HOW TO READ A COURSE DESCRIPTION

1 **Prefix**
Courses are listed alphabetically by their prefix. Prefixes appear in capital letters and range from two to four letters long. They indicate the course’s subject matter. For example, ACC is the prefix for courses in the accounting subject area.

2 **Course Number**
A course number is assigned to identify the specific course and whether it is a first- or second-year course. Courses numbered in the 100s are considered first-year. Those numbered in the 200s are second-year courses. For example, ACC 101 is a first-year accounting course, and ACC 201 is a second-year accounting course.

3 **Title**

4 **Lecture, Lab, or Contact Hours**
The numbers in parentheses signify the number of lecture hours, lab hours, or other contact hours per week if the course is offered for 15 weeks. The first number is the lecture hours per week, followed by the lab hours. Occasionally these are followed by a third number designating additional contact hours of recitation or seminar.

5 **Credit Hours**
The number of credits you will earn for this course.

6 **Description**

7 **Semester Offered**
F=Fall, S=Spring, B=Both or either Spring or Fall, JP=JanPlan (January Intersession), SU=Summer
The following pages present descriptions of courses offered at Finger Lakes Community College. Students are advised to consult the official list of course offerings issued prior to the start of each semester before making up their schedules.

All courses offered at Finger Lakes Community College are equal to, in content and quality, freshman and sophomore courses offered at most four-year colleges and universities. Courses offered at Finger Lakes Community College are identified under the following system.

**OFFERING TIMES:** F-Fall, S-Spring, B-Both or either Spring and Fall semesters, JP-JanPlan (January Intersession), SU-Summer

**DUAL-LISTED COURSES**

The following courses are offered under two different course prefixes and are called “dual-listed.” Students opt for one of the two prefixes at the time of registration, depending on their curriculum requirements.

| BIO/HRT 151 | Plant Materials |
| BIO 281/CHM261 | Biotechnology Module 1- Spectrophotometric Techniques |
| BIO 283/CHM 263 | Biotechnology Module 3- Electrophoresis |
| BIO 284/CHM 264 | Biotechnology Module 4- Genetic Research Techniques |
| BIO 221/CON 202 | Principles of Terrestrial and Aquatic Ecology |
| BIO 225/CON 211 | Ornithology |
| BIO 245/CON 210 | Field Natural History |
| BIO 250/CON 205 | Field Botany |
| BIO/CON 246 | Limnology |
| BUS/COM 122 | Television Advertising |
| BUS/CSC 212 | MS Excel for Business Applications |
| BUS/CSC 247 | Electronic Commerce |
| BUS/OFT 200 | Office Management |
| BUS/PSY 124 | Organizational Behavior |
| CON/CJC 231 | Environmental Conservation- Outdoor Recreation Law I |

| CON/CJC 232 | Environmental Conservation- Outdoor Recreation Law II |
| CON/ENV 217 | Environmental Planning and Impact Analysis |
| CON/PHL 110 | Sustainable Earth: Spiritual and Scientific Consilience |
| CON 255/WFS 130 | Wildland Fire Suppression (S-130/S-190) |
| CON/WFS 256 | Fire Ecology |
| ENG 213/THE 210 | Introduction to Dramatic Literature |
| HIS/HUM 100 | Shaping of Western Society I |
| HIS/HUM 101 | Shaping of Western Society II |
| MAS 225/NUR 220 | Alternative Therapies |
| PE/THE 181 | Mime |
| PSY/SCI 215 | Biological Psychology |
| SCI 220/CON 220 | Glacial Environments of the Finger Lakes |
ACCOUNTING

ACC 101 Principles of Financial Accounting (4-0) 4 hrs.
The emphasis of this introductory course is to develop an understanding of accounting information systems for the business entity and for the individual. The basic concepts, procedures, business documents, and financial statements are included as they relate to the accounting cycle. Analysis of business decisions is stressed for the internal and external aspects of the business. B

ACC 102 Principles of Managerial Accounting (4-0) 4 hrs.
This course is an introductory course in managerial accounting. Fundamentals of cost accounting concepts, financial statement analysis, profitability analysis, budgeting, and decision making issues will be discussed. Prerequisite: ACC 101. B

ACC 103 Survey of Accounting (4-0) 4 hrs.
Survey of Accounting is designed for individuals who will be using accounting data (in various forms) to make decisions, presentations, and express opinions about an organization’s or an individual’s financial position. Students will learn the accounting cycle as part of the communication process and develop computer applications to more effectively evaluate and present information. B

ACC 201 Intermediate Accounting I (3-0-1) 4 hrs.
A continuation of ACC 102, stressing a broader application of accounting principles. Theory is emphasized as it relates to valuation and changes in the financial position and operations of the business entity. Problems and cases are studied as they relate to generally accepted accounting principles. Prerequisite: ACC 102. F

ACC 202 Intermediate Accounting II (3-0-1) 4 hrs.
A continuation of ACC 201, stressing a broader application of principles in previous accounting courses. Prerequisite: ACC 201. S

ACC 205 Cost Accounting (3-0) 3 hrs.
A systematic study of the fundamental procedures applied in the determination of production costs and inventory balances. Analysis of cost behavior and decision-making for planning and control of the business are also covered. Prerequisites: ACC 101, ACC 102. B

ACC 207 Income Tax Accounting (3-0) 3 hrs.
This course is designed to familiarize accounting students with aspects of income taxation of individuals and provide a foundation upon which they can act in either an advisory or functional capacity. Prerequisite: ACC 102, or permission of the instructor. B

ACC 210 Contemporary Accounting Applications (3-0) 3 hrs.
Provides an in-depth study of current accounting applications in the private sector, with emphasis on the more widely-used applications packages available to the modern accountant. Topics will include computerized accounting packages, accounting information systems, auditing and control, and the accountant’s role in the organization. Prerequisite: ACC 102 or permission of instructor. B

AGRONOMY

AGR 100 Soil Science (3-0) 3 hrs.
A study of origin of soils, soil formation, taxonomy, physical and chemical properties, bacteria and fungi, organic matter, water and fertility. B

AMERICAN SIGN LANGUAGE

ASL 101 American Sign Language I (3-0) 3 hrs.
The course is the first in a series of courses designed to develop the skills and knowledge needed to communicate in American Sign Language. This course introduces basic sign language vocabulary and finger spelling. In addition, students will be introduced to the Deaf culture and education. Other relevant topics will be addressed. Prerequisite/co-requisite: ENG 101. F

ASL 102 American Sign Language II (3-0) 3 hrs.
The course is the second in a series of courses designed to develop the skills and knowledge needed to communicate in American Sign Language. This course continues to develop Sign language vocabulary and sentence construction as well as finger spelling. In addition, students will continue to refine their knowledge of the Deaf community. Other relevant topics will be addressed. Prerequisite: ASL-101 or permission of instructor. S

ANTHROPOLOGY

ANT 110 Human Prehistory (3-0) 3 hrs.
An introduction to early human biological and cultural variability emphasizing evolution, cultural adaptation and cultural change within different environments using the subfields of physical anthropology and archaeology. B

ANT 111 Cultural Anthropology (3-0) 3 hrs.
An introduction to ethnology, that is the cross-cultural study of the diverse adaptive patterns humans use to satisfy the requirements of life in specific natural and sociocultural environments. Data will be drawn from contemporary nonindustrial and urban industrial societies to illustrate how and why cultural variations exist in today's ever-shrinking world. B

ANT 200 Comparative Cultures (3-0) 3 hrs.
A comparative approach to the content and processes of culture as adaptation. This course will examine and describe the ways selected pre-literate and complex societies have used culture to adapt to their environments. Case studies drawn from American, Asian, African, and European societies will be the basis for engaging in cross-cultural studies. B
ART

ART 100 Art History I (3-0) 3 hrs.
A study of the creative process with development of an appreciation and understanding of the history and methods of artistic expression from prehistoric art to the middle ages. May be taken to fulfill either a humanities or social science elective. F

ART 101 Art History II (3-0) 3 hrs.
A continuation of ART 100. Study of European, American and Contemporary art. May be taken to fulfill either a humanities or social science elective. S

ART 102 Foundation Drawing I (4-0) 3 hrs.
The foundation for all studio courses. The fundamentals of freehand drawing techniques are discussed and worked with in depth. The study of natural forms and three-dimensional still-life objects will be developed based on the study of line, perspective, light and shade, form, and proportion. F

ART 103 Foundation Drawing II (4-0) 3 hrs.
A continuation of ART 102. Study of contour drawing including indication of surface texture, form, line, value, and composition. Students work in various media. Prerequisite: ART 102 or permission of instructor. S

ART 104 Design I (4-0) 3 hrs.
A broad foundation in the principles and elements of design are applied to two-dimensional work. Various media and their application are employed. F

ART 105 Design II (4-0) 3 hrs.
A continuation of ART 104. Emphasis is placed on color theory and its application to two-dimensional design. Prerequisite: ART 104 or permission of instructor. S

