Non-Euclidean geometry, the concept of infinity, probability and optional topics chosen from topology, chaos, and fractals. Not open to Math-Science students. This course is primarily for liberal arts students entering fields of study which do not have a strong mathematical emphasis. Prerequisite: Beginning Algebra or equivalent.

MAT 113 Contemporary Mathematics (3) The purpose of this course is to show a direct connection between mathematics and concrete real-life problems. Topics will include voting theory, routing problems (graph theory), and either scheduling, fair division or apportionment. This is a course primarily for liberal arts students entering fields of study which do not have a strong mathematical emphasis. Participation in group work is required for classroom sections. Not open to Math/Science students. Prerequisite: Beginning Algebra or equivalent.

MAT 114 Intermediate Algebra With Applications (4) Topics include solving linear equations and inequalities, graphs, functions, systems of equations, polynomials and polynomial functions, factoring, rational expressions and equations, radical expressions and equations, geometric concepts, quadratic equations, and applications. This course will not count toward any elective credit for Math - Science majors. Prerequisite: Beginning Algebra or equivalent.

MAT 115 Modeling for Decision Making (3) Linear systems, matrices, linear programming, mathematics of finance, counting procedures, sets, probability, functions, exponents. Use of specific technology will be required. Not open to Math/Science students. Prerequisite: Intermediate Algebra, College Algebra or equivalent.

MAT 116 Decision Making With Calculus (3) Limits, differentiation, exponential and logarithmic functions, differential equations (growth & decay), anti-derivatives, definite integral, applications to social and management sciences. Use of specific technology will be required. Not open to Math/Science students. Prerequisite: MAT 115

MAT 118 Statistics: An Empirical Introduction (3) A course in empirical statistics for non-science majors. Topics include: random sampling, graphing, measures of central tendency and dispersion, normal distribution, ranks, percentiles, standard scores, confidence intervals, hypothesis testing. Student's t, chi square, correlation and regression. Prerequisite: Intermediate Algebra or MAT 111 or MAT 113 or Permission of Instructor. Not open to Math/Science or Engineering Science majors or to anyone having earned credits in MAT 151 or BUS 219.

MAT 121 Math for Elementary Teachers (4) This course is the first of a two-semester sequence designed for the prospective B-2, 1-6, 5-8, and B-6 teacher. Students who plan to transfer to a four-year institution in Early Childhood, or Middle Childhood Education should take this course and Math 122. Students will develop an understanding of the mathematical curriculum recommended by the National Council of Teachers of Mathematics' (NCTM) Standards. Topics include: sets, numeration systems, whole numbers, integers, rational numbers, real numbers, and number theory. A hands-on problem solving technology-based approach will be emphasized throughout this course. This course fulfills the math requirements for General Studies, Humanities, and Human Services only. Prerequisite: Permission of Department based on diagnostic testing and previous math course work.
MAT 122 Math for Elementary Teachers II (4) This course is the second of a two-semester sequence designed for the prospective B-2, 1-6, 5-8, and B-6 teacher. Students who plan to transfer to a four-year institution in Early, Childhood, or Middle Childhood Education should take this course and MATH 121. Students will develop a comprehensive understanding of the mathematical curriculum as recommended by the National Council of Teachers of Mathematics’ (NCTM) standards. Topics will include: geometry, probability, statistics and the metric system. A hands-on problem-solving teaching technology-based approach will be emphasized throughout the course. This course fulfills the math requirement for General Studies, Humanities and Human services only. Prerequisite: MAT 121.

MAT 141 Pre-Calculus Algebra (3) Topics include polynomial and absolute value inequalities, functions and their inverses, operations on functions, graphs and transformations, exponential and logarithmic functions, right triangle trigonometry, law of sines and law of cosines, and binomial theorem. Graphing calculator use is required. Prerequisite: Grade of C or better in Intermediate Algebra or College Algebra, or equivalent. Not open to anyone with credit in MAT 143.

MAT 142 Trigonometric Functions (1) A functions approach to the study of trigonometry. The basic trigonometric functions of real numbers are discussed. Graphing calculator use is required. Prerequisite: Intermediate Algebra, College Algebra or equivalent.

MAT 143 Pre-Calculus With Trigonometry (4) This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value and quadratic inequalities, functions and their equations, exponential and logarithmic functions and their applications, right triangle trigonometry, law of sines and law of cosines, trigonometric functions (circular) and their inverses, trigonometric identities and equations, addition and multiple angle formulas, and binomial theorem. Graphing calculator use is required. Prerequisite: Grade of C or better in Intermediate Algebra or College Algebra, or equivalent. Not open to anyone with previous credit in MAT 141.

MAT 151 Statistics I (4) Topics covering the descriptive and inferential aspects of statistics will include: frequency distribution, graphs, measures of central tendency and dispersion, probability, probability distributions, binomial and normal distributions, introduction to sampling theory, estimation theory, and hypothesis testing (mean, variance, proportions, etc.). Computer software and graphing calculator applications will be an integral component of this course. A graphing calculator with specific statistical capabilities will be required. Credit will not be given for both MAT-151 and BUS-219. Prerequisite: MAT-141 or MAT-143 or MAT-116 or equivalent.

MAT 152 Statistics II (4) A continuation of Statistics I to include the topics: Two-sample analysis, linear and multiple regression, correlation, analysis of variance, non-parametric statistics and Chi-squared goodness of fit. Time series analysis and/or statistical process control as time permits. Computer software and graphing calculator applications will be an integral component of this course. A graphing calculator with specific statistical capabilities will be required. Credit will not be given for both MAT 152 and BUS 220. Prerequisite: MAT 151 or BUS 219 or equivalent.

MAT 161 Calculus I (4) A first course in calculus for students in mathematics, science, computer science, and engineering. Basic analytic geometry, functions, limits and continuity, derivatives of algebraic and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, applications of derivatives and integrals. Graphing calculator use is required. Prerequisite: Four years of college preparatory mathematics (including trigonometry) or MAT 143 or Permission of Instructor.

MAT 162 Calculus II (4) A second course in calculus for students in mathematics, science, computer science, and engineering. Applications of integrals; derivatives and integrals of exponential, logarithmic, and inverse trigonometric functions; indeterminate forms and L'Hopital's rule; techniques of integration; improper integrals; numerical integration; infinite series; polar graphs. Graphing calculator use is required. Prerequisite: MAT 161.

MAT 241 Linear Algebra (3) Systems of linear equations, matrices, real vector spaces, subspaces, linear independence, basis, dimension, row and column space of a matrix, rank, linear transformations, kernel, range, matrix of a linear transformation, determinants, eigenvalues, eigenvectors. Prerequisite: MAT 161 or equivalent.

MAT 251 Discrete Mathematics (3) Study of theoretical bases of set theory, logic, techniques of proof, number systems, functions, relations, algorithms, graph theory, counting, permutations, combinations, binomial co-efficients, recurrence relations, induction and recursion, and trees. Prerequisite: MAT 161 or Permission of Instructor.

MAT 263 Calculus III (4) Vectors, vector functions, 3-dimensional analytic geometry, partial derivatives, total differential, gradient, multiple integrals, line integrals, Green's theorem, Stokes's theorem. Prerequisite: MAT 162.

MAT 264 Differential Equations (4) A course designed primarily for Math/Science and Engineering major. Topics include: definitions, first-order differential equations, linear equations of order two and higher, Laplace transforms, series solutions, systems of differential equations, numerical solution methods, modeling applications. Prerequisite: MAT 162 or equivalent.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 151</td>
<td>Machine Tools (3)</td>
<td>A study of basic theory and laboratory experiences for lathes, milling, drilling, grinding, bench work, and shaping operations. Study of cutting feeds and speeds, surface finishes as well as machine capabilities is included. Two class hours and laboratory.</td>
</tr>
<tr>
<td>MET 151L</td>
<td>Machine Tools Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 152</td>
<td>Machine Tools (3)</td>
<td>A continuation of MET 151. Additional theory and laboratory experiences include: milling, attachments, broaching, machine tooling, tapers, heat treating, metal finishes, and inspection. Also basic programming and operations of numerical control equipment.</td>
</tr>
<tr>
<td>MET 152L</td>
<td>Machine Tools Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 153</td>
<td>Introduction to Modern Manufacturing (3)</td>
<td>This course compares traditional manufacturing to modern manufacturing. Elements of Kaizen, Delivery, Accelerated Lead Time Reduction, and Work Place Organization, along with their applications are studied. Pull Systems, Cellular Manufacturing, Statistical Process Control, and Value Stream Mapping are also investigated. Each is studied as to how they relate to one another and the total process of modern manufacturing.</td>
</tr>
<tr>
<td>MET 161</td>
<td>Engineering Drawing (3)</td>
<td>This course is designed to prepare students with the necessary skills to interpret and construct engineering drawings. Lectures address such topics as drawing interpretation, orthographic projection systems, dimensioning, geometric dimensioning, and tolerancing, while laboratory sessions give the students practice in drawing creation. Two class hours and three laboratory hours per week.</td>
</tr>
<tr>
<td>MET 161L</td>
<td>Engineering Drawing Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 171</td>
<td>Manufacturing Processes (3)</td>
<td>This course covers the principles and procedures of various manufacturing processes used in modern industries. Material selection and machine tools required for the processes are emphasized. Two class hours and a three hour lab per week.</td>
</tr>
<tr>
<td>MET 171L</td>
<td>Manufacturing Processes Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 175</td>
<td>Geometric Dim and Tolerancing (2)</td>
<td>Using the most recent ASME standards this lecture/discussion-based course will focus on the fundamental principles of geometric dimensioning and tolerancing. Form and function relationships as they relate to manufacturing processes will be discussed, as will the five basic tolerances of form, orientation, profile, runout and location. Prerequisites: GPH 100 or GPH 161 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 251</td>
<td>Appl Strength of Materials (4)</td>
<td>Provides a ready vehicle for highly design-oriented approach to the basic concepts of mechanics of materials. Throughout the course emphasis is placed on the best practical applications of the theory. Students need not have studied a course in statics because statics is introduced directly into the course. The content of the course consists of: co-planar concurrent force systems, co-planar non-concurrent force systems, stresses in trusses and bridges, deformation and thermal stresses, direct shear, torsion shearing forces and bending moments in beams, centroids and moments of inertia, stress due to bending and vertical shearing force, combined stresses, deflection of beams, columns, pressure vessels, riveted connections and welding joints. Three class hours lecture, two class hours recitation, four hour laboratory per week. Prerequisite: MAT 101 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 251L</td>
<td>Appl Strength of Materials Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 252</td>
<td>Physical Metallurgy (3)</td>
<td>Provides a sound foundation of learning in the area of properties and microstructures of the important ferrous and nonferrous alloys. Also provides a firm foundation relative to the understanding of internal metallic structures of metals. The contents of the course include: metallic structures, the unit cell, atomic radius, planer density, effects of stress and temperature on simple metal structures, ferrous alloys - steel, superalloys, cast iron, ductile iron, malleable iron, phase diagrams, aluminum alloys, heat treatment of metals. Two class hours, three lab hours. Prerequisite: MAT 101 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 252L</td>
<td>Physical Metallurgy Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 254</td>
<td>Numerical Control Programming (3)</td>
<td>Designed to prepare students with the necessary skills to program NC and CNC controlled machine tools. Lectures address such topics as drawing interpretation, program formats, input media, sub-routines, canned cycles, and tooling, while the laboratory sessions give the students practice in programming learned techniques. Two class hours and three laboratory hours. Prerequisite: GPH/MET 261 or Permission of Instructor. Co-requisite: MET 151</td>
</tr>
<tr>
<td>MET 254L</td>
<td>Numerical Control Programming Lab (0)</td>
<td>ál applications of jigs and fixtures. Two class hours and laboratory. Prerequisite: MET 151 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 261</td>
<td>Intro to CAD (3)</td>
<td>An introductory course in CAD (Computer-Aided Drafting) utilizes state of the art software. Topics to include the manipulation of the basic drawing commands to construct computer detailed multiview drawings with printer/plotter hard copy output. Prerequisite or Co-requisite: MET/GPH 161 or Permission of Instructor.</td>
</tr>
<tr>
<td>MET 270</td>
<td>Solid Modeling (4)</td>
<td>A course designed to acquaint students with parametric computer aided design software. Utilizing state of the art software students will be introduced to the manipulation of basic commands necessary to construct three-dimensional models. Prerequisite: MET/GPH/MET 261.</td>
</tr>
</tbody>
</table>
Modern Languages

FOR MORE INFORMATION, CONTACT THE MODERN LANGUAGES DEPARTMENT IN COULTER LIBRARY, ROOM 219, (315) 498-2305.

A native speaker of one of the languages offered at OCC will not be given college credit for enrolling in an elementary course in that language. Placement into language courses depends on previous experience with the language. Please see page 66 for the foreign language placement policy or contact the department for more information.

AMERICAN SIGN LANGUAGE

ASL 113 American Sign Language I (3) A beginning course in American Sign Language as used within the American Deaf community. A basic study of manual-visual communication, with an introductory phase in communicating with one's eyes, face and hands; instruction and practice in vocabulary, sentence structure and elementary conversations. Receptive skills (reading signs) and expressive skills (signing one's own thoughts) will be emphasized. An introduction to Deaf culture will be included.

ASL 114 American Sign Language II (3) This course continues the basic study of American Sign Language. It will expand the student's knowledge of vocabulary, use of signing space and non-manual aspects of ASL grammar such as facial expressions and body posture. This course develops receptive and expressive skills in grammatical structures, short dialogues and narratives. Further instruction in Deaf culture will be included. Prerequisite: ASL 113 or equivalent.

ASL 213 American Sign Language III (3) American Sign Language III continues development of receptive and expressive skills. It provides exposure to more complex vocabulary and grammatical structures. The student will be exposed to more creative use of expression, classifiers and signing space. Short stories, narratives and conversations focusing on people in their environment will be used during the course. Discussions on issues related to the Deaf community will be included. Prerequisite: ASL 114 or equivalent.

ASL 214 American Sign Language IV (3) American Sign Language IV develops the student's receptive and expressive skills in more complex grammatical features, vocabulary building and comprehension of medium length dialogues and narratives. Storytelling, narratives and conversations focusing on descriptions and talking about events will be used consistently during the course. Discussions on issues related to the Deaf community will be included. Prerequisite: ASL 213 or equivalent.

FRENCH

FRE 101 Elementary French I (3) The emphasis is on the acquisition of the basic language skills of speaking, reading, and writing. For students beginning the language.

FRE 102 Elementary French II (3) The emphasis is on the continued acquisition of the basic language skills of speaking, reading, and writing. For students beginning the language. Prerequisite: FRE 101, or equivalent.

FRE 201 Intermediate French I (3) A continued review of basic structures and study of more complex linguistic, idiomatic and grammatical concepts through intensive practice in listening, speaking and writing within an authentic cultural context. Emphasis is on listening and speaking. Prerequisite: FRE 102, or equivalent.

FRE 202 Intermediate French II (3) A continued review of basic structures and study of more complex linguistic, idiomatic and grammatical concepts through intensive practice in listening, speaking, reading, and writing within an authentic cultural context. Emphasis is on reading and writing. Prerequisite: FRE 201 or equivalent.

FRE 205 French Conversation, Composition and Reading I (3) Intensive work in conversation and composition based on reading and analysis of representative literary masterpieces. Oral and written reports in French. Class conducted in French. Solid preparation in grammar recommended.

FRE 206 French Conversation, Composition and Reading II (3) Intensive work in conversation and composition based on reading and analysis of representative literary masterpieces. Oral and written reports in French. Class conducted in French. Solid preparation in grammar recommended.

FRE 215 French Literature & Civilization in English I (3) A survey of French literature and civilization from the Middle Ages to the Renaissance, examining representative works within the context of artistic, historical and intellectual developments. Lectures and readings in English. This course fulfills the global awareness requirement, but does not fulfill the foreign language requirement, for the AA in Humanities.

FRE 216 French Literature & Civilization in English II (3) A survey of French literature and civilization from the seventeenth to the twentieth Century, examining representative works within the context of artistic, historical, and intellectual developments. Lectures and readings in English. This course fulfills the global awareness requirement, but does not fulfill the foreign language requirement, for the AA in Humanities.

www.sunyocc.edu 157
GERMAN

GER 101 Elementary German I (3) The emphasis is on the acquisition of basic language skills of speaking, reading, and writing. For students beginning the language.

GER 102 Elementary German II (3) The emphasis is on the continued acquisition of basic language skills of speaking, reading, and writing. For students beginning the language. Prerequisite: GER 101 or equivalent.