ART 106 Ceramics I (4-0) 3 hrs.
A study of the basic techniques of ceramic materials, slab building, coil, wheel throwing, firing and glazing, and ceramics as an art form, with emphasis on design and function. B

ART 107 Natural Forms (3-0) 3 hrs.
An introduction to two- and three-dimensional representation of natural forms (i.e. plant and animal), using basic drawing and sculpture techniques. S

ART 115 Computer Imaging (4-0) 3 hrs.
An introduction to techniques of creating computer-generated images for commercial and fine art. Hands-on experience with drawing and design packages for the non-programmer. F

ART 116 Computer Publishing (4-0) 3 hrs.
An introduction to the use of computers in creating publications. Topics include the Publishing Industry, Typographical Design, Grids, Layout and Graphic Techniques. Prerequisite: ART 115 or permission of instructor. S

ART 200 Figure Drawing I (4-0) 3 hrs.
Representation and dynamic drawing of the human figure based on observation of organic relationship, gestures, action, motion, and rhythm. Prerequisite: ART 103 or permission of instructor. F

ART 201 Figure Drawing II (4-0) 3 hrs.
A continuation of ART 200. Drawing form figures to develop proportion, structure, gesture, movement, and composition, in various media. Prerequisite: ART 200 or permission of instructor. S

ART 202 Painting I (4-0) 3 hrs.
Introduction to painting, using still-life and portraiture as the basis for the study of light, color, and form. The basic material is oil; however, acrylic paint and other media will be used. Prerequisites: ART 102, ART 103, or permission of instructor. F

ART 204 Painting II (4-0) 3 hrs.
A continuation of ART 202, with more advanced problems for the experienced students. Prerequisite: ART 202 or permission of instructor. S

ART 205 Modeling and Sculpture I (4-0) 3 hrs.
Working from life, developing three-dimensional understanding of the figure and sculpture techniques. Casting, working with composition, and portraiture. F

ART 206 Modeling and Sculpture II (4-0) 3 hrs.
A continuation of ART 205, with an emphasis on individual student projects. Students will further an understanding of three-dimensional form by working with different processes and media such as: woodworking, welding, carving, and casting in bronze. Prerequisite: ART 205 or permission of instructor. S

ART 207 Photography I (4-0) 3 hrs.
An introduction to black & white photography covering basic techniques of camera operation, artistic picture and composition, film processing and printing. Students should have an adjustable camera. F

ART 208 Photography II (4-0) 3 hrs.
Advanced work in darkroom procedure, including control of negative and print quality; the straight print versus the manipulated print; documentary, portraiture, abstractive, light studies, and a variety of experiments in viewing and presentations. Prerequisite: ART 207 or permission of instructor. S

ART 209 Printmaking I (4-0) 3 hrs.
An introductory survey of the processes used in the production of multiple, fine art prints. Basic techniques of woodcut, dry-point, and monotypes will be explored. Prerequisite: ART 102 or ART 200 or permission of instructor. F

ART 210 Printmaking II (4-0) 3 hrs.
A continuation of ART 209. Emphasis will be on further development of intaglio techniques including line etching, aquatint, and soft-ground impressions. Prerequisite: ART 209 or permission of instructor. S

ART 211 Digital Photography (4-0) 3 hrs.
This course offers advanced photographic instruction
for those with basic camera and darkroom experience. It introduces the skills related to the capture, editing, and printing of digital images. Emphasis will be on artistic expression and style through the use of digital technology. Prerequisite: ART 207 or permission of instructor. S

ART 212 Ceramics II (4-0) 3 hrs.
A continuation of ART 106. The course will introduce the student to more challenging techniques and processes, expanding the scope and dimension of previously learned material. Prerequisite: ART 106 or permission of instructor. S

ART 213 History of American Art (3-0) 3 hrs.
A study of the history of American painting, sculpture, architecture, decorative arts, and photography from the early colonial period to the present day. S

ART 215 Graphic Design I (2-2) 3 hrs.
The student will have an intensive introduction to the technical and aesthetic aspects of communication relative to graphic design. This will include typography, design application, communication language, comprehensive layout, technical considerations, research, and development of ideas. The subject matter will be presented based on current industry standards. Prerequisite: ART 105 or permission of instructor. F

ART 216 Graphic Design II (2-2) 3 hrs.
The student will be given practical graphic problems to solve using established design principles as well as current pre-press production techniques. The student will be developing an expressive awareness from a graphic viewpoint. He/she will learn the process and skill of presentation, and in so doing, build a personal graphics portfolio for entry into the job market or the next level of education. Prerequisite: ART 215. S

ART 220 Graphic Illustration (3-0) 3 hrs.
This course will focus on the process of illustration through the exploration of professional working methods leading to the production of a portfolio representative of advertising, corporate, editorial, and publishing themes. Prerequisite: ART 103. S

ART 221 Advanced Drawing (4-0) 3 hrs.
This course will emphasize the development of the student's visual vocabulary and more personal approaches to media, technique, and thematic content. This course will be offered only in the fall semester. Prerequisite: ART 103 or permission of instructor. F

ART 222 Design for the Web (4-0) 3 hrs.
This course introduces the skills related to the design, production, and maintenance of web based graphics. Emphasis will be on the visual communicative aspects of site design with integration of multimedia components. Prerequisites: ART 115 and ART 215 or permission of instructor. S

ART 223 Women in Art (3-0) 3 hrs.
A survey of the achievements of women painters, sculptors, architects, designers, photographers, and craftspersons from earliest times to the present. In addition, woman as image in the visual arts will be examined as it relates to her role in society. Prerequisites (for art students): ART 100 and ART 101. S

AVIATION

AVT 100 General Aeronautics (3-0) 3 hrs.
An introductory course on basic aeronautical knowledge for private pilots including FAA requirements in basic ground school regulations, meteorology, mapping, navigation, and safety practices and procedures for aircraft and engines. SU/F

AVT 120 Private Pilot (3-0) 3 hrs.
An introductory course of flight instruction and experience, involving the operation, regulations, and procedures to master solo flight and eligibility for private pilot licensure. SU/F

BIOLOGY

BIO 101 Current Topics in Social Biology (3-0) 3 hrs.
A seminar approach to the discussion of current biologically oriented problems that affect mankind. The course emphasizes the ecology of man as an organism and his relationship to the natural environment. (Satisfies science requirements in Office Technology Programs only.) B

BIO 111 Biology of Man: The Organism (3-2) 4 hrs.
A principles course with a laboratory experience designed for non-science majors. This course approaches basic biological principles with a human orientation. Chemistry of life, cellular principles, and body systems are the major topics. Three hours of lecture and two laboratory hours weekly. B

BIO 112 Biology of Man: Genetics, Evolution and Environment (3-2) 4 hrs.
A principles course with a laboratory experience designed for non-science majors. This course approaches basic biological principles with a human orientation. Genetics, reproduction, development, evolution, and environmental issues are the major topics. Three hours of lecture and two laboratory hours weekly. B

BIO 121 General Biology I (3-2) 4 hrs.
Basic principles of biology, photosynthesis, and respiration, levels of cellular complexity, genetics and evolution. Prerequisite: High School Biology highly recommended. B

BIO 122 General Biology II (3-2) 4 hrs.
A study of evolution, survey of the kingdoms (monera, fungi, protista, plant, animal) and major phyla of each with emphasis on representative organisms, their anatomy, physiology, and life history. Prerequisite: High School Biology or BIO 121 recommended. B

BIO 151 Plant Materials (3-0) 3 hrs.
This course exposes students to the identification, selection, adaptation, and utilization of common ornamental and native plants in New York State. Landscape value and wildlife usage of plants will be discussed where appropriate. The student will gain identification proficiency in association with a knowledge of plant pattern and environmental planning. A field project of individualized interest will be included. Field trips to area arboreta are included. (Also listed as HRT 151) Corequisite: BIO 121 or permission of instructor. F
BIO 165 Kinesiology and Myology I (3-3) 4 hrs.
This is a lecture and laboratory course designed to acquaint students with a detailed study of the major muscles of the lower torso and extremities of the body and their function. Focus will be placed on the origin, insertion, action, innervation, and range of motion of specific muscles. This course includes the study of the name, shape, and location of bones and tendons, as well as their related joints. Prerequisite: BIO 171 and Corequisite: BIO 172.

BIO 171 Human Anatomy & Physiology I (3-2-1) 4 hrs.
Structure and function of the human body dealt with at the following levels of organization: chemical/biochemical, cell/tissue, organ/system. Organ systems include integumentary, skeletal, muscular, digestive, nervous and special senses. Laboratory involves analysis done at both microscopic and macroscopic levels, the latter including disarticulated bones, muscle models, digestive enzyme biochemistry, and selected dissections. This course consists of a three-hour lecture, a two-hour lab, and a one-hour seminar.

BIO 172 Human Anatomy & Physiology II (3-2-1) 4 hrs.
A continuation of BIO 171 to include the circulatory, respiratory, excretory, and endocrine systems, along with genetics and fluid/electrolyte/pH balance. Laboratory will constitute a continuation of BIO 171 lab studies: microscopic and macroscopic levels of analysis, the latter including electronic apparatus, mammalian dissection, and elementary physiological experiments. This course consists of a three-hour lecture, a two-hour lab, and a one-hour seminar. Prerequisites: BIO 171 or BIO 111 or permission of instructor.

BIO 210 Winter Ecology (0-0-2) 2 hrs.
This is a five day residential course at Muller Field station. The course will be offered during Jan Plan. A combination of lecture and field work will be used to gain a proficiency in the over wintering adaptations of organisms in the northeast, specifically the Finger Lakes region. Adaptations of mammals will be emphasized. Lectures will focus on identification, natural history, behavior, physiology and ecology of mammals. Laboratory will include live-trapping, mark and recapture techniques to assess habitat selection of small mammals residing in the subnivean environment. Evaluation of students is based on 1) class participation, 2) group summary of trapping results, 3) oral critique of a recent scientific article on winter ecology, 4) maintenance of a field journal. Prerequisites: BIO 122.

BIO 221 Principles of Terrestrial and Aquatic Ecology (3-0) 3 hrs.
A study of climatic, edaphic, and biotic factors as they relate to species distribution and population dynamics in selected biomes of New York State and the world. Students develop deeper understanding of the ecological principles concerning the interaction between organisms and their environment. (Also listed as CON 202.) Writing Intensive. Prerequisites: BIO 121, 122, ENG 101, or permission of instructor.

BIO 222 Introduction to Cell Biology (3-0-1) 3 hrs.
This course is designed to provide students with an intense study of cell structure and function. A wide range of topics will be covered and will include: biochemistry, membrane structure and function, organelle structure and function, the cell cycle and cancer, necrosis and apoptosis, cell signaling, and the cellular basis of tissue structure. Prerequisite: BIO 121 or permission of instructor.

BIO 225 Ornithology (3-2) 4 hrs.
The study of birds with special emphasis on anatomy, physiology, life histories and identification of birds common to Western New York. Lecture and laboratory work supplemented by several field trips, including early morning bird observations. A Monday trip to Cornell’s Laboratory of Ornithology is required. A morning trip to a local birding area is also required. (Also listed as CON 211.) Prerequisite: BIO 121, 122 or permission of instructor.

BIO 230 Microbiology (3-3) 4 hrs.
The course is designed to give the student a broad understanding of microbiology covering areas of microbial structure and function, growth, metabolism, genetics, control of microorganisms, principles of immunology, diseases of man and selected aspects of applied microbiology. The laboratory will give the student an appreciation of the problems and methods involved with culturing and identification of microorganisms. Three lecture hours, one two-hour laboratory period, and one one-hour laboratory time to be assigned weekly. Prerequisite: BIO 121-122 or BIO 171-172.

BIO 235 Microtechniques (1-3) 2 hrs.
The theory and practice of histological and cytological techniques and specimen preparation of plant and animal material. Offered periodically.

BIO 240 Principles of Genetics (3-0) 3 hrs.
A course designed to introduce the student to the aspects of modern genetics. Topics will include: gene structure and function, Mendelian genetics, gene expression, recombinant DNA technology, and population genetics with attention given to human aspects and applications. Three lecture hours weekly. Prerequisite: BIO 112 or 121 or BIO 171-172.

BIO 241 Laboratory in Genetics (0-3) 1 hr.
A laboratory offering to compliment BIO 240. This course provides a variety of laboratory experiences, including classical, morphological, and molecular genetics. Corequisite or Prerequisite: BIO 240.

BIO 245 Field Natural History (3-0) 3 hrs.
This course is a series of extended field trips into a selection of local ecosystems such as gorges, bogs, streams and marshes. Students will analyze these ecosystems both as examples of each ecological situation and as areas managed in different ways by man. Natural History topics such as insects, aquatic life, migratory birds, glacial geology, and human interactions with the environment are studied in appropriate areas. (Also listed as CON 210.) Prerequisite: BIO 121, 122 or permission of instructor.

BIO 246 Limnology (3-2) 4 hrs.
An introduction to the scientific study of inland waters, Limnology concerns itself with all the factors that affect living populations within those waters. Through lecture and field experiences, the student will become familiar with physical and chemical processes
in water, especially those that have a direct effect on biological organisms. Standard methods and highly technical instrumentation will be used on board the College’s educational vessel. A survey of life forms and identification skills will be emphasized as well as aquatic community structure and interactions. (Also listed as CON 246.) F

BIO 250 Field Botany (3-0) 3 hrs.
Field identification, taxonomy, habitat preference, growth characteristics and management of trees, shrubs, and herbaceous plants are the major topics covered in this course. Emphasis is placed on local flora and its utilization by man and wildlife. Important ornamental trees, New York State rare plants, exotic plants that are management problems, and the ecology of the eastern deciduous forest biome are highlighted. Considerable class time will be spent outdoors on campus and at nearby areas. (Also listed as CON 205) Prerequisite or concurrently: BIO 121. B

BIO 251 Plant Structure and Function (3-3) 4 hrs.
An integrated approach to the study of plant anatomy and physiology, dealing with both the total plant and its constituent parts. Emphasis is on plant growth, development and regulatory mechanisms. The student will follow the growth of a plant from germination to maturity, examining its anatomical and physiological development. Three hours lecture, three hours laboratory. Prerequisite: BIO 121. B

BIO 255 Plant Micropropagation (2-3) 3 hrs.
The asexual in vitro propagation of plants from tissues and cells utilizing sterile technique. Theory and practical application are stressed. Upon approval of the instructor and advisor, this course may be used as a Horticulture elective. Prerequisite: BIO 251 or BIO 122. B

BIO 260 Plant Pathology (3-2) 4 hrs.
Investigation of the nature, cause, diagnoses of plant health problems. The interaction of the environment, the disease causing organism, and the plant will be considered in relation to environmentally sound control. Site development and corrective horticulture practices in relation to health building will be considered. Students will be trained to identify common plant diseases, including environmentally caused disorders. Field analysis, sampling and diagnostic techniques. Field Trips. Prerequisite: BIO 121, 251 or permission of instructor. B

BIO 265 Kinesiology and Myology II (3-3) 4 hrs.
This is a lecture and laboratory course designed to acquaint students with a detailed study of the major muscles of the upper torso and extremities of the body and their functions, including a brief review of the muscles of the lower extremity covered in Kinesiology and Myology I. Focus will be placed on the origin, insertion, action, innervation, and range of motion of specific muscles. This course includes the study of the name, shape, and location of bones and tendons, as well as their related joints. Prerequisite: BIO 165. F

BIO 280 Entomology (2-2) 3 hrs.
Investigation of insects' ecology, behavior, life histories, structure and function of economically and environmentally important insects. The relationship between these topics and biological chemical control will be discussed. Insect identification and sampling methods. Field Trip. B

BIO 281 Biotechnology Module 1- Spectrophotometric Techniques (1-2) 1 hr.
A laboratory module introducing the student to techniques for quantitative visible and ultra violet spectrophotometry. (Also listed as CHM 261.) B

BIO 282 Biotechnology Module 2- Bacteriological Methods (1-½) 1 hr.
A laboratory module introducing the student to techniques in reagent and media preparation, staining slide preparation, culturing and handling of microorganisms. Prerequisite: BIO 121. B

BIO 283 Biotechnology Module 3- Electrophoresis (1 ½ - ½) 2 hrs.
A laboratory module introducing the student to polyacrylamide and agarose gel electrophoresis. Seven weekly laboratory exercises (3 hours each). (Also listed as CHM 263.) Prerequisite: BIO 121 or permission of the instructor. B

BIO 284 Biotechnology Module 4-Genetic Research Techniques (1-2) 1 hr.
A laboratory module introducing the student to some of the modern techniques used in genetic research including: isolation and characterization of DNA and RNA, restriction digestion and other techniques. (Also listed as CHM 264.) Prerequisites: BIO 121, BIO 281, BIO 283. B

BIO 286 Cell and Tissue Culture Techniques (0.5-1) 1 hr.
A laboratory module introducing students to the basic techniques used in culturing tissues and cells. An emphasis will be placed on mammalian systems. Topics covered include sterile and aseptic technique, media preparation, cell count and viability cryopreservation, subculturering, and research applications using cell cultures. Prerequisite: BIO 222 or permission of instructor. S

BUSINESS

BUS 100 Introduction to Tourism (3-0) 3 hrs.
This course is designed to provide an overview of the tourism industry. The student will be exposed to the various components which comprise tourism. There will be opportunities for the student to observe the tourism industry through field experiences. This course provides the basis for further study in the hospitality programs. Students enrolled in this course, as an elective, will have the opportunity to explore another business-related field as a career option. B

BUS 120 Business Organization (3-0) 3 hrs.
Introduction to such business factors as ownership, careers, dynamics of business, organizational structures, production, marketing, finance government regulations, business ethics, and current topics. B

BUS 122 Television Advertising (3-0) 3 hrs.
A workshop planning, writing, and producing television commercials. Students will receive experience
in writing, production techniques (recording and video taping commercials), and evaluating advertising. (Also listed as COM 122.) B