GER 201 Intermediate German I (3) A thorough review of grammatical structures combined with oral and written practice and readings to develop the student's proficiency in German. Prerequisite: GER 102 or equivalent.

ITALIAN

ITA 101 Elementary Italian I (3) The emphasis is on the acquisition of basic language skills of speaking, reading, and writing. For students beginning the language.

ITA 102 Elementary Italian II (3) The emphasis is on the continued acquisition of basic language skills of speaking, reading, and writing. For students beginning the language. Prerequisite: ITA 101 or equivalent.

ITA 201 Intermediate Italian I (3) A thorough review of grammatical structures combined with oral and written practice and readings to develop the student's proficiency in Italian. Prerequisite: ITA 102 or equivalent.

ITA 202 Intermediate Italian II (3) A thorough review of grammatical structures combined with oral and written practice and readings to develop the student's proficiency in Italian. Prerequisite: ITA 201 or equivalent.

SPANISH

SPA 101 Elementary Spanish I (3) The emphasis is on the acquisition of the basic language skills of speaking, reading, and writing. For students beginning the language.

SPA 102 Elem Spanish II (3) The emphasis is on the continued acquisition of the basic language skills of speaking, reading, and writing. For students beginning the language. Prerequisite: SPA 101 or equivalent.

SPA 165 Transitional Spanish (3) A thorough review of the basic linguistic, grammatical and idiomatic structures combined with listening, speaking, reading and writing practice within an authentic, practical cultural context, to prepare students for further study of Spanish. Prerequisite: SPA 102 or equivalent

SPA 201 Intermediate Spanish I (3) A continued review of basic structures and of more complex linguistic, idiomatic and grammatical concepts through intensive practice in listening, speaking, reading and writing within an authentic cultural context. Emphasis is on listening and speaking.

Prerequisite: SPA 102, SPA 165 or equivalent.

SPA 202 Intermediate Spanish II (3) A continued review of basic structures and of more complex linguistic, idiomatic and grammatical concepts through intensive practice in listening, speaking, reading and writing within an authentic cultural context. Emphasis is on reading and writing.

SPA 203 Business Spanish (3) At an intermediate-high level, this course will focus on the unique language and the culture pertinent to doing business with Spanish people or with the Spanish-speaking world. Intensive work in conversation and composition. Solid preparation in grammar recommended. Class conducted entirely in Spanish. Prerequisite: SPA 202 or equivalent.

SPA 204 Spanish Literature: An Introduction (3) At an intermediate-high level, this course will introduce students to literary concepts and literature from around the Spanish-speaking world. Lectures and readings in English. This course fulfills the global awareness requirement, but does not fulfill the foreign language requirement for the AA in Humanities.

SPA 220 Spanish Communication Through Cinema (3) At an intermediate-high level, this course will focus on the diversity in language and culture of the Spanish-speaking world as represented in cinema. The course includes intensive work in conversation and composition. Solid preparation in grammar is recommended. This class is conducted entirely in Spanish. Prerequisite: SPA 202 or equivalent.

SPA 223 Spanish Civilization in English (3) A one-semester survey of Spanish civilization and culture with emphasis on the major social, intellectual, and artistic trends. Lectures and readings in English. This course does not fulfill the foreign language requirement for the AA in Humanities.

SPA 224 Latin American Civilization in English (3) A one-semester course examining the geographical areas, Indian cultures, Spanish heritage, and 20th century problems of Latin America. Lectures and readings in English. This course fulfills the global awareness requirement, but does not fulfill the foreign language requirement, for the AA in Humanities.

SPA 230 Latinos in the U.S. (3) A survey of the major Latino groups living in the United States, this course will focus on the most significant issues facing these populations as well as notable literary and artistic contributions they have made. Emphasizing literature, art, music and film, its primary aim is to provide a basic introduction to Latino cultures in the U.S. Taught in English. Does not fulfill the foreign language requirement for AA in Humanities.
Music


MUS 066 Beginning Music Reading I (1 eq) An introductory course for Music Reading (MUS 101R). Course content includes instruction in the recognition/performance of rhythms, pitches, meters and notational systems.

MUS 067 Beginning Music Reading II (0) A continuation of MUS 066 which includes instruction in the recognition/performance of rhythms, pitches and meters. Prerequisite: Permission of Instructor.

MUS 100A Convocation (1)
MUS 100B Convocation (1)
MUS 100C Convocation (1)
MUS 100D Convocation (1)
MUS 101D Diction for Singers (3) A basic study of French, German and Italian diction with practical application to singing.

MUS 101K Keyboard Harmony (1) Explores basic concepts of tonality/modalities; primary triads and their inversions, modes and modal inflections; secondary triads; standard chord progressions involving these elements, and chord nomenclature.

MUS 101R Music Reading (1) Music Reading (solfeggio) is a four-semester course designed to aid the Music student in aural recognition of pitch and rhythm by sight and develop the ability to sing back or clap back the same. Sight-singing exercises are of increasing complexity. Recognition of intervals and chords by sight and sound and dictation study (the ability to indicate prescribed pitches and/or rhythmical patterns on music staff paper) are required. Prerequisite for each semester is successful completion of the prior semester.

MUS 101T Music Theory (3) Covers notation, scales (major, minor and chromatic), tempo designations, intervals, triads, phase structure and cadences, modes and beginning study of four-part harmony and figure bass. Ear training in all areas is included. Prerequisite: Music Theory test and Permission of Instructor.

MUS 102K Keyboard Harmony (1) A continuation of MUS 101K using various musical excerpts embodying first-semester materials. Extensive work is done in the minor mode. There is continued study of chord nomenclature, and non-harmonic tones are introduced. Prerequisite: MUS 101K

MUS 102R Music Reading (1) Music Reading (solfeggio) is a four-semester course designed to aid the Music student in aural recognition of pitch and rhythm by sight and develop the ability to sing back or clap back the same. Sight-singing exercises are of increasing complexity. Recognition of intervals and chords by sight and sound and dictation study (the ability to indicate prescribed pitches and/or rhythmical patterns of music staff paper) are required. Prerequisite for each semester is successful completion of the prior semester.

MUS 102T Music Theory (3) Four part harmony and figured bass studies are continued; counterpoint, instrumental transpositions and non-harmonic tones are introduced. Ear training is continued. Prerequisite: MUS 101T

MUS 103 Music Appreciation (3) An introduction to the basic elements of music. Areas explored include the symphony orchestra and other performing media. The course investigates styles and techniques of the 18th and 19th Centuries through the use of recordings and visual aids with the aim of more complete understanding and enjoyment of the art. Designed as an elective for liberal arts students not majoring in music.

MUS 104 Music Appreciation (3) An examination of the music of today. Topics include the music of other cultures, various types of popular music, music in relation to other media (films, shows, electronics, etc.), and 20th century orchestral/wind ensemble usage. (MUS 103 not needed for MUS 104)

MUS 105 Survey of Western Music History I (3) A survey of music in western civilization from Gregorian chant through the baroque period. Not open to non-music majors.

MUS 106 Survey of Western Music History II (3) A continuation of MUS 105 from Classic through 20th Century. Not open to non-music majors.

MUS 107 Solfeggio (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.

MUS 107A Drum Set Lessons (2)
MUS 107B Flute Lessons (2)
MUS 107C Oboe Lessons (2)
MUS 107D Clarinet Lessons (2)
MUS 107E Bassoon Lessons (2)
MUS 107F Saxophone Lessons (2)
MUS 107G Trumpet/Cornet Lessons (2)
MUS 107H French Horn Lessons (2)
MUS 107J Trombone Lessons (2)
MUS 107K Euphonium/Baritone Lessons (2)
MUS 107M Tuba Lessons (2)
MUS 107N Piano Lessons (2)
MUS 107P Percussion Lessons (2)
MUS 107Q Electric Bass Lessons (2)
MUS 107S Harp Lessons (2)
MUS 107T Guitar Lessons (2)
MUS 107U Voice Lessons (2)
MUS 107V Violin Lessons (2)
MUS 107W Viola Lessons (2)
MUS 107X Violincello Lessons (2)
MUS 107Y Contra Bass Lessons (2)
MUS 107Z Organ Lessons (2)
MUS 108 Appl Mus Major (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.
MUS 108A Drum Set Lessons (2)
MUS 108B Flute Lessons (2)
MUS 108C Oboe Lessons (2)
MUS 108D Clarinet Lessons (2)
MUS 108E Bassoon Lessons (2)
MUS 108F Saxophone Lessons (2)
MUS 108G Trumpet/Cornet Lessons (2)
MUS 108H French Horn Lessons (2)
MUS 108J Trombone Lessons (2)
MUS 108K Euphonium/Baritone Lessons (2)
MUS 108M Tuba Lessons (2)
MUS 108N Piano Lessons (2)
MUS 108P Percussion Lessons (2)
MUS 108Q Electric Bass Lessons (2)
MUS 108S Harp Lessons (2)
MUS 108T Guitar Lessons (2)
MUS 108U Voice Lessons (2)
MUS 108V Violin Lessons (2)
MUS 108W Viola Lessons (2)
MUS 108X Violincello Lessons (2)
MUS 108Y Contra Bass Lessons (2)
MUS 108Z Organ Lessons (2)
MUS 109 Keyboard (1) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.
MUS 109A Drum Set Lessons (2)
MUS 109B Flute Lessons (2)
MUS 109C Oboe Lessons (2)
MUS 109D Clarinet Lessons (2)
MUS 109E Bassoon Lessons (2)
MUS 109F Saxophone Lessons (2)
MUS 109G Trumpet/Cornet Lessons (2)
MUS 109H French Horn Lessons (2)
MUS 109J Trombone Lessons (2)
MUS 109K Euphonium/Baritone Lessons (2)
MUS 109M Tuba Lessons (2)
MUS 109N Piano Lessons (2)
MUS 109P Percussion Lessons (2)
MUS 109Q Electric Bass Lessons (2)
MUS 109S Harp Lessons (2)
MUS 109T Guitar Lessons (2)
MUS 109U Voice Lessons (2)
MUS 109V Violin Lessons (2)
MUS 109W Viola Lessons (2)
MUS 109X Violincello Lessons (2)
MUS 109Y Contra Bass Lessons (2)
MUS 109Z Organ Lessons (2)
MUS 110 Keyboard Harmony (1) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.
MUS 110A Drum Set Lessons (2)
MUS 110B Flute Lessons (2)
MUS 110C Oboe Lessons (2)
MUS 110D Clarinet Lessons (2)
MUS 110E Bassoon Lessons (2)
MUS 110F Saxophone Lessons (2)
MUS 110G Trumpet/Cornet Lessons (2)
MUS 110H French Horn Lessons (2)
MUS 110J Trombone Lessons (2)
MUS 110K Euphonium/Baritone Lessons (2)
MUS 110M Tuba Lessons (2)
MUS 110N Piano Lessons (2)
MUS 110P Percussion Lessons (2)
MUS 110Q Electric Bass Lessons (2)
MUS 110S Harp Lessons (2)
MUS 110T Guitar Lessons (2)
MUS 110U Voice Lessons (2)
MUS 110V Violin Lessons (2)
MUS 110W Viola Lessons (2)
MUS 110X Violincello Lessons (2)
MUS 110Y Contra Bass Lessons (2)
MUS 110Z Organ Lessons (2)
MUS 111A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.
MUS 111B Flute Lessons (2)
MUS 111C Oboe Lessons (2)
MUS 111D Clarinet Lessons (2)
MUS 111E Bassoon Lessons (2)
MUS 111F Saxophone Lessons (2)
MUS 111G Trumpet/Cornet Lessons (2)
MUS 111H French Horn Lessons (2)
MUS 111J Trombone Lessons (2)
MUS 111K Euphonium/Baritone Lessons (2)
MUS 111M Tuba Lessons (2)
MUS 111N Piano Lessons (2)
MUS 111P Percussion Lessons (2)
MUS 111Q Electric Bass Lessons (2)
MUS 111S Applied Harp (2)
MUS 111T Guitar Lessons (2)
MUS 111U Voice Lessons (2)
MUS 111V Violin Lessons (2)
MUS 111W Viola Lessons (2)
MUS 111X Violincello Lessons (2)
MUS 111Y Contra Bass Lessons (2)
MUS 111Z Organ Lessons (2)
MUS 112A Drum Set Lessons (2) Private study for each student in voice, piano, guitar, electric bass and drum set or an orchestral or band instrument depending upon availability of faculty. Department audition and permission card required. Additional fee for private lessons.
MUS 112B Flute Lessons (2)
MUS 112C Oboe Lessons (2)
MUS 112D Clarinet Lessons (2)
MUS 112E Bassoon Lessons (2)
MUS 112F Saxophone Lessons (2)
MUS 112G Trumpet/Cornet Lessons (2)
MUS 112H French Horn Lessons (2)
MUS 112J Trombone Lessons (2)
MUS 112K Euphonium/Baritone Lessons (2)
MUS 112M Tuba Lessons (2)
MUS 112N Piano Lessons (2)
MUS 112P Percussion Lessons (2)
MUS 112Q Electric Bass Lessons (2)
MUS 112S Applied Harp Lessons (2)
MUS 112T Guitar Lessons (2)
MUS 112U Voice Lessons (2)
MUS 112V Violin Lessons (2)
MUS 112W Viola Lessons (2)
MUS 112X Violin/Cello Lessons (2)
MUS 112Y Contra Bass Lessons (2)
MUS 112Z Organ Lessons (2)
MUS 113 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.
MUS 113A Applied Piano Minor Class (1) A beginning course designed for non-music majors to teach basic technique/reading on piano in an electric piano lab.
MUS 114 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.
MUS 115 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.
MUS 116 Applied Piano Minor (1) Non-piano majors must study piano for four semesters or until able to pass a proficiency examination.

The following repertory courses earn one credit:
MUS 121A Drum Set Repertory
MUS 121B Flute Repertory
MUS 121C Oboe Repertory
MUS 121D Clarinet Repertory
MUS 121E Bassoon Repertory
MUS 121F Saxophone Repertory
MUS 121G Trumpet Repertory-Freshman
MUS 121H French Horn Repertory
MUS 121J Low Brass Repertory
MUS 121M Tuba Repertory
MUS 121N Piano Repertory
MUS 121P Percussion Repertory
MUS 121Q Electric Bass Repertory
MUS 121T Guitar Repertory
MUS 121U Voice Repertory
MUS 121Y Cello/String Bass Repertory
MUS 121Z Organ Repertory
MUS 122A Drum Set Repertory
MUS 122B Flute Repertory
MUS 122C Oboe Repertory
MUS 122D Clarinet Repertory
MUS 122E Bassoon Repertory
MUS 122F Saxophone Repertory
MUS 122G Trumpet Repertory
MUS 122H French Horn Repertory
MUS 122J Low Brass Repertory
MUS 122M Tuba Repertory
MUS 122N Oiano Repertory
MUS 122P Percussion Repertory
MUS 122Q Electric Bass Repertory
MUS 122T Guitar Repertory
MUS 122U Voice Repertory
MUS 122Y Cello/String Bass Repertory
MUS 122Z Organ Repertory

www.sunyocc.edu 161
The following Ensembles earn .5 credit:

MUS 151B Flute Choir
MUS 151C String Ensemble
MUS 151D Clarinet Choir
MUS 151E Wind Ensemble
MUS 151F Saxophone Ensemble
MUS 151G Latin Ensemble
MUS 151H Horn Ensemble
MUS 151J Big Band Jazz
MUS 151L Woodwind Quintet
MUS 151P Percussion Ensemble
MUS 151R Chamber Singers
MUS 151T Guitar Ensemble
MUS 151V OCC Singers
MUS 151X Improvisation
MUS 151Y Brass Quintet
MUS 152A Barbershop Quartet
MUS 152B Flute Choir
MUS 152C String Ensemble
MUS 152D Clarinet Choir
MUS 152E Wind Ensemble
MUS 152F Saxophone Ensemble
MUS 152G Latin Ensemble
MUS 152H French Horn Repertory
MUS 152J Big Band Jazz
MUS 152L Woodwind Quintet
MUS 152P Percussion Ensemble
MUS 152R Chamber Singers
MUS 152S Accompanying
MUS 152T Guitar Ensemble
MUS 152V OCC Singers
MUS 152X Improvisation
MUS 152Y Brass Quintet

MUS 160 Introduction to Music Theory I (3) A course in basic music theory, including notation, scales, intervals, rhythmic elements, ear training, chords and modes. Designed for the non-music major and or perspective music major, as determined by audition process. Does not fulfill Music Curriculum requirements.

MUS 161 Introduction to Music Theory II (3) Continues studies of scales, intervals, key signatures, ear training and chord studies. Minor scales and harmonization of melodies are introduced. Prerequisite: MUS 160 or Permission of Instructor. Not applicable to Music curriculum requirements.