BUS 123 Business Communications (3-0) 3 hrs.
A comprehensive introduction to the theory and practice of basic business communication skills. Emphasis is placed on the process of communication and on typical forms of business communication such as business reports, business letters, speeches, and resumes. Prerequisite: ENG 101 or permission of instructor. B

BUS 124 Organizational Behavior (3-0) 3 hrs.
Organizational Behavior is an introductory business course that will provide information to the student about individuals, groups, organizational structure and function. Topics to be studied include: Interpersonal Communications, Decision-making, Human Perception, Dynamics of Groups, Human Needs and Motivation, Concept of Organization, Leadership, Morale and the Quality of Work Life with attention to ethical consideration. (Also listed as PSY 124.) B

BUS 126 Introduction to Sports Studies (3-0) 3 hrs.
This course is designed to provide an introduction to sport management and an overview of the role and scope of sport events, sport management, and sport marketing as they contribute to the planning and development of a sport business or tourism destination. The student will study the components of management as applied to sport enterprises, as well as the historical, psychological, and sociological foundations of sport. The student will understand the components of sport management, event logistics, sponsorship, hospitality, use of volunteers, and licensing agreements. The student will be exposed to various sports and sports tourism careers. B

BUS 131 Personal Money Management (3-0) 3 hrs.
This course deals with management of personal finances over the life cycle of the individual consumer. Topics covered include establishment of personal financial objectives, budgeting, use of credit, property, liability and life insurance, major purchases such as housing, transportation and education; taxes, savings, investments, and retirement and estate planning. B

BUS 142 Professional Selling (3-0) 3 hrs.
A study of the fundamentals of professional selling as a prerequisite to the success in retailing and business occupations. Emphasis is placed on acquiring effective communication skills, self-confidence, and basic selling techniques through practical demonstration, on-site observation, and practice in retail setting. The importance of product knowledge, consumer buying motivations, and the role played by the salesperson in the store’s total image are examined. F

BUS 146 Retail Business Management (3-0) 3 hrs.
This course is an introduction to contemporary retailing as a service industry and profitable operation. A study is made of each of the five major organizational functions: merchandising, personnel, finance, operation, and promotion, with emphasis placed on career opportunities in each division. B

BUS 147 Small Business Management (3-0) 3 hrs.
A management approach to the study of contemporary small business practices. Students evaluate alternatives to be considered in forming policies regarding organizational structure, location, financial and legal requirements, merchandising and service standards, personnel considerations, methods of operation, promotional strategy, inventory control and accounting procedures. This course will serve as preparation for the establishment and operation of a small retail business. B

BUS 200 Office Management (3-0) 3 hrs.
This course is a comprehensive overview of the administration of the modern office in the public and private sector. The application of management principles to office operations will be covered. The course provides practical information about human relations, office technology, and management process. Prerequisite: BUS 120 or BUS 124 or permission of instructor. B

BUS 205 Services Marketing (3-0) 3 hrs.
This course is designed to provide an introduction to the general principles of marketing and an in-depth study of services marketing theory. The concepts students learn will enable them to develop the skills and aptitudes required in our emerging service economy. Students will be exposed to the relationship between services marketing and the consumer experience. There will be opportunities for students to apply services marketing theory utilizing case studies and models in health care, entertainment, business services, tourism, retailing, and financial services. This course provides the basis for further study in marketing management. B

BUS 210 Legal Environment of Business (3-0) 3 hrs.
This course is designed to provide a student with a knowledge of preventive law. The position of business in the legal environment and the interaction business has with legal entities will be examined by the understanding of jurisprudence, legal ethics, administrative law, anatomy of regulation, antitrust law, product liability, and environmental law. B

BUS 212 MS Excel for Business Applications (3-0) 3 hrs.
This course offers students the opportunity to master the advanced functionality of Microsoft Excel, and to apply those skills to genuine business applications such as financial modeling, reporting, and the automation of accounting and financial tasks. Although the basic functions of Excel will be covered, areas of focus include graphs and charts, the use of advanced financial functions and analytical tools, reporting templates, linking of worksheets and workbooks, importing and manipulating data, macros (automation of tasks), auditing tools, and other features especially useful to the financial or accounting professional. Prerequisites: ACC 101 and MAT 110 (or higher), or permission of the instructor. (Also listed as CSC 212) S

BUS 215 Tourism Planning and Development (3-0) 3 hrs.
This course is designed to provide the student with a knowledge of the role of management science in the design of a destination. The student will have an understanding of management science and its application to tourism
destination planning and development. The planning process will be a major focus of study. The student will be exposed to management issues that relate to urban and rural tourism development. The student will have the opportunity to apply knowledge through case studies of selected destinations. The course will culminate with student teams, developing a case study for a specific New York State destination. *Prerequisite: BUS 100.*

**BUS 220 Principles of Supervision (3-0) 3 hrs.** Practical application of planning, organizing meetings and committees, communicating with subordinates and supervisors, employee orientation training and appraisal, the supervisor and labor relations, problem solving, decision making, and management of time. *Prerequisite: BUS 120 or permission of instructor.*

**BUS 221 Principles of Management (3-0) 3 hrs.** The basic purpose of this course is to provide an understanding and appreciation of the part management plays in the successful operation of a business. The evolution of management practices is explored along with present applications in order to maintain effective coordination and control. *Prerequisite: BUS 100.*

**BUS 222 Marketing (3-0) 3 hrs.** A comprehensive introduction to procedures and practices involved in marketing, such as: product research, development and packaging; pricing; sales, advertising and sales promotion; distribution and transportation; wholesalers and retailers; marketing research. This is an excellent course for all business-related majors as focus is placed upon marketing cooperation with all other business functions and disciplines.

**BUS 224 Human Resource Management (3-0) 3 hrs.** A detailed study of personnel practices as they relate to the behavioral science concept of the management of human resources. Topics considered are recruitment, selection and training, motivation, job analysis, salary and wages, and performance appraisal.

**BUS 225 Destination Marketing (3-0) 3 hrs.** This course is designed to provide an in-depth study of the variety of organizations and strategies utilized to market a destination. The student will study marketing management as it relates to a destination. The student will be exposed to the structures of destination marketing organizations, funding sources, and operations. There will be opportunities for the student to apply marketing management theory, utilizing authentic destination marketing organizational models. This course provides an understanding of the various careers in destination marketing organizations. *Prerequisite: BUS 100.*

**BUS 227 Business Law I (3-0) 3 hrs.** A study of legal principles applied to business transactions. Topics covered include: court systems, constitutional authority, torts, contracts, criminal law and business, and commercial paper.

**BUS 228 Business Law II (3-0) 3 hrs.** A continuation of BUS 227--the study of legal principles applied to business transactions. Topics covered include: partnerships, corporations, agency, franchises, bankruptcy, real property, personal property, sales, and secured transactions.

**BUS 229 Advertising (3-0) 3 hrs.** Examines advertising as an important component in managerial marketing. Emphasis is placed on objectives, media study, strategic planning, budget considerations, control, and the measurement of advertising effectiveness. The role of advertising agencies and departments are examined.

**BUS 231 Sports Marketing (3-0) 3 hrs.** This course is designed to provide an in-depth study of the general principles of sports marketing. Students will study services marketing theory. The student will be exposed to the relationship between sports marketing, the success of sporting events, and the economic development for a destination. The student will study the effects sports marketing has upon the creation and development of sports facilities and venues. The student will study the role and impact of sports marketing intermediaries. The course emphasis will be focused upon public relations, sponsorship development, media relations, and various promotional techniques as they apply to professional, amateur, and youth sporting events. There will be opportunities for the student to apply sports marketing theory utilizing case studies. *Prerequisites: BUS 126 or permission of instructor.*

**BUS 232 Event Management (3-0) 3 hrs.** This course is designed to provide an introduction to the principles of event management. A conceptual framework will be developed through definitions, models, and the utilization of case studies. The student will learn how to formulate event tourism strategies for destinations. The planning, development, management, and implementation of festivals and/or entertainment events will be the focus of study. Specific topics will include event studies, bid preparation, public and corporate sponsorship, negotiations, and volunteer staff management. Students will have the opportunity to volunteer and participate in a variety of authentic events and festivals. *Prerequisite: BUS 100 or permission of instructor.*

**BUS 235 International Business (3-0) 3 hrs.** This course is designed to provide an introduction to international business and the global economic environment in which it is conducted. The process of economic globalization, international law, global finance and currencies, and the impact of information technology on international business operations will be covered. The impact of global business competition on the workplace will be discussed. Special focus will be applied to understanding the business risks that arise when firms engage in international trade, and on how global business enterprises manage those risks. *Prerequisites: BUS 120, ECO 210 or ECO 100, or permission of the instructor.*

**BUS 236 Special Topics in Business (3-0) 3 hrs.** This course is designed to select and analyze current topics associated with the field of Marketing. Topics may include Marketing Research, Customer Service, Consumer Behavior, Careers in Marketing, Customer Relationship Management, Visual Merchandising, Marketing Communications and Current events. The content of this course will vary from semester to semester.
BUS 240 Dynamics of Leadership (3-0) 3 hrs.
This course is a management course wrapped in a voyage of self-discovery. Through the critical study of proven leadership theories and their practical applications, students will develop leadership styles, focus their values and beliefs, develop communication and interpersonal skills, strengthen decision-making and problem-solving abilities, and awaken the leader within. Students will be encouraged to embrace and develop a leadership style best suited to their individual personality, attributes, and temperament. F

BUS 247 Electronic Commerce (3-0) 3 hrs.
This course provides the learner with an overview of the basic principles of electronic commerce and the related concepts, which are reflected in the current environment of the global economy. Students will develop a deeper understanding of the critical attributes of a successful participant in today’s ever-changing electronic markets. Current issues related to electronic commerce will be explored, including the evolving Internet; security; digital money; and ethical, legal, and environmental considerations. During this course, the student will utilize fundamental concepts learned in economics and marketing classes, integrated with computer skills to create an online business. Prerequisites: CSC 262 and BUS 222. (Also listed as CSC 247) B

BUS 250 Business Internship Program 6 hrs.
The Internship Program enables a Finger Lakes Community College student to supplement his/her academic studies and increase his/her career awareness through field experience. A student can acquire first hand experience in the work environment related to his/her academic and/or career interests. The students’ activities during the internship will include both participation and observation so that they can gain skills relevant to the interest as well as an understanding of the overall organization and operation of the internship site. A student who makes a thoughtful, serious commitment to the opportunities for learning in an internship can also increase his/her ability to make well-informed decisions about his/her career and/or graduate study. B

BUS 255 Tourism Internship 3 hrs.
This is an experiential learning course of study. Students will be required to complete a minimum of 150 hours of field experience. This experience may consist of interaction with the tourism industry which may include, but not be limited to, work experience, participation in trade seminars, professional meetings, volunteer experience, special projects, and trade shows. Tourism field experiences will be provided by the following types of tourism organizations: destination marketing organizations; various types of events, convention and visitor bureaus; convention centers; chambers of commerce; travel companies; tour operators; conference centers; attractions, meeting/planning companies; and governmental agencies involved in tourism planning and development. Students will be required to enter into an internship contract, submit written report(s), and attend two special topic seminars. Prerequisites: BUS 100, 30 credit hours completed, 2.0 grade point average and permission of instructor. B

BUS 260 Tourism Seminar (3-3) 3 hrs.
The Tourism Seminar is a capstone course designed to provide tourism students with an opportunity to integrate theory and principles learned in other required courses. This knowledge will be applied to an “authentic” tourism project or destination in New York State. Students will have the opportunity to attend annual industry conferences such as the Travel Industry of America Marketing Outlook Forum, and the students will work as a team with an assigned mentor from the field to research, evaluate, synthesize information, and create an appropriate document. This document will be submitted to the professional mentors for input and evaluation. The document will include research findings and recommendations. Prerequisites: BUS 100, BUS 205, BUS 215, CSC 100, MAT 121, and BUS 123. F

CHEMICAL DEPENDENCY COUNSELING

CDC 100 Alcoholism (3-0) 3 hrs.
The course will survey social, psychological, moral, interpersonal, biological, and cultural aspects of problem drinking. Definitions of alcoholism are explored. Approaches to “cure” are investigated, including A.A., psychotherapy, imprisonment, Antabuse, and recovery centers. The concepts of alcoholism as “the progressive disease” and as the “family disease” are reviewed. The purpose of this course is to familiarize the student with the complexity of alcoholism and to survey major research findings in the field. B

CDC 101 Chemical Use, Abuse and Dependency (3-0) 3 hrs.
This course investigates drug use, abuse, and addiction. Psychological, social, legal, spiritual, and philosophical sources of drug use and abuse are explored. The “why” of drug abuse, together with definitions and interpretations, are offered. The study includes licit and illicit drugs, over-the-counter, prescription, and synthetic drugs. Major areas of interest are pharmacology, the psychology of addiction, the role of advertising, and social implications of drug abuse. The course is designed to help the student think through to some viable national policies and personal convictions about drug use. B

CDC 200 Addiction Counseling (3-0) 3 hrs.
This course is designed to introduce the student to the uniqueness of counseling addicts and/or alcoholics. It presupposes an introductory knowledge of counseling in general, and a reasonable working knowledge of alcoholism, drug abuse, and addiction. The course surveys the essential body of knowledge needed to begin addiction counseling. Ten hours of role playing or actual counseling sessions are included. Prerequisites: CDC 100, CDC 110, PSY 150. B

CDC 210 Field Experience I 4 hrs.
One hundred and fifty hours of field experience will be spent in a rehabilitation or treatment facility for alcoholics or addicts. The student will enter the facility under terms laid down by said facility. The facility will provide direct supervision and the field coordinator
indirect supervision for the student. Prerequisites: CDC 100, CDC 101. Corequisite: PSY 150. B

**CHEMISTRY**

**CHM 121 General Chemistry I (3-3) 4 hrs.**
The history of chemistry, chemical equations, periodic law, atomic theory, and bonding are studied. The states of matter are introduced, gas laws and thermodynamic principles are considered in detail. Problem solving is emphasized. Laboratories reinforce concepts learned in the classroom. High school chemistry or SCI 102 and mathematics at the level of quadratics and logarithms are assumed. B

**CHM 122 General Chemistry II (3-3) 4 hrs.**
Liquid phenomena, solid state kinetics, equilibria, and electrochemistry are studied. Problem solving is emphasized. Laboratory reinforces concepts learned in lecture. Prerequisite: CHM 121 with a grade of C or better. B

**CHM 211 Organic Chemistry (3-3-1) 5 hrs.**
Bonding models, stereochemistry, and spectroscopy of organic compounds are introduced. Reactivity of alkanes, alkenes, alkyl halides, alcohols, and ethers are approached mechanistically. Laboratories stress synthesis, separation, and analysis. Four lecture hours, three laboratory hours weekly. Prerequisite: CHM 122 with a grade of C or better. F

**CHM 212 Organic Chemistry II (3-3-1) 5 hrs.**
A continuation of CHM 211. Includes structure and reactivity of aromatics aldehydes, ketones, carboxylic acids, and their derivatives. Mechanism is stressed. Four lecture hours, four laboratory hours weekly. Prerequisite: CHM 211 with a grade of C or better. S

**CHM 261 Spectrophotometric Techniques (1-2) 1 hr.**
A laboratory module introducing the student to qualitative and quantitative visible and ultraviolet spectrophotometry. (Also listed as BIO 281.) B

**CHM 263 Biotechnology Electrophoresis (1-2) 1 hr.**
A laboratory module introducing the student to cellulose acetate and slab-gel electrophoresis. Prerequisite: BIO 121. (Also listed as BIO 283.) B

**CHM 264 Biotechnology Module 4-Genetic Research Techniques (1-2) 1 hr.**
A laboratory module introducing the student to some of the modern techniques used in genetic research including: isolation and characterization of DNA and RNA, restriction digestion, and other techniques. Prerequisites: BIO 121, Biotech Modules 1 and 3. (Also listed as BIO 284.) B

**CHM 295, 296, or 297 Problems in Chemistry II (0 - 9-15) 3-5 hrs.**
A practical analysis problem in which each student will select an appropriate problem, search the scientific literature to develop an appropriate laboratory procedure to solve the problem, and carry out the analysis. Includes the preparation and oral presentation of a scientific paper based on the literature review, methodology, and analysis of the results. Prerequisites: CHM 121 and 122. B

**CINEMA**

**CIN 260 Cinema as an Art Form: Silent Era (3-0) 3 hrs.**
The motion picture as an integral art form will be studied from historic and aesthetic perspectives. Emphasis will be placed on the silent era and its technological development, genres, directors, stars, and themes. B

**CIN 261 Cinema as an Art Form: Sound Era (3-0) 3 hrs.**
The motion picture as an integral art form will be studied from historic and aesthetic perspectives. Emphasis will be placed on the sound era and its technological developments, genres, directors, stars, and themes. B

**CIN 263 Minority Groups in Film (3-0) 3 hrs.**
Minority Groups in Film focuses on fostering awareness of cultures deemed ‘other,’ according to ethnicity or sexuality, by the mainstream society of the United States. Utilization of films, from, by, and/or about these ethnic groups, as well as documentaries, will provide an artistic and historical representation of these cultures. This course also analyzes films as they relate to social issues dealing with minorities. B

**CIN 264 Global Cinema (3-0) 3 hrs.**
This course focuses on fostering global awareness of “non-Western” cultures by utilizing films, usually from the countries of origin, to provide an artistic representation through film into these cultures. Cinematic offerings will concentrate on Asia, Latin America, Africa, and the Middle East. In addition, films from Eastern Europe as well as films by Native Americans may be included. Prerequisite: ENG 101. B

**COMMUNICATIONS**

**COM 110 Public Speaking (3-0) 3 hrs.**
A study in communication with emphasis on the organization, presentation, and delivery of speeches for various occasions. B

**COM 111 Vocal Communication (3-0) 3 hrs.**
A one semester course in the improvement of the speaking voice through vocal techniques and the interpretation of literature. F

**COM 115 Interpersonal Communication (3-0) 3 hrs.**
The course focuses on the development of the interpersonal communication skills necessary for
building and maintaining positive relationships in both a personal and professional environment. Topics of study will include verbal and nonverbal communication in career and personal relationships, perception of self and others, listening, managing conflict, response skills, cultural and gender considerations, characteristics of leadership and effective work groups, and job interviewing. Students will study various theories and practice skill development.