MUS 162T Guitar Class I (2) Class instruction for the beginning guitarist. Both pick and finger-style (classical) guitar are taught simultaneously. A primary goal will be to develop sight reading skills.

MUS 162U Voice Class I (2) Class instruction for the beginner and the vocalist needing a refresher course in voice fundamentals. Major emphasis given to breathing exercises and vocalization technique. Classical and folk singing in groups and individual setting.

MUS 163T Guitar II (2) A continuation of techniques from 162T.

MUS 163U Voice II (2) Continuation of techniques from 162U.

MUS 166 Introduction to Ethnic Music (3) A study of African music and its influence on other cultures, including Middle East, South American, Caribbean, and North American/European music.

MUS 168 Drum Set I (1) Basic rhythmic reading skills taught in a class situation. Additional material covered includes basic hand technique, coordination exercises, chart reading. Playing time on drum set dependent on class size/background of those registered. No prerequisite, but some musical background is preferable.

MUS 169 Drum Set II (1) A continuation of Drum Set I with more emphasis on playing time/practical applications. Prerequisite: MUS 168 or Permission of Instructor.

MUS 170 Jazz History (3) A study of jazz, including analysis and survey of jazz history.

MUS 182 Music As a Business (3) The purpose of this course is to study the power structure and operation of the music business from large companies to retail stores, and to understand the way money is being distributed in a multiplicity of jobs from individual artists to company presidents.

MUS 183 Piano Literature of the 18th Century (1) A study of the historical development of the piano and its literature traced through the most important works written for the harpsichord, clavichord, fortepiano, and piano in the 18th century. Will emphasize and aural differentiation among the instruments and the styles of J.S. Bach, Handel, D. Scarlatti, Bach's sons, Haydn, Mozart, Clementi, and the young Beethoven. Prerequisite: MUS piano major

MUS 186 Piano Literature of Early 19th Century (1) A study of the historical development of piano literature traced through the most important works written between 1800 and 1850. Will emphasize and aural differentiation among the styles of Schubert, Beethoven, Chopin, Schumann, Weber, Mendelssohn and the young Liszt. Prerequisite: MUS piano major

MUS 187 Piano Literature of Late 19th Century (1) A study of the historical development of piano literature traced through the most important works written between 1850 and 1900. Will emphasize an aural differentiation of the styles of Brahms, the mature Liszt, Grieg, Franck, Albeniz, Reger, and the young Busoni. Prerequisite: MUS piano major
MUS 188 Piano Literature of the 20th Cent (1)  A study of the historical development of piano literature traced through the most important works written during the 20th century. Will emphasize an aural differentiation of the styles of Debussy, Ravel, Rachmaninoff, Prokofiev, Bartok, Stravinsky, Busoni, Schoenberg, Boulez, Stockhausen. Prerequisite: MUS piano major.

MUS 190 Introduction to Music Software With Midi (3) A study of MIDI applications using hardware and software as a tool to improve musicianship. The course will utilize the new technology to enhance and reinforce basic classroom concepts. Emphasis will be placed on hands-on involvement using software programs.

MUS 201K Keyboard Harmony (1) Explores secondary dominants, diminished seventh chords, augmented sixth chords, chord substitution, chord nomenclature; pieces embodying these elements are studied. Prerequisite: MUS 101K, MUS 102K or Permission of Instructor.

MUS 201R Music Reading (1) Music Reading (solfeggio) is a four-semester course designed to aid the Music student in aural recognition of pitch and rhythm by sight and develop the ability to sing back or clap back the same. Sight-singing exercises are of increasing complexity. Recognition of intervals and chords by sight and sound and dictation study (the ability to indicate prescribed pitches and/or rhythmical patterns on music staff paper) are required. Prerequisite for each semester is successful completion of the prior semester.

MUS 201T Music Theory (3) Diatonic chords and progression are reviewed. Seventh chords are analyzed along with non-dominant seventh chords and their progressions. Altered non-harmonic tones and secondary dominants are studied along with modulation to closely related keys and harmonization of melodies. Four-part dictation is introduced. Prerequisite: MUS 101T, MUS 102T or Permission of Instructor. Honors: Prerequisite: 3.5 GPA or Permission of Instructor.

MUS 202K Keyboard Harmony II (1) Playing styles are discussed, more chord substitutions are introduced, playing from lead sheets and harmonizing unmarked melodies are explained, and compound and polychordal chords are defined. Prerequisite: MUS 101K, MUS 102K, MUS 201K or Permission of Instructor.

MUS 202R Music Reading (1) Music Reading (solfeggio) is a four-semester course designed to aid the Music student in aural recognition of pitch and rhythm by sight and develop the ability to sing back or clap back the same. Sight-singing exercises are of increasing complexity. Recognition of intervals and chords by sight and sound and dictation study (the ability to indicate prescribed pitches and/or rhythmical patterns on music staff paper) are required. Prerequisite for each semester is successful completion of the prior semester.

MUS 202T Music Theory (3) Construction and analysis of all borrowed chords, Neapolitan sixth, and other altered chords; chromatic medians, and modulation to foreign keys are studied. Ninth, eleventh, and thirteenth chords are constructed and analyzed. Four-part dictation is continued. Prerequisite: MUS 101T, MUS 102T, MUS 201T, or Permission of Instructor.

MUS 203 Introduction to Composition (3) This is a course in beginning music composition. Aesthetic concepts and specific detailed theoretical concepts and techniques, particularly of the 20th century, will be covered as will introductory 18th century counterpart. Students must have one year of basic music theory and be able to read music to take this course. Prerequisites: MUS-102T and MUS-106 or Permission of Instructor.

The following Music Lessons earn 1 credit:

MUS 211A Drum Set Lessons
MUS 211B Flute Lessons
MUS 211C Oboe Lessons
MUS 211D Clarinet Lessons
MUS 211E Bassoon Lessons
MUS 211F Saxophone Lessons
MUS 211G Trumpet/Cornet Lessons
MUS 211H French Horn Lessons
MUS 211J Trombone Lessons
MUS 211K Euphonium/Baritone Lessons
MUS 211M Tuba Lessons
MUS 211N Piano Lessons
MUS 211P Percussion Lessons
MUS 211Q Electric Bass Lessons
MUS 211S Applied Harp
MUS 211T Guitar Lessons
MUS 211U Voice Lessons
MUS 211V Violin Lessons
MUS 211W Viola Lessons
MUS 211X Violincello Lessons
MUS 211Y Contra Bass Lessons
MUS 211Z Organ Lessons
MUS 212A Drum Set Lessons
MUS 212B Flute Lessons
MUS 212C Oboe Lessons
MUS 212D Clarinet Lessons
MUS 212E Bassoon Lessons
MUS 212F Saxophone Lessons
MUS 212G Trumpet/Cornet Lessons
MUS 212H French Horn Lessons
MUS 212J Trombone Lessons
MUS 212K Euphonium/Baritone Lessons
MUS 212M Tuba Lessons
MUS 212N Piano Lessons
MUS 212P Percussion Lessons
MUS 212Q Electric Bass Lessons
MUS 212S Applied Harp Lessons
MUS 212U Voice Lessons
MUS 212W Violin Lessons
MUS 212X Violincello Lessons
MUS 212Y Contra Bass Lessons
MUS 212Z Organ Lessons

MUS 215 Applied Major (3) Private study in voice, piano, guitar, organ, electric bass drum set or an orchestral or band instrument - brass, woodwind, strings, percussion. Department audition and permission card required. Additional fee for private lessons.

MUS 215A Drum Set Lessons
MUS 215B Flute Lessons
MUS 215C Oboe Lessons
MUS 215D Clarinet Lessons
MUS 215E Bassoon Lessons
MUS 215F Saxophone Lessons
MUS 215G Trumpet/Cornet Lessons
MUS 215H French Horn Lessons
MUS 215J Trombone Lessons
MUS 215K Euphonium/Baritone Lessons
MUS 215M Tuba Lessons
MUS 215N Piano Lessons
MUS 215P Percussion Lessons
MUS 215Q Electric Bass Lessons
MUS 215T Guitar Lessons
MUS 215U Voice Lessons
MUS 215V Violin Lessons
MUS 215W Viola Lessons
MUS 215X Violincello Lessons
MUS 215Y Contra Bass Lessons
MUS 215Z Organ Lessons

MUS 216B Flute Lessons
MUS 216C Oboe Lessons
MUS 216D Clarinet Lessons
MUS 216E Bassoon Lessons
MUS 216F Saxophone Lessons
MUS 216G Trumpet/Cornet Lessons
MUS 216H French Horn Lessons
MUS 216J Trombone Lessons
MUS 216K Euphonium/Baritone Lessons
MUS 216M Tuba Lessons
MUS 216N Piano Lessons
MUS 216P Percussion Lessons
MUS 216T Guitar Lessons
MUS 216U Voice Lessons
MUS 216V Violin Lessons
MUS 216W Viola Lessons
MUS 216X Violincello Lessons
MUS 216Y Contra Bass Lessons
MUS 216Z Organ Lessons
MUS 217B Flute Lessons
MUS 217C Oboe Lessons
MUS 217D Clarinet Lessons
MUS 217E Bassoon Lessons
MUS 217F Saxophone Lessons
MUS 217G Trumpet/Cornet Lessons
MUS 217H French Horn Lessons
MUS 217J Trombone Lessons
MUS 217K Euphonium/Baritone Lessons
MUS 217M Tuba Lessons
MUS 217N Piano Lessons
MUS 217P Percussion Lessons
MUS 217T Guitar Lessons
MUS 217U Voice Lessons
MUS 217V Violin Lessons
MUS 217W Viola Lessons
MUS 217X Violincello Lessons
MUS 217Y Contra Bass Lessons
MUS 217Z Organ Lessons
MUS 218B Flute Lessons
MUS 218C Oboe Lessons
MUS 218D Clarinet Lessons
MUS 218E Bassoon Lessons
MUS 218F Saxophone Lessons
MUS 218G Trumpet/Cornet Lessons
MUS 218H French Horn Lessons
MUS 218J Trombone Lessons
MUS 218K Euphonium/Baritone Lessons
MUS 218M Tuba Lessons
MUS 218N Piano Lessons
MUS 218P Percussion Lessons
MUS 218T Guitar Lessons
MUS 218U Voice Lessons
MUS 218V Violin Lessons
MUS 218W Viola Lessons
MUS 218X Violin Cello Lessons
MUS 218Y Contra Bass Lessons
MUS 218Z Organ Lessons
MUS 219N Piano Lessons

*The following Repertory courses earn 1 credit:*
MUS 220A Drum & Bugle Corp (3)
MUS 221A Drum Set Repertory
MUS 221B Flute Repertory
MUS 221C Oboe Repertory
MUS 221D Clarinet Repertory
MUS 221E Bassoon Repertory
MUS 221F Saxophone Repertory
MUS 221G Trumpet Rep-Sophomore
MUS 221H French Horn Repertory
MUS 221J Low Brass Repertory
MUS 221M Tuba Repertory
MUS 221N Piano Rep-Sophomore
MUS 221P Percussion Repertory
MUS 221Q Electric Bass Repertory
MUS 221T Guitar Repertory
MUS 221U Voice Repertory
MUS 221Y Cell/String Bass Repertory
MUS 221Z Organ Repertory
MUS 222A Drum Set Repertory
MUS 222B Flute Repertory
MUS 222C Oboe Repertory
MUS 222D Clarinet Repertory
MUS 222E Bassoon Repertory
MUS 222F Saxophone Repertory
MUS 222G Trumpet Repertory-Sophomore
MUS 222H French Horn Repertory
MUS 222J Low Brass Repertory
MUS 222M Tuba Repertory
MUS 222N Piano Repertory-Sophomore
MUS 222P Percussion Repertory
MUS 222Q Electric Bass Repertory
MUS 222T Guitar Repertory
MUS 222U Voice Repertory
MUS 222Y String Repertory
MUS 222Z Organ Repertory
MUS 223B Soph Flute Repertory
MUS 223P Soph Percussion Repertory
MUS 223U Soph Voice Repertory
MUS 223Y Sophomore Cello/String Bass Repertory

MUS 224B Sophomore Flute Repertory (1)
MUS 224U Soph Voice Rep (1)

*The following Ensembles earn .5 credit:*
MUS 251B Flute Choir
MUS 251C String Ensemble
MUS 251D Clarinet Choir
MUS 251E Wind Ensemble
MUS 251F Saxophone Ensemble
MUS 251G Latin Ensemble
MUS 251H Horn Ensemble
MUS 251J Big Band Jazz
MUS 251L Woodwind Quintet
MUS 251P Percussion Ensemble
MUS 251R Chamber Singers
MUS 251S Accompanying
MUS 251T Guitar Ensemble
MUS 251V OCC Singers
MUS 251X Improvisation
MUS 251Y Brass Quartet
MUS 252B Flute Choir
MUS 252C String Ensemble
MUS 252D Clarinet Choir
MUS 252E Wind Ensemble
MUS 252F Saxophone Ensemble
MUS 252G Latin Ensemble
MUS 252H Horn Ensemble
MUS 252J Big Band Jazz
MUS 252L Woodwind Quintet
MUS 252P Percussion Ensemble
MUS 252R Chamber Singers
MUS 252S Accompanying
MUS 252T Guitar Ensemble
MUS 252V OCC Singers
MUS 252X Improvisation
MUS 252Y Brass Quartet
MUS 253B Flute Choir
NUR 180 Nursing Process and Concepts I (1)
Introduces the concepts essential for applying Level I human needs theory in the clinical setting. Concepts stressed are: an effective approach to learning; the role of the nurse within the health care system; problem solving/introduction to the Nursing Process; and introduction to human needs theory. Demonstration of application of these concepts in the clinical setting in the roles of Provider of Care, Manager of Care, and Member Within the Discipline of Nursing is a requirement of NUR 180. Successful completion of Level I clinical is required for a final grade in NUR 180. Prerequisite: Matriculated Nursing Student.

NUR 181 Activity and Rest Needs I (1)
In this course students apply nursing process in the human needs area of activity and rest. Students are introduced to the client’s need of alternate periods of activity and rest. Students learn principles of body alignment/mechanics and how to apply them to their own activities as well as for clients. Students also learn to assess activity and rest needs and to provide for these needs by assisting clients to move effectively, performing range of motion exercises, bathing and positioning clients, and bed making. Some factors of growth and development are highlighted as assessing client readiness for diet progression. Unit two, the focus switches to normal adult nutritional needs. Areas of special concern to nurses are highlighted as assessing client readiness for diet progression. Unit three and four focus on basic assessment and measures to promote the hospitalized person’s elimination. Co-requisite: NUR 180.

NUR 182 Oxygenation Needs I (1)
The student will use the nursing process in the human needs area of basic oxygenation. This course introduces students to the need for adequate oxygen supply to maintain cellular metabolism and to the interrelationship of respiratory and cardiovascular function in maintaining oxygen supply. Students learn to assess oxygenation status, plan and implement measures learned to promote respiration/ventilation and circulation and to evaluate their effectiveness. Measures learned to assess oxygenation status include: assessment of blood pressure, temperature, pulse and respiration and peripheral circulation. Students learn to promote respiration/ventilation by use of medications, oxygen administration, ventilation aids, breathing exercises. Students learn to promote circulation through the use of the environment and exercise. Co-requisite: NUR 180.

NUR 183 Safety and Security Needs I (1)
In this course, students apply nursing process in the human needs area of safety and security. Students are introduced to potential environmental and biologic threats to the well-being of the individual such as tissue injury and infection. Nursing assessments and interventions to minimize threats, provide a safe environment, and promote healing such as medical asepsis, isolation, surgical asepsis, wound care, heat and cold therapy, and a safe process to administer medications are included. Co-requisite: NUR 180.

NUR 184 Nutrition and Elimination Needs I (1)
This level one nursing course assists students in learning basic nursing care. The first unit includes assessments and skills such as: collecting and testing urine samples, monitoring intake and output, as well as client care during intravenous therapy. Readings, films and laboratory small groups are used to help the student learn to assess and promote their clients fluid and electrolyte balance. In unit two, the focus switches to normal adult nutritional needs. Areas of special concern to nurses are highlighted as assessing client readiness for diet progression. Unit three and four focus on basic assessment and measures to promote the hospitalized person’s elimination. Co-requisite: NUR 180.