COM 122 Television Advertising (3-0)  
A workshop in planning, writing, and producing television commercials. Students will receive experience in writing, production techniques (recording and videotaping commercials), and evaluating advertising. (Also listed as BUS 122) S

COM 123 Television Production I (4-0)  
This course introduces students to the basic techniques of television production. Students will be given hands-on experience in camera operation, lighting, sound, computer graphics, switching, directing, and video tape editing. Experience with the local Public Access Television Channel (FLTV) is included. B

COM 124 Television Production II (4-0)  
This course provides advanced work in television production techniques. Students work in groups to develop and produce newscasts that are televised on the local, public access television channel FLTV. Emphasis is placed on script writing, news writing, videography, and editing. Experience with FLTV is included. Prerequisite: COM 123 or equivalent requirement. S

COM 202 Introduction to Mass Communication (3-0)  
This course is designed to orient students to the field of Mass Communication and its impact and influence on their lives. Included is an overview of the field and discussion of the mass media industries (newspapers, magazines, radio, television, movies, music, and the Internet). Regulations, responsibilities, and emerging technologies are discussed and evaluated. B

COM 210 Communications Practicum (2-0)  
Work experiences are arranged on campus and with appropriate agencies to provide students with practical experience in advertising, public relations, and all aspects of television production. Prerequisite: COM 124 and permission of instructor. F

COM 215 Script Writing (3-0)  
This course is designed to introduce students to the fundamentals of developing and writing scripts for film, television, and the live event. The course emphasizes theme, story, plot, dialogue, character arc, dramatic structure, script format, and the process of developing and writing a script. Prerequisite: ENG 102 or permission of instructor. F

COM 220 Digital Video Editing (3-0)  
This course is designed to enhance students' video editing skills through hands-on use of a nonlinear editing system. Students will learn the fundamental and advanced capabilities of this sophisticated digital system, which is widely used in professional video production. Prerequisite: COM 123 or permission of instructor. Basic computer skills. B

COMPUTING SCIENCES  
(Courses do not fulfill mathematics, science, or liberal arts requirements.)

CSC 100 Computing in the Information Age (3-0)  
A study of the development and usage of computers for the non-computing sciences majors. This course will prepare and instruct the student to use computers in attaining solutions to issues they face in the information society of today. The component parts of a computer information system will be studied: hardware, software, networking, and systems. Student hands-on activities will support the underlying concepts and theories taught. Special emphasis will be placed on using applications software, a variety of hardware, and networks to solve problems. (Will not carry CSC credit for A.A.S. Information Technology, A.S. Information Systems, or A.S. Computer Science degrees). B

CSC 102 Tools for Internet Users (3-0)  
This is a results-oriented course designed to teach students the use of the basic tools of the Internet for research, knowledge, and enjoyment. An overview of the Internet and WWW will be covered. Included in this overview will be a discussion of what it is, reasons for its tremendous growth, and connection options. A security overview and ethics will also be discussed. Other course topics for discussion and hands-on activity will include e-mail options, web browsers, newsgroups, listservs, chat, ftp, search engines, finding people, finding a job, government and financial resources, and some elementary Web page creation. B

CSC 103 Computing Sciences Freshman Seminar (2-0)  
This course is designed for students to learn about the College computer systems and computer literacy as well as college life. Students will learn about computers as well as explore career options in the computer field. Students will also learn about motivation, goal setting, critical thinking abilities, problem solving techniques, and time management strategies. This course is graded on a satisfactory/unsatisfactory grading scheme. B Grade S/U

CSC 105 Core Word, Core Excel, PowerPoint  
This course is designed to teach the student core skills in MS Word, MS Excel, and MS PowerPoint, which are MS Office Applications. The course will include topics appropriate to prepare the student to take the MOS (Microsoft Specialist) certification test upon completion. This course is offered online only. Prerequisite: CSC 100 or familiarity with Windows. B

CSC 115 Introduction to Programming and Computing (3-1)  
Introduction to computing serves as a first course for all computer related majors. This course emphasizes the development of languages and software, problem solving, and programming in a structured language. Prerequisite: GST 142 or its equivalent. B

CSC 134 Core Word (1-0)  
This course is designed to teach the student Word, a Microsoft Office application software product. The course will include topics appropriate to prepare the student to take the MOS (Microsoft Office Specialist) certification test upon completion. Topics covered include...
file management, creating and formatting documents, styles and templates, tables, desktop publishing features, Web publishing features, mail merge, and collaboration.  
**Prerequisites:** CSC 100 Computing in the Information Age or familiarity with Windows.  

**CSC 135 Core Excel (1-0)**  
1 hr.  
This course is designed to teach the student Excel, a Microsoft Office application software product. The course will include topics appropriate to prepare the student to take the MOS (Microsoft Office Specialist) certification test upon completion. Topics covered include file management, creating and formatting spreadsheets, formulas and functions, creating and formatting charts, sorting and filtering lists, pivot tables and charts, data consolidation across spreadsheets, collaboration, Web publishing features, and an introduction to macros.  
**Prerequisites:** CSC 100 Computing in the Information Age or familiarity with Windows.  

**CSC 136 PowerPoint (1-0)**  
1 hr.  
This course is designed to teach the student PowerPoint, a Microsoft Office application software product. The course will include topics appropriate to prepare the student to take the MOS (Microsoft Office Specialist) certification test upon completion. Topics covered include file management, creating and formatting presentation materials such as slides, shows and handouts, creation and modification of slide master and design templates, adding tables, graphics, clip art, charts and animation to presentations, and the automation of slide shows.  
**Prerequisites:** CSC 100 Computing in the Information Age or familiarity with Windows.  

**CSC 137 Expert Word (2-0)**  
2 hrs.  
This course is designed to instruct the student in Microsoft Word at the expert level. Topics will include working with paragraphs, working with documents, using tables, working with pictures and charts, using mail merge, using advanced features, and collaborating with workgroups. This course will not fulfill the requirements for Administrative Assistant and Paralegal degrees and Office Technologies Certificate.  
**Prerequisite:** Students must be skilled with Word at the core level prior to taking this course.  

**CSC 138 Expert Excel (2-0)**  
2 hrs.  
This course is designed to instruct the student in Microsoft Excel at the expert level. Topics will include importing and exporting data, using templates, using multiple workbooks, formatting numbers, printing workbooks, working with named ranges, working with toolbars, using macros, auditing a worksheet, displaying and formatting data, using analysis tools, and collaborating with workgroups.  
**Prerequisite:** Students must be skilled with Excel at the core level prior to taking this course.  

**CSC 172 Computer Programming for Engineering (3-1)**  
3 hrs.  
This is a programming course for technical or engineering students. Topics covered include: problem solving, design tools, programming concepts (looping, decision, functions, I/O, arrays), and spreadsheet concepts. A high level language such as C++ will be the tool used to code solutions to problems.  

**CSC 190 Data Structures I (3-1)**  
3 hrs.  
This course is designed to present to the student the basic data structures necessary to design and write object oriented programs. The topics covered include procedures and modules, functions, arrays, records, strings, and files.  
**Prerequisite:** CSC 115 with a grade of C or better.  

**CSC 200 Data Structures II (3-2)**  
4 hrs.  
This course is a study of the more common data structures utilized in computing science applications. Topics to be covered include linked lists, queues, stacks, matrices, storage allocation, tree structures, searching techniques and sorting techniques. Development of algorithms for practical applications will demonstrate the advantages of the above topics.  
**Prerequisite:** CSC 190.  

**CSC 211 MS Access and Database Applications (3-0)**  
3 hrs.  
This course offers students the opportunity to master the advanced functionality of Microsoft Excel, and to apply those skills to genuine business applications such as financial modeling, reporting, and the automation of accounting and financial tasks. Although the basic functions of Excel will be covered, areas of focus include graphs and charts, the use of advanced financial functions and analytical tools, reporting templates, linking of worksheets and workbooks, importing and manipulating data, macros (automation of tasks), auditing tools, and other features especially useful to the financial or accounting professional.  
**Prerequisites:** ACC 101 and MAT 110 (or higher), or permission of the instructor.  
(Also listed as BUS 212)  

**CSC 212 MS Excel for Business (3-0)**  
3 hrs.  
This course provides the student with the tools and programming languages (of the tools).  

**CSC 215 Visual Basic (3-0)**  
3 hrs.  
**Visual Basic** is a Windows programming language whose function is to help users build their own special-purpose Windows applications. Visual Basic.net will be used to teach topics including domain definition, GUI design, and development data access modules.  
**Prerequisite:** CSC 115 with a grade of C or better or programming experience.  

**CSC 226 Tools for Computer Users Support (3-0)**  
3 hrs.  
This course provides the student with the tools and techniques needed to support today’s computer user. The continued growth and complexity of computing systems has increased the need for professional computing system user support. CSC 226 provides the student with skills needed to interact professionally at all levels when providing the support needed by computing system users. This course covers skills such as listening and communications, effective use of the telephone, technical documentation, handling difficult situations and users, problem solving and prevention, computer user education, and teamwork needed to provide a high level of service to the computer user. An additional focus is the role the computer user
support team plays in ensuring that organizations realize the full potential of their computing system investments.

Prerequisites: CSC 115. B

CSC 228 Introduction to Java (3-1) 3 hrs.
This course will introduce students to Java and software design. Students with a basic programming background (e.g., C++) will learn the syntax and semantics for planning and writing a computer program in Java. Successful completion of this course will allow the student to plan, build, implement, and execute scripts that will create fully functional, interactive, and dynamic Web applications. Included in the course will be developing Web sites that depend on databases. Additionally, the student will learn how to set cookies, make an e-commerce shopping cart, and schedule the timing and placement of Web advertisements.
Prerequisite: CSC 262. B

CSC 235 Active Server Pages and Server-Side Scripting (3-0) 3 hrs.
This course will familiarize the student with different approaches in creating server-side scripts using Active Server Pages (ASP) and other technologies. Successful completion of this course will allow the student to build, implement, and execute scripts that will create fully functional, interactive, and dynamic Web applications. Included in the course will be developing Web sites that depend on databases. Additionally, the student will learn how to set cookies, make an e-commerce shopping cart, and schedule the timing and placement of Web advertisements.
Prerequisite: CSC 262. B

CSC 243 Systems Analysis and Design I (3-0) 3 hrs.
This course is an introduction to systems analysis and design. It includes such topics as: defining the scope and objectives of a system project, investigative techniques, feasibility analysis, design of input/output forms, master file, database, and transaction file organization, Tools that the analyst uses are also introduced, i.e., data flow diagrams and systems flowcharts. A case study will be performed by the students in teams, which will serve to emphasize the material covered in the text. Prerequisite: both CSC 134 and CSC 135 or both CSC 137 and CSC 138; CSC 136; and CSC 115 with a grade of C or better. B

CSC 245 Visual Basic for Business Applications (3-0) 3 hrs.
Advanced programming concepts and practices are covered in this course, using VB.NET. Advanced concepts in graphical user interface design are also covered, along with a survey of more advanced data structures and object design. Mobile applications, data access classes, ADO.NET, are among the specific topics covered. Prerequisite: CSC 215. B

CSC 247 Electronic Commerce (3-0) 3 hrs.
This course provides the learner with an overview of the basic principles of electronic commerce and the related concepts, which are reflected in the current environment of the global economy. Students will develop a deeper understanding of the critical attributes of a successful participant in today’s ever-changing electronic markets. Current issues related to electronic commerce will be explored, including the evolving Internet; security; digital money; and ethical, legal, and environmental considerations. During this course, the learner will utilize fundamental concepts learned in economics and marketing classes, integrated with computer skills to create an online business. Prerequisites: CSC 262 and BUS 222. (Also listed as BUS 247.) B

CSC 248 Network Administration and Support (3-0) 3 hrs.
This course covers the complex activities and tasks needed to ensure that networks and network servers are functional and applications and network resources are available as required. This course will focus on the provision of support for the client/server network, in particular supporting server hardware and server administration. This course will provide an understanding of the planning, installation, configuration, and maintenance of servers that is needed to ensure maximum uptime and reliability of today’s networks. Network Service and Support will cover topics such as server-level hardware implementations, data storage subsystems, data recovery, and I/O subsystems as well as the interrelationships of all parts of the server system and the system’s relationships to today’s computing environment. Additionally, this course will cover server-side system administration tasks. Prerequisites: CSC 260 and CSC 271. Corequisite: CSC 261. B

CSC 250 Computing Sciences Internship 3 hrs.
The Computing Sciences Internship will provide the student with an opportunity to gain “real-world” experience. The student will apply learned skills acquired through course work in any of the computing sciences degree programs to a work experience. The internship will also supply an awareness of career opportunities in the computing science and information technology fields. Lastly, it will give the student a much needed advantage on acquiring a job after graduation because an internship is a full-time work experience. Student must have a 2.0 GPA. Prerequisite: CSC 226. B

CSC 251 Applied Database Concepts (3-0) 3 hrs.
An introduction to database design and development. Database normalization, data integrity, concurrent updates, and data security will also be discussed and practiced. Emphasis will be on using Access to build and maintain relational databases. The student will create databases, queries, custom forms and reports, use macros and modules with VBA. Additionally, SQL programming will be used extensively. Prerequisite: CSC115 with a “C” or better. S

CSC 252 Multimedia Development (3-0) 3 hrs.
In order for students to be competitive when going for jobs in today’s economy, they need tools in their pocket to get them through the door. This course is designed to take students from the level of Web programmer to Web developer. Using tools that exist today and modifying those tools to fit for tomorrow will provide a solid foundation for development. Image editing software like Fireworks, animation software like Flash, and design software like Dreamweaver have all been identified by Web development companies as tools of which a person entering the workplace should have a working knowledge. We will use these or similar development tools to learn the programming languages behind the pictures to learn multimedia development. The class will culminate in producing a game in Flash and Action Script. An extensive understanding of Javascript or similar object oriented, Web-based programming language is required. Prerequisite: CSC 262 or instructor permission. B

CSC 260 Data Communications and Networking (3-0) 3 hrs.
The increasing computerization of today’s workplace has created the need for knowledgeable technicians,
managers, and administrators well grounded in the techniques of connecting multiple computer platforms, enabling data communications in diverse hardware and software environments and providing reliable communication between all parts of the organization. This course provides an overview of the essential fundamentals of networking required in today’s local area network (LAN) environment as well as a solid foundation for the student’s pursuit of certification through other programs such as CompTIA’s Net+ and Microsoft’s Certified Professional program. Specifically, the course will focus on data communication technology, including telecommunication basics, LAN fundamentals, and wide area network (WAN) principles that comprise today’s complex networking environment. Students will be required to complete several hands-on labs covering a number of activities for the creation and maintenance of a server-based, networked environment (i.e., Windows Server and Windows Workstation products). The course will also include the study of a working medium-sized institutional network. Prerequisite: CSC 115 with a grade of C or better.

CSC 261 Internetworking (3-0) 3 hrs.
This course is a study of internetworking fundamentals and how the Internet is integrated into the computing environment to enable organizations to share resources, collaborate, and meet organizational goals. The networking essentials and the creation of simple local area networks introduced in CSC 260 Data Communications and Networking are expanded upon to incorporate the linking of these simple networks to each other and to the Internet to create an internetwork. Internetworking devices such as switches and routers will be examined in detail. Students will focus on techniques to analyze, plan, and manage an enterprise network. In support of these techniques, lab activities will include subnetting, packet-sniffing, switching, and router configuration. Prerequisite: CSC 260.

CSC 262 Web Site Development and Programming (3-0) 3 hrs.
The study of designing and implementing sites for the World Wide Web. The planning and analysis techniques and design methods covered will allow students to create an informative, engaging presentation of information via the web. Additionally, students will prepare web sites using appropriate mark-up languages and scripting (programming). A variety of Web tools will be used in the development of the pages. Prerequisite: CSC 115. Corequisite: CSC 190.

CSC 270 Principles of Information Security (3-0) 3 hrs.
This course is an introduction to the various technical and administrative aspects of information security and assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features. Students will be exposed to the spectrum of security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses and an overview of the information security planning and staffing functions. Prerequisite: CSC 260 or permission of the instructor.

CSC 271 A+ Hardware and Operating Systems Technologies (3-1) 3 hrs.
This course is designed to provide the student with the skills and knowledge required for entry level PC technicians, IT professionals, or computer science majors seeking a comprehensive introduction to computer hardware and software. This course will provide the student with the fundamental knowledge required to build, install, configure, upgrade, manage, troubleshoot, and repair personal computers. Today’s computing systems include not only the stand-alone computer with a system unit, monitor, keyboard, mouse and printer, but have evolved into sophisticated systems that are networked with other systems while serving as a base for the addition of many other digital devices available on the market currently. These computer systems require the student to not only understand the hardware components and how they interact with one another, but also to understand how the software in the form of an operating system interacts with the hardware to create a sophisticated computing system. This knowledge will enable the student to effectively diagnose, configure, and maintain computer systems. While the objectives of A+ Hardware and OS Technologies will map closely to CompTIA’s A+ Certification objectives, the primary focus is to provide the computer student with the basic working knowledge of a computer system, defined by the hardware components and the software that interacts with this hardware to create a computer system. Prerequisite: CSC 115 with a grade of C or better, or permission of the instructor.