NUR 185 Psychosocial Needs I: Interviewing(1)
Students apply the nursing process concepts of assessment, planning, intervention, and evaluation in the area of psychosocial needs. They learn open-ended data gathering and relationship development techniques that meet clients’ psychosocial needs at the same time the students are meeting their own professional need of compiling a broad accurate database. Students explore the nature and goals of the professional relationship and learn open-ended techniques to use in each phase to assure that care is client-centered. Co-requisite: NUR 180.

NUR 191 Introduction to Nursing Process (2)
This course provides an opportunity for the student to master basic nursing skills in a simulated clinical setting in the Nursing Department under the guidance of the instructor in preparation for nursing care in the hospital setting. As provider of care, the student will begin to utilize the steps of the nursing process (assessing, planning, implementing, and evaluating) in conjunction with these nursing skills. As manager of care, the student will consider cost-effectiveness in utilizing materials and learn to use channels of communication. As member within the discipline of nursing, the student will use appropriate terminology, apply theory in performance of skills, work in groups, and use self-evaluation. Prerequisite: Matriculation in Nursing Co-requisite: Completed and current health form on file: CPR certification, Malpractice insurance, NUR 180.

NUR 192 Introductory Nursing Process Clinical (2)
This course provides an opportunity for the student to begin to apply theory and skills mastered to date while familiarity with the hospital environment, equipment, and personnel is developed. The student functions in the role of provider of care in collaboration with the instructor to plan for the day of care for the hospitalized adult. The student functions in the role of manager of care, depending on the instructor for guidance with interactions with members of the health care team and seeking assistance when appropriate. The student functions in the role of member within the discipline of nursing, depending on the instructor for guidance to maintain standards, develop relationships, and assume accountability for
learning and self-evaluation. The student utilizes the steps of the nursing process to perform basic assessments, identify problems, plan on an hourly basis, and implement and evaluate care for the day. Prerequisite: NUR 191 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 180

NUR 193 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 194 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 195 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 196 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 197 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 198 Extended Introductory Nursing Process Clinical (2) This course provides an opportunity for the student to have additional experience in the hospital setting to achieve clinical proficiency at Level 1. Prerequisite: NUR 192 Co-requisite: Completed and current Health form on file, current CPR certification, Malpractice insurance, NUR 180

NUR 199 Elective Nursing Process Clinical I (2) This course provides an opportunity for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in a clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Prerequisite: Permission of Instructor. Co-requisite: Completed and current health form on file, current CPR certification, malpractice insurance.

NUR 220 Nursing Process and Concepts II (1) NUR 220 introduces the concepts essential for applying Level 2 human needs theory in the clinical setting. The five phases of the nursing process are studied individually; cultural and spiritual differences are explored; and the concepts of growth and development are studied. Demonstration of application of these concepts in the clinical setting in the roles of provider of care, manager of care and member within the discipline of nursing is a requirement of NUR 220. Successful completion of Level 2 clinical is required for a final grade in NUR 220. Prerequisite: NUR 180

NUR 222 Oxygenation Needs II (1) This course builds on theory and skills learned in NUR 182. Prepares student to develop and utilize the nursing process during respiratory and circulatory physical assessments. Select oxygenation crises are included for nursing assessments and interventions. Select common respiratory and circulatory care modalities are included. Prerequisite: NUR 180 Co-requisite: NUR 220

NUR 223 Safety and Security Needs II (1) This course covers various aspects of nursing care and utilization of the nursing process related to a person's surgical experience, persons experiencing pain, and persons with cancer. Prerequisite: NUR 180 Co-requisite: NUR 220

NUR 224 Nutrition and Elimination Needs II (1) This level two nursing course provides information to assist students in applying the nursing process to address client's nutrition and elimination needs. Information on defining the client's problem as well as additional skills for promoting nutrition and elimination are included. Caring for clients receiving IV therapy via infusion pump, nutrition via feeding tubes or monitoring naso-gastric decompression; insertion of indwelling urinary catheters are skills to be demonstrated. Assessing effectiveness of treatment is considered. Prerequisite: NUR 180 Co-requisite: NUR 220

NUR 225 Psychosocial Needs II: Therapeutic Communication (1) Students apply the nursing process in the area of psychosocial needs by identifying clients' direct and indirect expressions of feelings and by using supportive communication skills to respond to them. Students also apply these supportive communication skills to assessing and intervening in difficult situations and with “difficult” clients. Prerequisite: NUR 180 Co-requisite: NUR 220
NUR 230 Introduction to Nursing Process for Advanced Placement Students (2) This course provides an opportunity for the student with prior nursing credits to consolidate and refine the role of provider of care, using previously learned theory and skills and emphasizing the underlying rationale and principles. Under the guidance of the instructor in a simulated clinical setting the principles of nursing process are applied to the role of provider of care, and the roles of manager of care and member within the discipline of nursing are introduced. Opportunities are provided to reduce the stress of re-entering school, to positively reinforce gained knowledge, and to form support groups by focusing on the skills needed for interpersonal relationships. Appropriate clinical placement will be determined at the end of this experience. Prerequisite: Matriculation in Nursing and Permission of Instructor. Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 180, NUR 220

NUR 231 Nursing Process Clinical I (2) This course provides an opportunity for the student to apply theory and skills mastered to date. The student functions in the role of provider of care in collaboration with the instructor to plan for the day of care for hospitalized adults, recognizing diverse characteristics. The student functions in the role of manager of care, depending on the instructor for guidance with interactions with members of health care team and seeking assistance when appropriate. The student functions in the role of member within the discipline of nursing, depending on the instructor for guidance to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments, identify problems, select nursing diagnoses, plan, implement and evaluate care for the day. Prerequisite: NUR 230 or NUR 231. Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 232 Nursing Process Clinical II (2) This course provides an opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 233 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 234 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 235 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 236 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 237 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 238 Extended Nursing Process Clinical II (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to achieve clinical proficiency at Level 2. Prerequisite: NUR 232 Co-requisite: Completed and current Health Form on file. Current CPR certification, Malpractice insurance, NUR 220

NUR 239 Elective Nursing Process Clinical II (2) This course provides opportunities for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge enhance skills learned, and/or validate maintenance of skills. Prerequisite: Permission of Instructor. Co-requisite: Completed and current health form on file, current CPR certification, malpractice insurance.
NUR 240 Nursing Process and Concepts III
(1) NUR 240 introduces the concepts essential for applying Level 3 theory in the clinical setting. The student will focus on the needs of clients and their families during the current events of hospitalization and in anticipation of future needs. Skills in documenting nursing process via obtaining a health care history, initiating the nursing care plan or referral, and completing a discharge/transfer summary are introduced. The concept of loss, most significantly the loss of health and life, is examined in light of Maslow’s hierarchy of needs. Several bio-ethical issues surrounding dying and death are explored. Skills are introduced to enable the student to assist the client and family experiencing such a loss. Demonstration of the application of these concepts in the clinical setting in the roles of Provider of Care, Manager of Care, and Member Within the Discipline of Nursing is a requirement of NUR 240. Prerequisite: NUR 220

NUR 243 Safety and Security Needs III: Pharmacology (1) In this course, students use nursing process to safely administer medications. Students are introduced to the study of drugs, how the drugs acts, and how the drug moves through the body, along with a format to organize drug information for both general classifications of medications and specific medications. Major drug classifications are covered. Drug actions, common side effects, contraindications, drug-drug interactions, and nursing implications are presented for each classification. The generic name, trade name, usual route(s), and safe dosage parameters of prototype drugs and/or commonly prescribed specific medications are highlighted. Safe administration and responsibilities for intravenous medications are introduced and practiced. Prerequisite: NUR 220 or Permission of Instructor Co-requisite: NUR 240 or Permission of Instructor

NUR 245 Psychiatric Client Needs I (1) In this course students apply concepts of nursing process and therapeutic communication with clients experiencing severe mental/emotional disorders likely to be seen in the acute care psychiatric setting: mood disorders and thought disorders. In addition, they learn assessments and interventions related to psychiatric emergencies: threatening/assaultive behavior and suicide. Prerequisite: NUR 220 Co-requisite: NUR 240

NUR 246 Childbearing Family Needs I (1) This course focuses on the use of the nursing process for the client/family in various phases of the childbearing process - prenatal, labor, delivery, and postpartum. The emphasis is on the normal aspects of childbearing and views the client within the context of family. The normal prenatal course will be viewed from both the maternal and fetal perspectives and includes the dynamic physiologic, psychosocial, and emotional adaptations. The family will be studied through the process of labor and delivery and the student will learn to assess the postpartum woman and the normal newborn. Prerequisite: NUR 220 Co-requisite: NUR 240

NUR 247 Childbearing Family Needs II (1) The understanding of the concepts of illness provides a base for the students to learn the skills in this course directed toward mediating the impact of illness and hospitalization on children and their families. The concepts of the nursing process are expanded to enable the student to document the planned and implemented care that will meet the needs of patients and their families throughout the course of and illness. Nursing strategies for specific physiologic alterations will be included. Prerequisite: NUR 220 Co-requisite: NUR 240

NUR 248 Gerontological Nursing: Needs of The Elderly Client (1) This course presents the student with information and tools to use when applying the nursing process to meet the health care needs of the elderly client. Aspects of normal aging and the impact of age-related changes on the able elderly and the dependent elderly are discussed. Assessment guides for physiological and psychological functioning are provided, and nursing interventions for health problems are discussed. Prerequisite: NUR 220 Co-requisite: NUR 240

NUR 250 Elective Units in Nursing (1) These varied units of instruction provide students with concepts and/or skills in a clinical area of their interest. Included are topics considered to be of value and interest to the nursing practitioner, but beyond the scope of required preparation for all students. These units may be completed in conjunction with the Integrative Clinical Laboratory (NUR 220), with Elective Clinical Laboratory (NUR 251), or independently. A complete listing of elective units and individual prerequisites is available from the Nursing Department on request.

NUR 251 Nursing Assessment: The Physical Examination (3) This course will assist the learner to develop his/her skills in the assessment of a client’s health status. It is especially designed for those anticipating employment on acute care settings or those wishing to pursue a BS in Nursing. The purchase of a good quality stethoscope is required. Prerequisite: BIO 107 and BIO 108 and Permission of Instructor, also open to registered nurses.

NUR 233 Safety in Med Administration: Pharmacology for Nurses (3) This course focuses on safety issues involved in administering medications in a clinical setting. It covers drug classifications and the effects of that classification on the body systems. The student will be introduced to the basics of pharmacology and how the drugs work right down to the cellular level. This detailed information will make client assessments more meaningful. Case scenarios describing actual medical errors will follow each classification studies. In addition to drug classification, medical calculations, legal aspects and safety issues will be presented.
NUR 255 Specialty Care Clinical: Psychiatric Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the psychiatric client needs course. The student functions in the role of provider of care in collaboration with the instructor, members of the nursing team and the client within the context of family. The student functions in the role of manager of care, exercising limited independence in collaboration with other members of the health care team to act as a client advocate. The student functions in the role of member within the discipline of nursing, exercising limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client and family-centered care. Prerequisite: NUR 220 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 240

NUR 256 Specialty Care Clinical: Childbearing Family Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the childbearing family needs courses. The student functions in the role of provider of care in collaboration with the instructor, members of the nursing team, the client and the family to plan for the day of care. The student functions in the role of manager of care, exercising limited independence in collaboration with other members of the health care team to act as a client advocate. The student functions in the role of member within the discipline of nursing, exercising limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client and family-centered care. Prerequisite: NUR 220 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 240

NUR 257 Specialty Care Clinical: Childbearing Family Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the childbearing family needs courses. The student functions in the role of provider of care in collaboration with the instructor, members of the nursing team, the client and the family to plan for the day of care. The student functions in the role of manager of care, exercising limited independence in collaboration with other members of the health care team to act as a client advocate. The student functions in the role of member within the discipline of nursing, exercising limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care that incorporates principles of teaching/learning, and to implement and evaluate client and family-centered care. Prerequisite: NUR 220 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 240

NUR 258 Specialty Care Clinical: Gerontological Nursing (2) This course provides an opportunity for the student to apply theory and skills mastered to date and to implement new theory and skills learned in the gerontological nursing needs course. The student functions in the role of provider of care in collaboration with the instructor, members of the nursing team and the client within context of family. The student functions in the role of manager of care exercising limited independence in collaboration with other members of the health care team to act as a client advocate. The student functions in the role of member within the discipline of nursing, exercising limited independence to maintain standards, develop relationships, and assume accountability for learning and self-evaluation. The student utilizes the nursing process to perform ongoing assessments that include the family, to select nursing diagnoses, to plan care which incorporates principles of teaching/learning, and to implement and evaluate client and family-centered care. Prerequisite: NUR 220 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 240

NUR 259 Elective Nursing Process Clinical III (2) This course provides opportunities for the student to have clinical experiences to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge enhance skills learned, and/or validate maintenance of skills. Prerequisite: Permission of Instructor Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance.

NUR 260 Nursing Process and Concepts IV (1) NUR 260 introduces the concepts essential for applying Level 4 theory in the clinical setting. The course material explores the discipline of nursing including historical perspectives; educational, ethical and legal issues; health care delivery and nursing roles; application of nursing process in the management of client care; and professional trends and issues. Demonstration of application of these concepts in the clinical setting in the roles of provider of care, manager of care, and member within the discipline of nursing is a requirement of NUR 260. Prerequisite: BIO 171, BIO 172 and NUR 240
NUR 261 Activity and Rest Needs II: Orthopedic Nursing (1) This course provides the opportunity to apply the nursing process for the client with activity and rest needs. Students will learn assessment techniques for the client with mobility impairment. Principles of nursing care are emphasized for clients undergoing orthopedic treatment modalities for injury impairment. Principles of nursing care are emphasized for clients undergoing orthopedic treatment modalities for injury of disease. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 262 Oxygenation Needs III (1) This course provides the opportunity to focus on the use of the nursing process when caring for clients with conditions resulting from interferences with oxygenation related to the upper and lower respiratory tracts, and interferences with oxygenation related to circulation. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 263 Safety and Security Needs IV: Neuro Science Nursing (1) This course provides the opportunity for the student to focus on the use of the nursing process for the commonly occurring pathological conditions of the special senses (vision, hearing, smelling, and touch), and nervous systems (central and peripheral). Emphasized will be what the nurse needs to know in order to assess, plan, implement, and evaluate the nursing care for clients with these dysfunctions in order to maximize their potentials. Information necessary for the safe provision of nursing care for clients with communicable and infectious diseases will be provided. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 264 Nutrition and Elimination Needs III (1) This is a level four nursing course which provides theory to assist the student in body system assessment. The nursing process is applied to clients with illness that interfere with nutrition and/or elimination. For communicable illnesses, clients needs are considered as well as those of client contacts and health care providers. The planning focus is the entire episode of illness, considering potential teaching needs and home health maintenance. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 265 Psychiatric Clients Needs II (1) In this course, students apply concepts of nursing process and therapeutic communication with clients experiencing mental/ emotional disorders that may be seen in a variety of settings: acute or outpatient care, psychiatric settings or medical-surgical settings, among them addiction, eating disorders, and personality disorders. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 266 Childbearing Family Needs II (1) In this course the student will study the maintenance of women’s reproductive health as well as disorders of the reproductive system. Contemporary issues related to contraception, sexually transmitted diseases, infertility, abortion, and violence will be covered. The student will also focus on applying the nursing process with the high risk client/family during the puerperium. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 267 Childbearing Family Needs II (1) The understanding of the concepts of growth and development provides a base for students to learn the skills, in this course, directed towards assessing and promoting health of children and their families. The concepts of the nursing process are expanded to enable the student to document the planned and implemented care that will meet the needs of clients and their families. Children’s perceptions and behaviors in relation to health concepts will be included. Prerequisite: NUR 240 Co-requisite: NUR 260

NUR 271 Advanced Nursing Process Clinical (2) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels and to implement new Level 4 theory and skills. The student functions in the role of provider of care, in collaboration with members of the health care team, to provide care for hospitalized clients with complex needs. The client is viewed as part of a broader community. The student functions interdependently in the role of manager of care to establish priorities for a group of clients, to delegate and assist others with aspects of nursing care, and to provide for continuity of care, discharge planning and referrals. The student functions interdependently in the role of member within the discipline of nursing to maintain standards, to develop relationships, and to assume accountability for self and others. The student applies the nursing process considering previous illness, to develop and implement a plan of care for a group of clients. Prerequisite: NUR 240 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 272 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 273 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 274 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260
NUR 275 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experiences in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 276 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 277 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experiences in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 278 Extended Advanced Nursing Process Clinical (2) This course provides the opportunity for the student to have additional experience in the medical-surgical hospital setting to meet the objectives of the courses in Level 4. Prerequisite: NUR 271 Co-requisite: Complete and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 279 Elective Nursing Process Clinical IV (2) This course provides opportunities for the student to have clinical experience to work on personal objectives and/or those beyond the scope of basic preparation. These experiences will allow the student to be supervised in the clinical setting in order to gain additional experiential knowledge, enhance skills learned, and/or validate maintenance of skills. Prerequisite: Permission of Instructor. Co-requisite: Completed and current health form on file, current CPR certification, malpractice insurance.

NUR 281 Intraoperative Nursing I (2) This course is designed to introduce the student to the functions of the Perioperative Nurse as part of the health care team. It includes an introduction to surgical services and aseptic techniques. Topics will include surgical asepsis, scrubbing, gowning and gloving, sterilization processes, surgical instrumentation, equipment, and the role of the scrub nurse and circulating nurse in the care of the surgical patient. Prerequisite: Currently Licensed RN or Permission of Instructor, NUR 251 Health Assessment (3cr) or equivalent.

NUR 282 Intraoperative Nursing II (1) This course is designed to introduce the student to the functions of the Scrub Nurse as part of the health care team; it includes the study of preparation of supplies, the roles of the circulator, medico-legal responsibilities including various counting procedures, operating room policies, the myriad sutures and needles employed, and the mechanisms involved with the operating tables and all other surgical equipment. Prerequisite: NUR 281 or Permission of Instructor.

NUR 283 Managing Pharmacology in the Perioperative Arena (1) This course covers the pharmacological agents used in general, conscious, and local anesthesia. There is an emphasis on the assessment and management of the client undergoing surgery via these agents. Included are the post-anesthesia recovery care and responsibilities of the nurse. Prerequisite: Currently Licensed RN or Permission of Instructor, NUR 251 Health Assessment (3cr) or equivalent

NUR 284 Teaching the Client Undergoing Surgery (1) This course focuses on the learning needs of the client undergoing a surgical procedure. The student will study relevant: principles of teaching and learning; core elements of pre-operative teaching plans; evaluation and reinforcement of teaching and learning; preparation for discharge and self-care; and community resources and follow up as they pertain to surgical procedures. Prerequisite: NUR 251 Health Assessment (3cr) or equivalent; NUR 283 or Permission of Instructor.

NUR 291 Role Transition: Capstone Course (2) As a capstone course for the program, this clinical course is designed as a collaborative experience between nursing service and nursing education. It is a reality-based experience in which the student, in conjunction with a registered nurse preceptor, begins to function as beginning staff nurse. In the role of provider of care, manager of care, and member within the discipline of nursing, the student incorporates the use of evidenced-based principles of nursing practice. The preceptor acts as a role model, teacher, and supervisor, and determines the pace and extent of assignments based on the student’s identified learning outcomes, the experiences available and the student’s ability. The student is involved in a collegial review process with the preceptor by maintaining and sharing a daily log receiving formative feedback from which to identify learning needs. The student receives summative feedback prepared by the preceptor at the conclusion of the experience. Prerequisite: Permission of Instructor. Co-requisite: Completed and current health form on file, current CPR certification, malpractice insurance.

NUR 292 Advanced Specialty Care Clinical (2) This course provides an opportunity for the student to experience an additional clinical setting to work on objectives beyond the scope of the basic preparation for all students. The students will apply the nursing process and function in the roles of provider of care, manager of care, and member within the discipline of nursing at an advanced level. Specialty clinical areas include, but are not limited to: intensive care nursing, psychiatric nursing, childbearing family nursing, child-rearing family nursing, and gerontological nursing. Prerequisite: NUR 271 and Permission of Instructor. Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance.
NUR 295 Distributive Care Clinical: Psychiatric Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels and to implement new theory and skills learned in the psychiatric client needs courses in settings not limited to acute care. The student functions in the roles of provider of care and manager of care in collaboration with members of the health care team within the context of community based settings. The student functions interdependently in the role of member within the discipline of nursing to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Prerequisite: NUR 240 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 296 Distributive Care Clinical: Childbearing Family Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels and to implement new theory and skills learned in the childbearing family needs courses in settings not limited to acute care. The student functions in the roles of provider of care and manager of care in collaboration with members of the health care team within the context community based settings. The student functions interdependently in the role of member within the discipline of nursing to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Prerequisite: NUR 240 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 297 Distributive Care Clinical: Childrearing Family Nursing (1) This course provides an opportunity for the student to consolidate theory and skills developed in previous levels and to implement new theory and skills learned in the child-rearing family needs courses in the roles of Provider of Care and Manager of Care in collaboration with members of the health care team within the context of community based settings. The student functions interdependently in the role of member within the discipline of nursing to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Prerequisite: NUR 240 Co-requisite: Completed and current health form on file. Current CPR certification, Malpractice insurance, NUR 260

NUR 298 Distributive Care Clinical: Gerontologic Nursing (1) This course provides an opportunity for the student to consolidate theory skills developed in previous levels to implement new theory and skills learned in the gerontological nursing needs course in setting not limited to acute care. The student functions in the roles of provider of care and manager of care in collaboration with members of the health care team within the context of community based settings. The student functions interdependently in the role of member within the discipline of nursing to maintain standards, to develop relationships, and to assume accountability. The student applies the nursing process to perform assessments, select nursing diagnoses, and develop a plan for care. Prerequisite: NUR 240 Co-requisite: Completed and current health form, current CPR certification, Malpractice insurance. NUR 260

Nutrition

FOR MORE INFORMATION, CONTACT THE BUSINESS ADMINISTRATION DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W324, (315) 498-2435.

NTR 218 Nutrition/Diet Therapy (3) A study of the principles of Basic Nutrition as it relates to normal growth, development and health. The student will study how nutrient intake can impact body systems and processes. Therapeutic diets for specific disease conditions will also be covered. This course is geared towards the basic and therapeutic knowledge needs of the nursing student.

Philosophy

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCE DEPARTMENT IN MAWHINNEY HALL, ROOM A385, (315) 498-2301.

PHI 102 History of Philosophy Ancient (3) Introduces students to the problems of philosophy through the critical examination of the earliest developments of philosophic thought: the Pre-Socratics, Socrates, Plato, and Aristotle.

PHI 104 History of Philosophy - Modern (3) An introductory course which examines the problems of philosophy as presented by the major philosophical movements of the 17th and 18th centuries. Representative readings will be selected from among the works of Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, Kant, and Hegel.

PHI 105 Nineteenth Century Philosophy (3) Primarily concerned with the Post-Kantian trends in the Philosophy of 19th Century Europe. Emphasis will be placed on the most conspicuous figures of this period including Hegel, Schopenhauer, Marx, Mill, Kierkegaard, and Nietzsche.

PHI 106 Twentieth Century Philosophy (3) The student will be introduced to the two major philosophical movements of the 20th Century, Analytic Philosophy and Existentialism, through selected writings of such philosophers as Moore, Russell, Austin, Wittgenstein, Husserl, Heidegger, Sartre, and Camus.

PHI 107 Logic (3) An introduction to modern symbolic logic. The course covers topics from among Aristotelian and modern class logic, informal fallacies, truth tables, proofs of invalidity, propositional logic, and the beginnings of predicate logic. Emphasis will be placed on acquiring the skills of logical technique.
PHI 108 Ethics (3) An introduction to basic problems about the application of the concepts of right, wrong, good and bad to persons and their actions. Topics covered may include: relativism and absolutism, determinism and freedom, and the foundations of moral obligation.

PHI 109 Philosophy of Religion (3) An introductory course examining issues in the traditions of western religious thought, e.g., proofs of the existence of God, the problem of evil, the relationship between religious belief and moral belief, religious experience and knowledge, immortality.

PHI 110 American Philosophy (3) Devoted to the search for characteristically American contributions to philosophical investigations. The course will examine how the issues of the great tradition of philosophy, developed in Europe, in the theories of existence, knowledge, ethics, and politics, have all been addressed by writers such as Emerson, Thoreau, Pierce, James, Dewey, Margaret Fuller, and also by Native American thinkers.

PHI 206 Philosophy of Law (3) This course concerns the fundamental nature of law, and the relations between law and morality. It covers natural law, imperative, and rule-based theories of the nature of law, and alternative statements of the justice of law. The philosophers covered in the course will include Aristotle, Aquinas, Austen, Hart and Rawls. Prerequisite: one prior course in PHI or Permission of Instructor.

PHI 208 Philosophic Issues and Problems (3) Detailed study and analysis of some particular problem, area, or philosopher. The subject chosen will vary with each semester; the Philosophy Department should be contracted for information as to the subject for a given semester. Prerequisite: one prior course in PHI or Permission of Instructor.

PHI 210 Philosophy of Science (3) Concerned with the nature of scientific theories and the evidence for them, as well as the ways these theories develop and change. Examples of the sorts of problems to be considered are the status of theoretical entities, the problems of induction, simplicity of theories, isomorphism of theories, and the nature of prediction. Examples of theories will be drawn from classical as well as contemporary science. Pre-requisite: one prior course in PHI or Permission of Instructor.

PHI 211 Metaphysics and Epistemology (3) Concerned with fundamental questions about the nature of reality and our knowledge of it. Emphasis will be placed on acquiring the analytic tools required to examine these areas intelligently, and an attempt will be made to show how uncritical opinions in these areas affect behavior and belief. Prerequisite: one prior course in PHI or Permission of Instructor.

Photography

FOR MORE INFORMATION, CONTACT THE PHOTOGRAPHY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W230, (315) 498-2154.

PHO 100 Basic Photography (3) This black and white photography is an introduction to basic film and camera techniques, photographic aesthetics, and black and white darkroom procedures. Class time is a combination of lecture, demonstration, critique, and hands on darkroom instruction. Regular assignments will be given. Students must have a adjustable camera.

PHO 111 Digital Photography (3) This non-major course is designed to cover the basics of digital photography. Instruction will be offered to introduce students to the digital camera and its functions, offering students a better understanding of the terminology, requirements as well as limitations of digital imagery. The course will cover issues of composition, design, color theory as well as history of photography to help students work creatively with their digital cameras. Students will be introduced to image editing software for color correction, image manipulation, and digital output. Projects will involve a range of subject matter and may include: portraiture, landscape, architecture and event photography. (Class time will include lecture, demonstration, aesthetics, critique and in-class projects.) Students must have a digital camera.

PHO 150 Black & White Photography II (3) This course will cover analog and digital color photography including exposure, processing, printing, color theory, color management, and digital output. Aesthetics and communication will be stressed. Class time will include lecture, demonstration, aesthetic critique, and hands on darkroom instruction. Writing and reading assignments as appropriate to the discipline are part of this course. Prerequisite: PHO-100 or Permission of Department.

PHO 160 Color Photography I (3) This course will cover black and white photography. Aesthetic and communication will be stressed. Class time will include lecture, demonstration, aesthetic critique, and hands on darkroom instruction. Writing and reading assignments as appropriate to the discipline are part of this course. Prerequisite: PHO-100 or Permission of Department.

PHO 170 Studio Lighting & Techniques I (3) This course is designed to introduce students to the tools and practice of studio photography. Students will be introduced to medium and large format cameras, tungsten and strobe lighting systems as well as other lighting equipment. Class will focus on creation of black and white imagery with projects drawn from the following: advertising, portraiture, fashion, product photography, digital, architecture and fine art. Students will develop a working knowledge of all the tools of the studio as well as the ability to work knowledgeably in the creation of effective lighting of all subject matter. Class projects may involve digital equipment and editing as well as work with analog film material. Class time will include lecture, demonstration, aesthetics, critique and in-class projects. Prerequisites: PHO 100 or Permission of Instructor.
PHO 175 Special Topics in Black & White (3)
Topics of special interest to broaden and intensify the students’ ability to use black and white photography as a means of communication and expression. Class time will include lecture, demonstration, aesthetics, critique and hands on darkroom instruction. Students must have a 35mm adjustable camera.

PHO 250 Color Negative Photography (3)
Acquaints students with skills in color materials handling, from exposure to color negative printing. Course will cover color theory and applied problems in color photography, processing and printing, color balance and correction. Aesthetic and communicative aspects of color photography will be stressed. Regular assignments and a completed portfolio are a requirement of this course. Class time will include lecture, demonstration, aesthetics, critique and hands on darkroom instruction. Students must have a 35mm adjustable camera. Prerequisite: PHO 150 or Permission of Instructor.

PHO 250L Color Negative Photo Lab (0)

PHO 260 Color Photography II (3) This course is an advanced color photography class using color negative and color transparency film as well as digital material. The course will build on the foundation created in PHO 160 and ART 142 for working with color photographic imagery in both analog and digital modes. Projects will address the relative strengths and weaknesses of both the analog and digital worlds. Class will focus on mastering color correction in both the analog and digital darkroom. In addition to non-digital projects, students will work with image editing software for creation of collage and montage imagery. Topics covered will include digital scanning and cameras, image manipulation, color correction and management, digital output. Class time will include lecture, demonstration, aesthetics, critique and in-class projects. Prerequisite: PHO 160, ART 142.

PHO 270 Studio & Lighting Techniques (3)
This course is an advanced studio photography class. Students will focus on effective use of medium and large format cameras as well as the full range of lighting equipment (tungsten and strobe) for work in both digital and analog (film-based) color photography. Class will address advanced studio techniques and creative problem solving using both traditional and digital methods. Assignments may include projects in advertising, portraiture, fashion, product photography, architecture and fine art. Class time will include lecture, demonstration, aesthetics, critique and in-class projects. Prerequisites: PHO 175 and ART 142

PHO 271 Altern Photographic Process (3) This course is an introduction to alternative photographic techniques and an expanded investigation of various modes of photographic presentation. Students will study techniques and photo processes ranging from the 19th century (such as cyanotype, gum bichromate and van dyke brown) to the most contemporary digital techniques with an eye toward adapting and combining various techniques for innovative personal expression. Students will be encouraged to move beyond the traditional presentation methods of photography and to devise presentation styles to match and augment their photographic content. Possibilities include: sequential imagery (book, video or digital), collage and montage, mixed media, wall hangings and sculptural and installation uses of photography. Class time will include lecture, demonstration, aesthetics, critique and in-class projects. Prerequisites: ART 142 and PHO 150

PHO 272 Documentary Photography (3) This course allows students to investigate a range of topics and issues typical to the photojournalist. These may include: legal and ethical issues, news, spot news, portrait and action photography, travel imagery, picture editing, photography and writing, digital imagery and the extended documentary project. Class is designed to provide a solid introduction to the work of the photojournalist. Class time will include lecture, demonstration, aesthetics, critique and in-class projects. Prerequisite: PHO 150 and ART 142. Recommended: PHO 160

PHO 275 Special Topics in Color (3) This course provides the students the opportunity to apply their color skills in a photographic genre of their choice. The studio, medium and large-format cameras and advanced printing techniques will be covered. A completed portfolio reflecting the student’s personal aesthetic is a requirement of this course. Class time will include lecture, demonstration, aesthetics, critique and hands on darkroom and studio instruction. Students must have a 35mm adjustable camera. Prerequisite: PHO 100 and PHO 150 or Permission of Instructor.

PHO 276 Digital Imaging (3) This studio course covers the basics of digital imaging to create a broad understanding of digital capabilities and their relationship to traditional photographic image production. Emphasis will be on Macintosh Systems and Adobe Photoshop. Topics covered will include design, image manipulation, scanning, collage, digital cameras, file management and digital output. Software technology will be discussed. The class will explore the creative possibilities of digital technology. Class time will include lecture, demonstration, aesthetics, critique and in-class projects.

PHO 290 History of Photography (3) A survey of the history of photography, with concentration on selected major figures in photography from the nineteenth and twentieth centuries. Class activities will include instructor’s presentations, student reports, field trips, guest presentations, and discussions based upon those activities and upon assigned readings in the history of photography.
Physical Education

FOR MORE INFORMATION, CONTACT THE PHYSICAL EDUCATION DEPARTMENT IN HEALTH AND PHYSICAL EDUCATION BLDG., ROOM H202, (315) 498-2282

PEH 100 Lifetime Physical Wellness (1) This course will provide the student with an overview of wellness and physical fitness principles. Through course lectures and actually participation, the material covered will enable the student to initiate a healthy lifestyle change. Topics covered include: the four areas of physical fitness, proper nutrition for a healthy lifestyle, relaxation and stress management techniques, self-responsibility as it relates to personal health management, prevention and care of common injuries, and the use and misuse of supplements. There are no prerequisites for this course. PEH 101 Beginning Swimming (1) For students who are extremely limited in their ability to handle themselves in water. These students are unable to perform one or more of the following basic beginner skills: 1) Put face in water, hold breath for 10 seconds; 2) Face float, front glide and recover; 3) Back float, back glide and recover; 4) Fearful of deep water; 5) Unable to jump into the water. Students will be tested on the first day of class to be sure they are in the right course.

PEH 102 Intermediate Swimming (1) The course will focus on stroke technique while increasing endurance and safety in and around the water. There is an emphasis on swimming as an enjoyable lifetime activity that will increase physical fitness and enhance the overall well being of the individual. There is no prerequisite to this course however, the student must be able to swim one length of the pool crawl stroke with rotary breathing to enter the course.

PEH 103 American Red Cross Lifeguard Training (2) American Red Cross course that leads to certification. Deals with the additional skills and knowledge required by individuals to develop effective lifeguard systems at swimming pools and at non-surf, open-water beaches. This course will fulfill the Physical Education aquatics requirement. Prerequisite: PEH 103 or equivalent skills.

PEH 104 Water Safety Instructors (2) Taught under American Red Cross standards leading to certification. This course prepares candidates as teachers of American Red Cross Water Safety courses. Prerequisite: Current American Red Cross Advanced Lifesaving Certification and American Red Cross Swimmer’s Skills.

PEH 105 Basic Scuba Diving (1) Taught under National Association of Skin Diving Schools, leading to certification. This course is open to individuals who meet the physical and preliminary swimming test qualifications. Additional fee is required.

PEH 106 Water Safety Instructors (2) Taught under American Red Cross standards leading to certification. This course prepares candidates as teachers of American Red Cross Water Safety courses. Prerequisite: Current American Red Cross Advanced Lifesaving Certification and American Red Cross Swimmer’s Skills.

PEH 107 Water Aerobic for Women and Men (1) A fun fitness program in the pool. Jumping, jogging and other calisthenics movements are incorporated in this well-monitored aerobic workout in the shallow end of the pool. Water Aerobics provide as much resistance as lifting weights, but is safer. It has as much cardiovascular benefits aerobics, but less impact than low impact aerobics in a gym. Knowing how to swim is not required. This course can be used toward the Physical Education Activity requirement. There are no prerequisites for this course.

PEH 108 Horsemanship (1) This course will provide the student with a basic knowledge of proper horsemanship. Through lectures and actual riding lessons, the student will learn the proper techniques of caring for a horse, riding, etiquette, grooming, horse anatomy and safety. The student will gain self-confidence for personal safety and riding enjoyment. In addition, the student will better understand the horse and how it functions, both mentally and physically. There is an additional fee per riding session for this class. There are no prerequisites for this course.

PEH 109 Horsemanship II (1) This course is a natural progression from Horsemanship I. Through lectures and actual riding lessons, the student will enhance his/her understanding of the nature of horses and proper methods of caring for them. They will identify different breeds, colors and markings. Advanced riding, handling and grooming skills will be taught along with more detailed instruction on the care and structure of the horses. The student must have completed Horsemanship I, or the equivalent of 15 hours of riding instruction to take this course.

PEH 110 Beginning Tennis (1) Primarily designed for those individuals who have no previous tennis experience. Areas to be covered include equipment, etiquette, rules, stroke fundamentals, and theory.

PEH 111 Basic Aerobic Dancing for Women and Men (1) A fun fitness program comprised of a variety of energetic dances that incorporate muscle toning, flexibility, balance, coordination and cardiovascular fitness. Course includes well-monitored workouts, beginning with slow, easy aerobics and working up to more vigorous routines. Meets Physical Education Activity requirement.

PEH 112 Ballroom Dancing (1) Designed for the student who has had little or no background in ballroom dancing. It will stress the development of basic rhythms in four or five different dances (fox trot, waltz, cha cha, rhumba, etc.) It will teach the basic steps, patterns, and simple breaks of the dances involved. Finally, it will stress good leading and following techniques so dancing can be an interpretive experience instead of mechanical.
Physical Therapist Assistant

FOR MORE INFORMATION, CONTACT THE PHYSICAL THERAPIST ASSISTANT DEPARTMENT IN FERRANTE HALL, ROOM F267, (315) 498-2458.

PTA 101 Introduction to Rehabilitation (3)
The history of the profession of physical therapy and the American Physical Therapy Association is explored. The student is introduced to procedures used in physical therapy, settings where P.T. is practiced, and the physical therapist assistant’s role as part of the rehabilitation team. Ethical and legal considerations in physical therapy are also introduced. Communication skills are developed including effective interpersonal communication, oral and written reports and medical terminology. Vital signs, dressings, aseptic techniques and various emergency procedures pertinent to the practice of physical therapy will be learned. The student is required to become CPR certified on an independent basis. Prerequisite: Acceptance into PTA Program or Permission of Instructor. Co-requisites: PTA 102, 102L, 103 or Permission of Instructor.

PTA 102 Physical Therapy Procedures I (2)
The theory and practice of physical therapy procedures is begun including patient positioning and handling techniques, skin care, heat, cold, hydrotherapy treatments and massage. Ambulation with assistive devices, transfers, activities of daily living skills and wheelchair prescription and use are taught. The theory, effects, contraindications and safety precautions of these treatments are learned. Prerequisite: Acceptance into PTA Program or Permission of Instructor. Co-requisites: PTA 101, 102L, 103, or Permission of Instructor.

PTA 102L Physical Therapy Procedures I Lab (2)
Skills of PTA 102 are practiced. Students will master entry level skills on patient positioning and handling techniques, heat, cold, and hydro-therapy treatments, and massage. Students will become proficient with ambulation using assistive devices and patient transfer techniques. Activities of daily living skills, use of adaptive equipment, wheelchair prescription and use will also be learned. Prerequisite: Acceptance into PTA Program or Permission of Instructor. Co-requisites: PTA 101, 102, 103, or Permission of Instructor.

PTA 103 Clinical Training I (1)
An introduction to the physical therapy department of a clinical facility. Assignments are designed to allow students to observe, assist and acquire skills in application of all procedures studied in PTA 101 and 102. Prerequisite: Acceptance into PTA Program or Permission of Instructor. Co-requisite: PTA 101, PTA 102, PTA 102Lab, or Permission of Instructor.

PTA 104 Physical Therapy Procedures II (2)
Presents the principles, theory, effects and contraindications of forms of electrotherapy, deep heat modalities, ultraviolet and traction. Mechanisms of injury and the healing process are taught. Theory and principles of passive range of motion and therapeutic exercise are introduced. Theory of peripheral joint mobilization and stretching is discussed. Basic assessment and treatment of musculo-skeletal injuries are introduced and discussed. Prerequisite: PTA 101, PTA 102, PTA 103. Co-requisite: PTA 104, PTA 105, PTA 106 or Permission of Instructor.

PTA 104L Physical Therapy Procedures II Lab (2)
Students master entry level skills of application of various forms of electrotherapy, deep heat modalities, ultraviolet and traction. Students become proficient in selecting and executing passive range of motion and therapeutic exercises. Students are familiar with practical application of joint mobilization and stretching of the limbs. Prerequisite: PTA 101, PTA 102, PTA 102 Lab, PTA 103 or Permission of Instructor. Co-requisite: PTA 104, PTA 105, PTA 106 or Permission of Instructor.
PTA 105 Functional Anatomy I (3) Application of principles of anatomy in the study of human motion. Emphasizes the positioning and procedures for muscle testing, and goniometry of the lower extremities and the physiology of muscle contraction. The origins, insertions, actions, innervation and palpations of various muscles of the lower extremities will be learned, in addition to landmarks of the skeletal system. Normal and abnormal posture and gait are studied. Prerequisite: PTA 101, 102, 102L, 103 or Permission of Instructor. Co-requisite: PTA 203, PTA 204, or Permission of Instructor.

PTA 105L Functional Anatomy I Lab (0)

PTA 106 Clinical Training II (3) In the clinical setting, the student applies newly acquired concepts and skills from PTA 104 and 105 and refines skills learned in PTA 102 and 102L. Prerequisite: PTA 101, 102, 102L, 103 or Permission of Instructor. Co-requisite: PTA 104, 104L, 105 or Permission of Instructor.

PTA 201 Physical Therapy Procedures III (4)
Studies the pathology, signs, symptoms, psycho-social factors and P.T. management of disabilities related to strokes, spinal cord injury, amputation, pediatric and developmental disabilities, collagen diseases and orthopedic procedures. Prerequisites: PTA 104, 104L, 105, 106 or Permission of Instructor. Co-requisite: PTA 207 or Permission of Instructor.

PTA 201L Physical Therapy Procedures III Lab (0)

PTA 203 Physical Therapy Procedures IV (3)
Study additional disabilities that may require P.T. interventions as in PTA 201. These include the pathology, signs, symptoms, psychosocial factors and P.T. management of burns, neuromuscular diseases, traumatic head injury, diabetes, cancer, cardiopulmonary disease, visual and auditory impairments, and obstetrics. Prerequisite: PTA 201, PTA 207 or Permission of Instructor. Co-requisite: PTA 204 or Permission of Instructor.

PTA 204 Seminar (3) Topics for this course include: the death, dying and bereavement process; ethical, legal and cultural implications; administration topics (reimbursement, quality assurance, budgeting, policies and procedures); motivational strategies; communication and planning. The use of computers specific to the physical therapy profession will be introduced. Students will explore PT practice issues, current literature review and evidence based research online. Ergonomics, functional capacity assessment and work hardening objectives will be discussed and demonstrated. Pharmacology, lab work, and medical imaging and their implication to PTAs will be discussed. The student will be given the opportunity to present an in-depth paper and oral report on a PT-related topic of interest, such as alternative medicine or a current issue concern. Prerequisites: PTA 201, 207 or Permission of Instructor. Co-requisites: PTA 205 or Permission of Instructor.

PTA 205 Advanced Clinical Training (6) Under direct super-vision of a registered Physical Therapist the student will be able to synthesize acquired concepts and skills from the previous levels of clinical training. The clinical experience follows the completion of all required PT courses. Prerequisite: PTA 203, PTA 204, or Permission of Instructor.

PTA 207 Functional Anatomy II (3) A continuation of PTA 105, this course includes bony landmarks, origins, insertions, actions, innervation and palpations of the muscles of the upper extremity, head and neck. Goniometry and muscle testing will be learned on the upper extremity. Prerequisite: PTA 104, 104L, 105, 106 Co-requisite: PTA 201 or Permission of Instructor.

PTA 207L Functional Anatomy II Lab (0)

PTA 208 Seminar II: Strategies for Success (2)
This course synthesizes knowledge gained from each course taken within the PTA curriculum to better prepare the graduate for entry level career positions. The student will learn how to organize and review the vast amounts of material that have been presented to them in the PTA curriculum. The student will undergo a collegial level review process, and log formative feedback to identify learning needs and individual weaknesses. This course is also geared towards preparing the student to successfully complete the National Physical Therapist Assistant Exam (NPTE). Prerequisites: PTA 201, 207, or Permission of Instructor. Co-requisites: PTA 203, 204.

Physics

For more information, contact the chemistry and physical science department in Ferrante Hall, Room F353, (315) 498-2432.

PHY 101 Technical Physics I (4) A course in general physics which emphasizes applications of basic principles. It covers fundamentals in mechanics, heat, and wave behavior. Three class hours and two laboratory hours. Co-requisite: MAT 101 or equivalent. Not open to Math-Science students.

PHY 101L Technical Physics I Lab (0)

PHY 103 General Physics I (4) The first semester of a two-semester, basic, non-calculus General Physics course emphasizing fundamental concepts and principles with a problem solving approach. Topics covered include Kinematics and Dynamics, Newton’s Laws, Work and Energy, Momentum, Rotational Motion, Heat and Thermodynamics. A two-hour recitation session allows the opportunity to work on techniques of problem solving. Two class hours, two recitation hours and two laboratory hours. Prerequisite: MAT 114 or higher. Only four (4) credits in either PHY 103 or PHY 105 may be used toward degree requirements.

PHY 103L General Physics I Lab (0)

PHY 103R General Physics I Recitation (1eq)
Optional recitation section for PHY-103. Provides an opportunity for students to apply the basic laws of mechanics and to develop problem-solving skills. Structured as small group activities, requires completion of worksheets weekly.
Political Science

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCE DEPARTMENT IN MAWHINNEY HALL, ROOM A385, (315) 499-2301.

POS 100 American National Politics (3) This course will introduce students to American democracy and its founding, contemporary governmental institutions and politics at the national level of government, and provide students with opportunities to participate as citizens in the U.S. political system. Political theories and ideas will be applied in daily discussions of current political affairs. Specific topics that will be analyzed including: political parties, interest groups, media, Federalism, Congress, the Presidency, the Supreme Court, and the policy-making that results from their interactions.

POS 102 State and Local Politics (3) In this course, politics, government, and public policy issues at the local level and in New York State are the focus. Students will explore how New York State differs and is similar to other states in the country. Students will examine the interaction between political culture, region, partisanship, and policy in local governments and New York State and explore the prospects for political and institutional reforms.

POS 198 Introduction to Political Thought (3) This course introduces students to arguments which seek to define, explain and justify various forms of political organization in the ancient and modern worlds. Student will analyze and discuss various concepts of justice. The dominant philosophical ideas that inform our political thinking will also be examined and critiqued.

POS 201 Comparative Politics (3) Students will learn about each of the world’s regions and particular nation - states within each region. Regions and nation - states will be compared with one another and with the USA. Historical and geographical factors will be examined to determine their effects on the contemporary political, economic and social patterns that exist in each of the regions. Further problems an the prospects for political and economic development in each region will also be analyzed. No prerequisite.

POS 214 Contemporary Global Issues (3) An interdisciplinary course which explores contemporary global issues. It surveys themes related to social, political, economic, and cultural processes, global linkages/interdependencies, and power relations that connect individuals, communities, groups, states, and regions across the globe. Examines the values and visions emerging from regional perspectives that lead to conflict and/or cooperation in the international system. It contrasts the increasingly complex problems faced by different regions with the growing integration of the global economy. Open to all interested students. Required course for all students pursuing the International Studies Concentration.

POS 215 The Politics of Native American-US Relations (3) This course will cover three aspects of the relationship between Native American peoples and the US government. The first includes a sample of Native American governance and law that existed prior to European settlement, its later influence on the US founding, and its rebirth. The second part of the course will examine US government policies toward native tribes from 1790 to the present. Treaties, acts and court decisions that reflect these policies will be analyzed. The last third of the course will include a discussion of contemporary issues and conflicts between and among various Native American tribes and the US government. These contemporary topics will include: land claims, land use, gambling, poverty, religious freedom, social and environmental policies.

POS 216 Student Leadership Development (2) This is a course designed to provide a theoretical framework and leadership development for those involved with the co-curricular activities of OSSA (Onondaga Student Services Association, Inc.). Student leaders and other interested students will learn about the design of government, rule making in government, political participation and the application of these concepts to the practice of student politics. Lecture, discussion and role-playing will be integrated to provide a unique educational seminar for student leaders. Prerequisite: Permission of Instructor.
POS 230 Women and Politics (3) Examines the role of women as a political actor in American politics. The political socialization, participation, and political strategies of women.

POS 260 New York State Environmental Regulation (3) This course surveys environmental regulatory management in New York State. Included are historical approaches to regulation, samples of present procedures, and samples of developing trends. The primary focus of the course is on programs of the New York State Department of Environmental Conservation. In addition to NYS DEC programs, the course will introduce the student to other agencies’ regulatory jurisdictions at the federal, state and local levels. Various local approvals will also be considered. The emphasis is on the inter-relationship of programs, not the specific details of the programs themselves.

POS 280 Internship in Politics and Government (3) The course provides students the opportunity to apply their knowledge of politics and government in a practical setting. Internships are available in various public offices in the executive/bureaucratic, legislative, or judicial branches of government at the national, state and local levels. Internships with major political parties may also be available. Students assist in their placement with the help of the Cooperative Education Office and a faculty coordinator. Course requirements include a minimum of 120 hours of work, maintenance of a weekly journal, attendance at four on campus seminars, occasional readings, and an experience-based essay. Two on-site evaluations will also be made by the faculty coordinator. Letter grade will be awarded. No credit given for past work experience. Prerequisite: Permission of Instructor.

POS 281 Practicum in Student Leadership (1) A one hour practicum for which student government officers and senators can earn credit for the academic components of their positions. This project is geared towards the responsibilities or each student officer’s job description. The faculty instructor and each officer communicate throughout the semester to ensure goals are being met and an essay and/or portfolio is written to illustrate the achievement of their goals. At least 30 hours of student government-related activities and office hours are required of each officer each semester.

POS 290 Senate/Assembly Internship (9) POS 291 Senate and Assembly Research (6) Senate and Assembly internships available on a competitive basis for outstanding sophomores. Description of Assembly Internship follows: The program begins with a comprehensive week-long orientation to the operation of the State Government, with particular reference to the workings of the Legislature. Interns then receive full-time job assignments in the office of an Assemblyman or Assembly committee; the assignments are based on a work plan and a learning contract between a supervisor and an intern; tasks involve constituent work, research on specific legislation, research on the legislative process, and office administration; supervisors are either members of the Assembly, members of their legal or research staffs, or committee staff; job performance is formally evaluated on a regular basis by the supervisors. During the course of the program interns participate in seminars covering such topics as descriptive statistics, evaluating social programs, behavior of legislators, legislative decision-making, and current political issues. Interns receive academic guidance and support, on an individual and group basis, from the permanent program staff, from the Professor in Residence, and from staff within the Assembly (and the State Government) who work with the interns on specific topics and who provide them with a unique blend of academic and practical expertise. The Professor in Residence evaluates the interns at regular intervals and at the end of the program. Prerequisite: POS 100 or POS 102 or Permission of Instructor.

Psychology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCE DEPARTMENT IN MAWHINNEY HALL, ROOM A383,(315) 498-2301.

PSY 103 General Psychology (3) Designed to give the student an introduction to the concepts required for the study of perception, conditioning, learning, intelligence, motivations, emotions, and personality. The interaction of heredity and environment is also stressed. Prerequisite to all other psychology courses.

PSY 204 Child Psychology (3) An introduction to the scientific study of the developing child. The age span covered ranges from the prenatal period up to puberty. Topics include age relevant studies of motor, cognitive, linguistic, social and personality growth. Prerequisite: PSY 103

PSY 205 Social Psychology (3) An introduction to the area of human social interaction from the perspective of how man affects and is affected by social phenomena. Social factors in the development of personality and motivation, attitudes and attitude change, interpersonal and group processes, and the application of social psychology to contemporary issues will be emphasized. Students will be expected to critically evaluate the explanatory models used to describe, explain, and predict social behavior. Prerequisite: PSY 103

PSY 206 Human Growth and Development (3) Human growth and psychological development of the individual from infancy through senescence. Attention is given to the patterns of change occurring during each of the life stages considering physiological, psychological, genetic and culture forces affecting human development. Prerequisite: PSY 103

PSY 207 Adolescent Psychology (3) All of the important aspects of the lives of adolescents are studied from a theoretical and research viewpoint. Topics discussed include the following: development of the
self-concept, sexual maturation, morality, mental growth, vocational choices, love and affection, anger, fear, parents, peer relationships, home and family, marriage, the drug culture, etc. Prerequisite: PSY 103

PSY 208 Personality Theories (3) A comparative analysis of various theories of personality in terms of the issues separating them and an examination of the role of research in resolving these issues. The course covers representative theories of personality from the areas of psychoanalytic, cognitive, phenomenological, and humanistic psychology. Analyses of the issues generated by these theories, and their explanatory adequacy will also be considered. Prerequisite: PSY 103

PSY 209 Psychology of Adulthood (3) Introduces the student to the current issues, questions, and research in the field of adult development. The course will address how personality development is affected by various adult-life crises or life passages such as: forming intimate relationships, parenthood, job changes, mid-life crisis, retirement, aging, and death. Prerequisite: PSY 103

PSY 210 Abnormal Psychology (3) Deals with the important aspects of "abnormal psychology", both from a descriptive as well as a theoretical viewpoint. In addition to noting the various symptoms and characteristics of psychological disorders, an emphasis will be placed on explaining the possible causes of such disorders and their possible methods of treatment. Prerequisite: PSY 103

PSY 211 Psychology of Leadership and Work (3) Designed to study the interplay of humans and organizations. It is concerned with many of the major effects on individuals, both management and workers, by our rapidly changing economy, automation, information technology, and social change. The organization is viewed as a system and this course focuses on the way workers, management, owners, and the public reach a balance in their respective objectives within that system. Prerequisite: PSY 103

PSY 212 Psychology of Women (3) A study of the psychology of women from an historical and contemporary perspective. The main focus of the course is on the current revisions and expansion of research on sex roles (sex differences and similarities). Such topics as, for example, sex-role stereotypes, the issue of fear of success in women (and men), and androgyny as an alternative to masculinity or femininity are considered in light of the relevant literature. Prerequisite: PSY 103

PSY 214 Educational Psychology (3) An investigation into the ways in which psychological knowledge can be applied to the processes of bringing about changes in behavior, i.e., teaching, and learning. The educational implications of psychological theory and research will be applied to such areas as: the processes involved in learning, remembering, thinking, solving problems, motivation, and creativity. In considering these areas the focus will be on understanding learning, the differentiation among learners and learning environments, so that appropriate strategies may be created to enable students to better define themselves as learners. Prerequisite: PSY 103

PSY 215 Mind and Body: Physiological Psychology (3) An introduction into the interrelationships between mind and body, exploring the physiological correlates of behavior as well as psychosomatic illness. Students will explore and critically evaluate the theories and research in physiological and their implications. Prerequisite: PSY 103

PSY 216 Psychology and Law: Forensic Psychology (3) An exploration of the issues and dilemmas created by the interaction between psychology and the law. Current psychological research and theory will be applied to evaluating the uses and abuses of the insanity defense; understanding, predicting, and regulating violent behavior; the role of the psychologist as expert witness in civil and criminal cases; the application of psychological research to jury selection, trial techniques and the evaluation of evidence. Prerequisite: PSY 103

PSY 217 Psychology of Men (3) A survey of the experience of being male from the biological, intrapsychic and social perspectives of psychology. The course content is meant both to acquaint the student with current thinking and understanding in the area and to help the student understand their life or the life of a significant male in a more complete and conscious way. Topics to be studied are: father-son relationships, mother-son relationships, fathering, relationships with men, relationships with women, husbanding, emotional expressiveness, aggression and war, gender differences, men's movement, feminism, work, solitude, sports and rites of passage. Prerequisite: PSY 103

PSY 218 Psychology of Disabilities (3) This course will address issues faced by individuals with physical disabilities, whether congenital, hereditary or traumatic in nature. Included is a discussion of the Americans with Disabilities Act, 1990, and its effects on the self-image of the disabled. The course will include definitions of disabilities, cultural attitudes about the disabled, and reactions of family members to the disabilities. Information about support services will also be given. Prerequisite: PSY 103

PSY 219 Positive Psychology (3) Positive Psychology explores the scientific study of ordinary human strengths and virtues. We will examine human behavior that is effective, valuable and contributes positively to human development. We will study how humans live lives of dignity and purpose and will include such topics as subjective well being, peak performance, wellness, interventions for enhanced well being, religion and spirituality, and work, community and well being. This course takes a holistic and general systems theory perspective. Prerequisite: PSY 103.
Public Safety

FOR MORE INFORMATION, CONTACT THE PUBLIC SAFETY TRAINING CENTER IN THE J. STANLEY COYNE HALL, ROOM E100,(315) 498-6046 OR WWW.PSTC.SUNYOC.C.EDU.

PSC 103 Principles of Law for Public Safety Officers (7) An introduction to the law as required of candidates. Topics include jurisdiction and responsibilities of law enforcement, criminal and civil adjudicatory process and court structure, constitutional law, penal law, criminal procedure law, juvenile law, civil liability, ancillary NYS statues and vehicle and traffic law. Open to PSC students only.

PSC 105 Public Safety Procedures (8) Public Safety Procedures teaches candidates the various topics, knowledge, actions and procedures required of a police officer. Topics include observation and patrol procedures, reacting to and dealing with bombs and bomb threats, the nature and control of civil disorder, domestic violence, crimes in progress, traffic enforcement procedures arrest processing and dealing with intoxication. Pre-requisite: Open to Public Safety Certificate students only. Co-requisite: PSC 105L

PSC 105L Public Safety Procedures - Proficiency (5) Students are instructed in the basic physical/psychomotor skills required of a police officer candidate. Students become certified as competent in the areas of arrest techniques, defensive tactics, the use of aerosol and impact devices, riot control and tactics associated with detecting fraudulent identification document. Prerequisite: Only sworn police officers may attend the basic course for police officers (phase 2). Correquisite: PSC 114L

PSC 111 Community Relations for Public Safety Officers (2) This course covers community relations issues and skills for the candidate. Topics include community relations, community resources, services to victims and witnesses, crime prevention, crimes against the elderly, ethical awareness issues, cultural diversity, bias related incidents, sexual harassment issues and contemporary issues with which the police are confronted. Prerequisite: Open to Public Safety Certificate students only.

PSC 114 Phase 2 - Basic Course for Police Officers (2) Course topics include the proper circumstances and uses of firearms; counter terrorism issues, actions and reactions techniques; as well as command and control issues for first responders; and tactics associated with detecting fraudulent identification document. Prerequisite: Only sworn police officers may attend the basic course for police officers (phase 2). Correquisite: PSC 114L

PSC 114L Phase 2 Laboratory - Basic Course for Police Officers (5) Students are instructed in and are certified as competent in the areas of firearms training, counter terrorism, DWI detection, standard field sobriety testing, and supervised field training review and orientation. Open to sworn police officers. Co-requisite: PSC 114

PSC 120 EMS Certified First Responder (3) An introduction to EMS systems. Topics include: patient assessment, airway management, shock/hemorrhage control, trauma orientation, medical emergencies/OB emergencies and cardiology overview/defibrillation/CPR skills. Credit for this course may not be applied to any degree or certificate requirements. All EMS courses are offered in conjunction with the Onondaga County EMS Bureau. Contact the EMS Bureau for registration information.

Reading and Study Skills

FOR MORE INFORMATION, CONTACT THE ENGLISH DEPARTMENT IN MAWHINNÉY HALL, ROOM A219, (315) 498-2313.

RDG 087 Intermediate Reading Skills (3eq) Designed to meet the needs of students who wish to strengthen their reading and study skills. Emphasis will be placed on vocabulary building; structural analysis; spelling improvement; such comprehension skills as paraphrasing and summarizing; and improving the study skills of time management, organizational techniques and listening. Prerequisite: RDG 079 or on the basis of Placement Test Score Co-requisite: RDG 099

RDG 087L Intermediate Reading Skills - Lab (1eq) RDG 093 Reading Preparation for College (3eq) Designed to meet the needs of students who wish to strengthen their reading and study skills to the level necessary to handle the demands of college level work. Emphasis will be placed on such comprehension skills as organizational patterns, outlining, overview outlining in texts, marketing texts and summarizing, study skills such as listening and note taking, time management and library use; and vocabulary building, including dealing with technical terms in content area courses. Prerequisite: RDG 087 or Placement Test

RDG 093L Reading Preparation for College - Lab (1eq)

RDG 130 Reading & Study Skills (1eq) Designed to improve basic skills necessary to college success. Emphasis will be on effective methods of study and reading comprehension.
RDG 134 Listening and Notetaking Skills (1)  
Course stresses improvement in both listening and note-taking during lectures. Emphasis is on listening for main ideas and for supporting details. The Cornell Method of note-taking is stressed and students are encouraged to apply the method to actual lecture courses. Skills analysis will provide direction for improvement.

RDG 136 Vocabulary Building (2)  
Designed to provide the student with several methods for dealing with unfamiliar words. Meaning in context, structural analysis, history of language, dictionary and thesaurus skills will be studied. Students will work to improve their choice of words in writing and to strengthen their recognition vocabulary when reading. Prerequisite: Placement Test/RDG 093

RDG 140 Vocabulary and Learning Strategies for Health Sciences (3)  
Designed specifically for health science majors for the purpose of developing learning strategies and vocabulary in the science content areas. The learning strategies component will focus on improving note-taking in science classes, reading science textbooks, active strategies for integrating class materials for test preparation, and test-taking strategies for lecture and lab exams. The vocabulary component will focus on developing knowledge of Greek and Latin roots and affixes, as well as building science knowledge and vocabulary from current health readings. Prerequisite: Placement Test/RDG 093

RDG 142 Reading and Learning Strategies (3)  
This course is designed to help students manage the demands of technology courses. Emphasis is on breaking down technological reading materials with focus on reading for information from technical manuals and documents. Understanding technical jargon and acronyms will also be addressed. Effective notetaking, active study strategies combined with higher level thinking skills to prepare for exams and efficient time management will also be incorporated as a means to improve student success in technical curricula. Special emphasis will be placed on problem based learning using collaborative teams.

RDG 153 College Learning Strategies (3)  
This course is designed to help students become more efficient learners through practice of higher level thinking skills. Emphasis is on taking complete, accurate notes; effective use of class notes in study; reading and marketing text assignments; strategies for taking essay and objective exams; studying beyond the literal level; and techniques for dealing with technical terms and unknown vocabulary.  
Prerequisite: Placement Test/RDG 093

RDG 154 Critical Reading (3)  
Emphasis is on critical reading and thinking skills, vocabulary development and reading flexibility. Students will analyze and evaluate material beyond the literal level. Critical thinking skills will also be applied to the mastery of content area course work. Prerequisite: RDG 153 or Permission of Instructor.

Recreation Leadership

FOR MORE INFORMATION, CONTACT THE HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT IN THE HEALTH AND PHYSICAL EDUCATION BLDG., ROOM H200, (315) 498-2280.

REC 101 Recreation and Leisure Studies: An Introduction (3)  
This course is an introduction to the philosophy, history, scope, and significance of the recreation and leisure field. An overview of the delivery of leisure services is explored with special consideration given to how such services impact the individual and society. Students will be exposed to a variety of career opportunities and professional affiliations associated with the Leisure Industry. An orientation to professional competencies in the field will also be addressed. Prerequisite: Recreation Leadership Majors or Permission of Instructor. Prerequisite or Co-requisite: ENG 103

REC 102 Recreation Skills I (3)  
This course provides students with opportunities to develop, lead, organize, and evaluate, recreational games and activities for elementary to middle school aged participants. Behavior management strategies are emphasized as they apply to the developmental stages of the population being served. Students are required to compose lesson plans with outcome objectives and develop safety plans based on risk assessment. On and off campus experiences in leadership are required. Prerequisite: Recreation Majors, Physical Education and Exercise Science majors or Permission of Instructor.

REC 103 Recreation Skills II (3)  
This course focuses on the development of skills necessary for the planning, programming and leading of social recreation activities for teens through adult life stages. Emphasis will be placed on the skills and progression of social games, board games, mental games, tournaments, and overall small and large event planning. Prerequisite: Recreation Majors or Permission of Instructor.

REC 104 Group Leadership in Recreation (3)  
The foundations of recreation leadership are discussed and the student is expected to develop a leadership philosophy. This course is designed to cover the dynamics of group interaction and the role the recreation leader plays in leading groups. Experiential activities will be used to demonstrate group dynamics and assist the student in analyzing recreation behaviors, participant motivations, and participant management. Prerequisite: Recreation Majors or Permission of Instructor.

REC 105 Recreational Aquatics (1)  
An aquatic overview: designed to acquaint the student with various forms of water activities in, on, and about the water. Includes American Red Cross basic water safety, adapted aquatics, water sports and games, scuba, and water exercises. Recreation majors or Permission of Instructor. Prerequisite: Proficiency Test in Swimming.

wwww.sunnyocc.edu 183
Respiratory Care

FOR MORE INFORMATION, CONTACT THE RESPIRATORY CARE DEPARTMENT IN FERRANTE HALL, ROOM F267, (315) 498-2458.

RET 101 Medical Physics I (1) Addresses the physical principles which apply to respiratory therapy equipment and procedures, including gas properties and laws, heat and humidity, and physical principles which apply to ventilation and external respiration. Prerequisite: RET matriculation or Permission of Department.

RET 102 Mechanics of Disease (2) Introductory pathophysiology, including medical terminology, general principles of disease, and overview of common diseases encountered in the hospitalized patient. Prerequisite: RET matriculation or Permission of Department.

RET 103 Respiratory Physiology (3) Basic function of the respiratory system, including thoracic, pulmonary, and cardiovascular anatomy, mechanisms of ventilation, pulmonary perfusion, gas exchange and transport, control of respiration, and introduction to acid/base interpretation. Prerequisite: RET matriculation or Permission of Instructor.

RET 105 Respiratory Care Practice I (2) Basic respiratory care procedures, including patient assessment, gas delivery, bronchial hygiene therapy, and respiratory pharmacology. Complements the clinical sequence. Prerequisite: RET Matriculation or Permission of Department.

RET 105L Respiratory Care Practice Lab (1) This course provides laboratory practice in basic respiratory care procedures, including patient assessment, oxygen and aerosol delivery, bronchial hygiene and isolation techniques. Two laboratory hours per week. Co-requisite: RET 105

RET 118 Clinical Internship I (3) Supervised clinical practice in basic patient care techniques in the hospital setting. Prerequisite/co-requisite: RET Matriculation or Permission of Department.

RET 125 Respiratory Care Practicum (1) Basic care of airway, ECG interpretation, arterial blood gas interpretation, chest radiograph interpretation and pulmonary function testing. Prerequisite: All RET courses numbered 118 and below.

RET 125L Respiratory Care Practice Lab (1) This laboratory course allows the student practice in various clinical techniques; airway care, arterial sampling, simple spirometry and assessment of pulmonary reserve. Prerequisite: all RET courses numbered 118 and below.

RET 126 Mechanical Ventilation I (2) Introduction to mechanical ventilation, emphasizing operation and application of common ventilators. Lecture. Prerequisite: All RET courses 118 and below.

RET 126L Mechanical Ventilation Laboratory (1) This course provides laboratory practice for setting up many different types of mechanical ventilators. Prerequisite: All RET courses numbered 118 and below. Co-requisite: RET 126

RET 128 Freshman Clinical II (4) Supervised laboratory and hospital practice in basic intensive care techniques, including ventilator management, airway care, arterial blood sampling, electrocardiography, phlebotomy and equipment maintenance. Prerequisite/co-requisite: All RET courses 126 and below.

RET 130 Respiratory Care of the Neonate (1) This course examines the gestational development and evaluation of the fetus, cardiopulmonary transition at birth, evaluation of the newborn, oxygen administration, mechanical ventilation, bronchial hygiene, airway care and cardiopulmonary resuscitation of the newborn. Prerequisite: RET 128 or Permission of Department.

RET 134 Respiratory Disease (3) Etiology, pathophysiology, clinical and laboratory presentation, and usual treatment of respiratory disorders in adults, children, and newborns. Prerequisite: RET 128 or Permission of Department.
RET 139 Freshman Clinical III (4) This clinical course gives the respiratory care student extensive experience working in the adult intensive care and pediatric units. Basic Respiratory care, ventilator monitoring, blood gas analysis and airway care. Advanced concepts in cardiopulmonary monitoring are covered. Prerequisite: RET 128

RET 142 Home Care of the Respiratory Patient (1) Addresses the care of both the pediatric and adult respiratory patient in the home including oxygen administration, apnea monitoring, sleep apnea therapy, adjunctive modalities, mechanical ventilation, psychosocial issues, discharge planning and pulmonary rehabilitation. Prerequisite: RET 128 or Permission of Department.

RET 144 Applied Physiology (1) This course covers the application of respiratory physiology to the clinical setting, inclusive of gas transport, gas exchange, tissue oxygenation, and ventilation/perfusion abnormalities. Basic arterial blood gas interpretation and clinical mathematical calculations are also included. Prerequisite: RET 103, Permission of Instructor.

RET 145 Respiratory Care Seminar I (1) Designed to provide a dynamic forum for lecture presentation and discussion of current topics of special interest to the future Respiratory Care Practitioner. Topics will be selected from areas of interest that are not included in more traditional core courses. CRT (NBRC) exam matrix will be reviewed in detail. Prerequisite: RET matriculation or Permission of Department.

RET 190 CO: Respiratory Care (3) This course is designed to provide work experience directly related to the student's intended field of study and offers the student opportunity to view the Respiratory Care profession through actual work experience in Respiratory Care Department.

RET 205 Cardiovascular Physiology and Disease (3) Anatomy and function of the cardiovascular system, cardiovascular disease, assessment and diagnostic techniques, and care of the patient with cardiovascular disorders. Prerequisite: All courses RET 139 and below or Permission of Instructor.

RET 206 Acid-Base Physiology (3) Regulation of acid-base balance in the body, with emphasis on the interpretation of acid-base disorders, fluid and electrolyte balance, and their inter-relationship. Prerequisite: RET 103 or Permission of Department.

RET 207 Diagnostic Techniques (3) Theory, significance, and methodology of various diagnostic studies used in the assessment of pulmonary function. Techniques discussed include basic spirometry, flow/volume tests, lung volume determination, diffusion capacity, tests of small airways disease, nutritional assessment and sleep disorders. Prerequisite: All 100 level RET courses or Permission of Department.

RET 211 Respiratory Care Seminar II (1) This course is designed to assist the student in developing techniques to diagnose and treat patients with cardiopulmonary disease utilizing instructor guided review of the WRRT (NBRC). Students will be required to complete a self assessment WRRT exam. Other topics (ACLS, smoking cessation) will be covered as time permits utilizing computer simulations. Prerequisite/Co-requisite: RET 213.

RET 213 Sophomore Clinical Internship I (3) This clinical course gives the respiratory-care student clinical experience in caring for neonatal patients and adult patients with chronic respiratory disease. Includes observation rotations in sleep disorders and pulmonary rehabilitation. Prerequisite/Co-requisite: RET 205, 206 and all 100 level RET courses.

RET 214 Sophomore Clinical Internship II (3) Clinical application of hemodynamic and other cardiopulmonary monitoring, practice in the methodology of pulmonary function testing, practice in the pulmonary system, cardiovascular disease, assessment and care of the patient with cardiovascular disease. Includes observation rotations in sleep disorders and pulmonary rehabilitation. Prerequisite/Co-requisite: RET 205 and 206.

Science—Physical Science

SCI 100 Meteorology (3) A basic course in descriptive meteorology with application of basic principles of weather phenomena. Includes climate and major weather patterns of the earth, the general circulation of the atmosphere, the basic physical laws of weather science, weather forecasting, and uses of weather. Satisfies the science elective requirement of the Math-Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week.

SCI 100L Meteorology Lab (1) Basic principles of weather and the dynamic characteristics of the atmosphere will be investigated through the study of instruments and investigation of exercises in the laboratory. Practical weather forecasting will be examined and field trips to local stations will be expected. Intended for those who wish to deepen their understanding of meteorology and/or who have a laboratory science requirement to satisfy. One three-hour session per week. Pre-requisite: MAT 079 or higher Prerequisite/Co-requisite: SCI 100.

SCI 102 Physical Science II (4) The second semester of a physical science course for non-science majors. The approach is qualitative-similar to SCI 101. Topics covered are projectile and satellite motion, atomic nature of matter, states of matter, heat transfer and changes of state, wave motion and sound, simple electrical circuits, magnetism, light and atomic physics. Prerequisite: SCI 101.
SC 103 Introductory Astronomy (3) The Universe: the solar system, stars, galaxies, and cosmology are examined in the light of the continuing discoveries of modern astronomy in the space age. Satisfies the science elective requirement of the Math-Science curriculum and also satisfies the science requirement of those curricula which require science. Three class hours or equivalent per week.

SCI 103L Astronomy Lab (1) Laboratory exercises emphasizing practical astronomy. Intended for those who wish to deepen their understanding of astronomy and/or who have a laboratory science requirement to satisfy. One three-hour session per week. Prerequisite: MAT 079 or higher Prerequisite/Co-requisite: SCI 103

SCI 111 Introduction to Physics and Chemistry (4) This course is an introductory survey course in physics and chemistry for non-science majors. Topics covered include: scientific method, motion, energy, momentum, heat, light, electricity, sound, atomic structure, the periodic table, chemical compounds, chemical bonds, chemical reactions, properties of water, acids, bases, and salts. Three class hours and two laboratory hours. Not open to Math/Science majors. Prerequisite: Elementary Algebra

SCI 111L Introduction to Physics and Chemistry Lab (0)

SCI 112 Introduction to Biology-Geology This is an introductory course in geology and biology for students with only a high school background in these two areas, and who are not intending to pursue a science curriculum. This course is designed for education majors with an emphasis in elementary education. Topics to be covered include: the scientific method, basic chemistry of geology and biology, the rock cycle and basic elements of rock types, biochemical cycles, hydrologic cycle, aspects of evolution, aspects of historical geology, and a survey of basic aspects of life. Course is restricted to Childhood Education and Liberal Arts & Science AA, Adolescent Education majors.

Sociology

FOR MORE INFORMATION, CONTACT THE SOCIAL SCIENCE DEPARTMENT IN MAWHINNEY HALL, ROOM A385, (315) 498-2301.

SOC 103 Introductory Sociology (3) This course is an introduction to the broad range of topics encompassed in the “science of society”. Students will be exposed to key sociological theories, as well as major sociological concepts such as culture, social structure, socialization, deviance, social institutions, and social inequalities such as class, race/ethnicity, and gender. Examples will be drawn from various cultures within the United States and will also be drawn from other contemporary societies. Prerequisite: None.

SOC 183 Popular Culture (3) This course is an analysis of popular culture. It will examine the role of popular culture in society. It will further examine how the nature of popular culture is shaped by mass media organizations and how popular culture, in turn, shapes the mass media, our perceptions of ourselves, and society. The course will explore various mediums of popular culture: print media, radio, television, films, advertising, and/or popular music. The student will use critical analysis to explore these mediums. No Prerequisite

SOC 203 Sociology of Sex Roles (3) A Sociological analysis of male and female sex roles in contemporary American society. The development of sex roles within the individual and within the society will be explored. This course discusses the impact sex roles have on the lives of men and women in the areas of socialization, education, work, marriage, families, and human relationships. Sexual prejudices and sexual discrimination will be explored, including their impact on both the individuals and society. The ramifications of changes in sex-role definitions for both the individual and society will also be discussed. Prerequisite: SOC 103 or Permission of Instructor

SOC 204 Social Problems (3) A study of selected social problems which could include poverty, race relations, violence, drug addiction, delinquency, crime, urbanization, or others. Emphasis on understanding the basic sociological concepts and theories as applied to modern social problems. Prerequisite: SOC 103 or Permission of Instructor

SOC 207 Sociology of Deviance (3) Just as “beauty is in the eye of the beholder,” so deviance depends on the viewpoint of the observer. This course is designed to give the student a general perspective on the “other side” of human behavior by providing examples of particular theories about deviant behavior and examples of research on deviance. Its emphasis is on certain patterns of deviant behavior such as juvenile delinquency, crime, homosexuality, prostitution, suicide, alcoholism, drug addiction and “mental illness.” Prerequisite: SOC 103 or Permission of Instructor
SOC 209 Death and Dying (3) An interdisciplinary investigation of death and dying, emphasizing the sociological perspective. Dying and death are studied as social processes, focusing on the effect these processes have on the lives of individuals and on society. The course will investigate social roles and occupations related to death and dying, death rituals, how concepts of death affect the lives of individuals and of society, and the problem areas related to death and dying. The particular emphasis will be on death as a social phenomenon, shaping and being shaped by society.

SOC 211 Race and Ethnicity (3) The course provides macro-sociological and microsociological theories for understanding the social contexts of racial/ethnic relations in contemporary societies. The course will also examine prejudice, discrimination, ethnocentrism, racism, segregation, ethnoviolence, as well as the social factors that influence the participation of racial/ethnic minority groups in American institutions. While the course will focus on the American society, it will not preclude comparison with other contemporary multi-racial/ethnic societies.

SOC 213 International Development and Change (3) Recent sociological analysis has examined the world as a global system characterized by its own political and economic structure, and a system of stratification different from the nation states that divide the globe. This course seeks to introduce students to the nature of this system and discusses several issues that affect it. Also examined are the belief systems that have traditionally shaped our ideas about international relationships and foreign peoples, as well as historical events that created global interdependence and inequality. Topics covered include values and ideologies shaping American perceptions of the global system, historical background of the global system, global stratification and inequalities, and value choices for building a new global system.

SOC 214 Contemporary Global Issues (3) An interdisciplinary course which explores contemporary global issues. It surveys themes related to social, political, economic, and cultural processes, global linkages/interdependencies, and power relations that connect individuals, communities, groups, states, and regions across the globe. Examines the values and visions emerging from regional perspectives that lead to conflict and/or cooperation in the international system. It contrasts the increasingly complex problems faced by different regions with the growing integration of the global economy. Open to all interested students. Required course for all students pursuing the International Studies Concentration.

SOC 215 Sports in Society (3) The course will explore the structural and cultural relationship of sport to society, paying particular attention to the issues of race, ethnicity, gender, social class, age, economics, and politics as they relate to sport. How sport parallels other social institutions such as the media, family, and schools (particularly college athletics) will be explored. An all-encompassing objective will be to examine how sport is a microcosm of society. By looking at sport we can also look at and learn about society.

Surgical Technology

FOR MORE INFORMATION, CONTACT THE SURGICAL TECHNOLOGY DEPARTMENT IN FERRANTE HALL, ROOM F269, (315) 498-2458.

SGT 101 Introduction to Surgical Technology (3) A course to introduce the student to the field of surgical technology. Includes the study of medical legal aspects, ethical conduct, hospital policies, and preparations for the care of the surgical patient. Includes clinical orientation sessions in the operating room setting at various hospitals in the community. Prerequisite: SGT matriculation.

SGT 102 Surgical Pharmacology (1) Studies dosage equivalents and terminology, proper procedures for handling intra-operative drugs, principles of drug usage, and the principles and effects of anesthesia administration. Prerequisites: Acceptance into the Surgical Technology Program. Co-requisites: SGT 101, 103, 103L.

SGT 103 Principles of Surgical Technology (3) An introduction to surgical services and aseptic techniques. Topics will include: instrumentation, suture types and technique, scrubbing and preparing the sterile field, types of instruments, uses of other operating room equipment. Prerequisite: Surgical Technology major or Permission of Instructor.

SGT 103L. Principles of Surgical Technology Lab (2) A lab to complement SGT 103, Principles of Surgical Technology. The student will be introduced to the techniques and equipment that are an integral part of his training as a Surgical Technologist. Prerequisite: SGT matriculation or Permission of Instructor. Co-requisite: SGT 103

SGT 105 Clinical Practice I (5) Clinical application of basic surgical technology procedures. To include the preparation of equipment and the practice of passing instruments and sutures during actual surgical procedures. Prerequisite: SGT 101, 103, 103L, or Permission of Instructor.

SGT 111 Surgical Procedures (5) A course detailing surgical procedures and the part the surgical technologist plays. Common surgical procedures are explained for each major body system. The student learns how to assist the physician during each specific procedure. Prerequisite: Surgical Technology major or Permission of Instructor.

SGT 115 Clinical Practice II (6) Continuation of SGT 105. More advanced application of clinical procedures in the operating room. Prerequisite: SGT 105 or Permission of Instructor.
Telecommunications

FOR MORE INFORMATION, CONTACT THE ELECTRICAL ENGINEERING TECHNOLOGY DEPARTMENT IN WHITNEY APPLIED TECHNOLOGY CENTER, ROOM W131, (315) 498-2451.

TEL 241 Telecommunications 1 - Voice Communications (4) This is the first course in a four course sequence. Topics include the techniques, principles and terminology of Voice Communications, public and private telecommunications networks; telecommunications equipment; switching, multiplexing, modulation and transmission technology. Four hours of integrated lecture/laboratory environment. Co-requisite: ELT 141 or ELT 131 or Permission of Instructor.

TEL 242 Telecommunication 2- Data Communication (4) This is the second course in a four-course sequence. Topics include the techniques, principles and terminology of Data Communications, public and private digital networks; data communications equipment; switching, multiplexing, modulation and transmission technology. Four hours of integrated lecture/laboratory environment. Co-requisite: CMT 161 or CMT 171 or Permission of Instructor.

TEL 243 Telecommunication 3 - LANS (4) This is the third course in a four-course sequence. Topics include technology and terminology of Local Area Networks (LANs) and Wide Area Networks (WANs), topologies; transmission media; network interfaces; and access methods. Five hours of integrated lecture/laboratory environment. Prerequisite: TEL 242 or Permission of Instructor. Co-requisite: CMT 180 or CMT 201 or Permission of Instructor.

TEL 244 Telecommunications 4 - Advanced Topics (4) This is the final course in a series of four telecommunications courses. Topics addressed will focus on state-of-the-art issues, such as mobile communication technologies, Broadband Networks, and Advanced Intelligent Network. Five hours of integrated lecture/laboratory environment. Prerequisite: TEL 243 or Permission of Instructor.

Writing Skills Tutorial

WSC 099 Writing Skills Tutorial (1 eq) A developmental, compensatory program in writing, employing one-on-one tutoring and emphasizing tasks, feedback, mastery, and transfer. Focus includes both prerequisite skills and more complex skills taught formally in other English courses. Students may enroll only through the Writing Skills Center. Equivalent credit is determined by the professional staff, subject to the approval of the Writing Skills Center coordinator. Students may work progressively to build a variety of skills over several semesters, but are limited to a total of 6 equivalent credits during the course of their studies at Onondaga Community College.