CSC 272 Managing Operating Systems (3-0) 3 hrs.
This course is designed to provide the student with an understanding of the architecture and management of today’s commonly used computer operating systems. The course surveys the operating systems and included tools and utilities to acquire an understanding of how the operating systems work and how to use the tools and techniques to manage and automate computing system tasks. This course will use the Windows command line and UNIX/Linux shell programming as teaching tools to provide the fundamental skills needed to prepare and use scripts to manage and automate daily computer/network management tasks and provide a deeper knowledge of operating system functions. Prerequisites: CSC 190, CSC 271. Corequisite: CSC 260 or permission of the instructor.

CSC 273 Technical Information Security (3-0) 3 hrs.
This course provides an in-depth look at network security concepts and techniques. It will adopt a practical, hands-on approach when examining networking security techniques. Along with examining different network strategies, the student will explore the advancement of network implementation as well as problem solving strategies necessary in the field of information security. Prerequisites: CSC 260 or permission of the instructor.
CSC 274 Computer Forensics and Investigations (3-0)
Computer Forensics and Investigation presents principles and techniques of conducting computing investigations. Computer forensics involves obtaining and analyzing digital information for use in evidence in civil, criminal, or administrative cases. Topics include: ethics, current computer forensic tools, digital evidence controls, processing crime and incident scenes, data acquisition, e-mail investigations, and becoming an expert witness. Hands-on experience, using a forensic software package will be part of the course. 
Prerequisites: CSC 260 or permission of the instructor. S

CSC 275 Preparing for Security+ Certification (2-0)
This course prepares the student to take the Security+ Certification examination. It is intended for the experienced network administrator or the student who is in the last semester of the proposed Certificate in Information Security program. This course focuses on the topics covered in the Security+ certification examination and is intended to be a culminating course as well as a supplement to the student's prior studies and/or experience. Prerequisites: Students must be in the last semester of the certificate program or permission of the instructor. S

CSC 290 Preparing for A+ Certification (2-0) 2 hrs.
This course prepares the student to take the A+ Certification examination. It is intended for the experienced PC Repair Technician or the student who has completed the FLCC Computer Technology and Networking degree program. This course focuses on the topics covered in the A+ certification examination and is intended to be a refresher course as well as a supplement to the student’s prior studies and/or experience. It is expected that prospective students will have at least six to eight months’ experience as a PC Repair Technician or its equivalent, or that the student has completed the Computer Technology and Networking degree program or the PC Repair course sequence which includes CSC 195 Computer Architecture and Software Systems, CSC 230 PC Maintenance and Repair as well as the CS internship. JP/SU

CSC 291 Preparing for Network+ Certification (2-0) 2 hrs.
This course prepares the student to take the Network+ Certification examination. It is intended for the experienced network technician or the student who has completed the FLCC Information Technology degree program. This course focuses on the topics covered in the Network+ certification examination and is intended to be a refresher course as well as a supplement to the student’s prior studies and/or experience. It is expected that prospective students will have at least eighteen months’ experience as a networking technician or its equivalent, or that the student has completed the networking course sequence (CSC260 Data Communications and Networking, CSC 261 Internetworking) as well as the CS Internship or has completed the Information Technology degree program. JP/SU

CONSERVATION

CON 100 Introduction to Environmental Conservation (3-0) 3 hrs.
This course focuses on environmental conservation and outdoor recreation, controversial issues, and current topics. Throughout the semester improvement in critical thinking, writing, and oral communication skills are emphasized. F

CON 101 Principles of Soils, Waters, Forests (3-0) 3 hrs.
To provide students with an introduction to principles of soil science, meteorology, hydrology, forestry and forest ecology. The student should gain knowledge and field experience in the conservation and management of these interrelated natural resources, especially as they apply to outdoor recreation, wildlife, fisheries, and land use planning. B

CON 102 Introduction to Fish and Wildlife (3-0) 3 hrs.
The study of fish and wildlife as a valuable aesthetic, recreational, and economic resource. Ecological consideration, life histories, identification, populations, habits, habitat characteristics, and relationship between humans and regional wildlife and fish. Special attention is paid to fish and mammals of New York State. S

CON 103 Environmental Chemistry: Testing and Analysis (2-2) 3 hrs.
This course is intended to provide students with information about fundamental chemical concepts. These are then applied toward understanding the sources, effect and methods of detection for substances which contaminate water, air and soil, and how they effect fish and wildlife. Students will become more familiar with environmental quality standards and humans’ attempts to reduce chemically caused, environmental hazards. The Laboratory section of the course will provide students with experience in basic laboratory technique, sampling procedures, and chemical methods used to test environmental quality. S

CON 110 Sustainable Earth: Spiritual and Scientific Consilience (3-0) 3 hrs.
Students will examine the impact of human populations on earth’s ecosystems. Students will explore psychological, cultural, spiritual, economic, and political factors that accelerate the deterioration of earth’s ecosystems and alternate perspectives of those factors which might lead to a more life-sustaining society. Emphasis will be placed on discovering common ground between science and spiritualism. Students will serve as discussion leaders for course topics of their choice. A community involvement component will be required. (Also listed as PHL 110.) Prerequisite: permission of instructor. S

CON 116 Fisheries Techniques (3-0) 3 hrs.
This hands-on course provides students with field experiences utilizing various types of fisheries equipment. Emphasis is placed on sampling techniques for both fish and aquatic habitats. Topics include small boat operation, fish identification, fish capture and handling techniques, data collection, tagging and marking, aging, electrofishing, netting, radio telemetry, hydro acoustics, habitat assessment, and equipment maintenance. F
CON 190 Conservation Field Camp (3-0)  3 hrs.
Field Camp is designed to provide one week of conservation-recreation field experiences. Emphasis will be on fish, wildlife, and forest management techniques; conservation field studies and investigations; field natural history; outdoor recreation skills; and rustic conservation construction. SU

CON 200 Conservation-Recreation Practicum/Internship (2-0)  2 hrs.
Work experiences are arranged with appropriate agencies, which may include the NYS Department of Environmental Conservation, County Conservation Services, BSA Camps, National Park Service, Nature Conservancy, Park Police, Water Treatment Plants and Nature Centers. These experiences allow the student the opportunity to assume the responsibilities for the jobs (Fish and Wildlife Technician, Conservation Officer, Nature Interpreter, Camp Ranger, etc.), they will be performing after graduation. The type of experience varies with student interest and previous experience. (Satisfactory or Unsatisfactory grade.) Prerequisite: Permission of department. B

CON 201 Conservation-Recreation Practicum/Internship (3-0)  3 hrs.
Work experiences are arranged with appropriate agencies, which may include the NYS Department of Environmental Conservation, County Conservation Services, BSA Camps, National Park Service, Nature Conservancy, Park Police, Water Treatment Plants and Nature Centers. These experiences allow the student the opportunity to assume the responsibilities for the jobs (Fish and Wildlife Technician, Conservation Officer, Nature Interpreter, Camp Ranger, etc.) they will be performing after graduation. The type of experiences varies with student interest and previous experience. (Satisfactory or Unsatisfactory grade.) Prerequisite: Permission of department. B

CON 202 Principles of Terrestrial and Aquatic Ecology (3-0)  3 hrs.
A study of climatic, edaphic, and biotic factors as they relate to species distribution and population dynamics in selected biomes of New York State and the world. Students develop deeper understanding of the ecological principles concerning the interaction between organisms and their environment. Writing intensive. (Also listed as BIO 221.) Prerequisites: BIO 121, BIO 122, ENG 101, or permission of instructor. F

CON 203 Seminar in Environmental Conservation (3-0)  3 hrs.
This course presents topics in the field of environmental conservation. Current topics include: Herpetology, Entomology, Winter Botany, Alternative Energy, Forest Fire Control, Environmental Conservation Research, and Public Lands. A comprehensive field identification test is required. S

CON 205 Field Botany (3-0)  3 hrs.
Field identification, taxonomy, habitat preference, growth characteristics and management of trees, shrubs, and herbaceous plants are the major topics covered in this course. Emphasis is placed on local flora and its utilization by man and wildlife. Important ornamental trees, New York State rare plants, exotic plants that are management problems, and the ecology of the eastern deciduous forest biome are highlighted. Considerable class time will be spent outdoors, on campus, and at nearby areas. (Also listed as BIO 250.) Prerequisite or concurrently: BIO 121. B

CON 206 Conservation-Recreation Project (3-0)  3 hrs.
Designed to provide students with specialization in an area related to their occupational interest and to provide students the opportunity to become more familiar with conservation-recreation practices. Projects typically involve community service activities, fisheries, advanced fisheries techniques, habitat and wildlife inventory, Conservation law, and other student interests. (Course will be graded with a letter grade or a Satisfactory/Unsatisfactory basis, depending on the project.) Prerequisite: permission of instructor. SU

CON 207 Conservation-Recreation Facility Construction, Operation and Maintenance (3-0)  3 hrs.
Designed to expose students to construction and maintenance problems unique to outdoor recreational facilities. Emphasis is placed on trail design and construction and use of native materials. Wood frame construction, masonry, plumbing, electrical installation, and sanitation systems included. Field trips and field construction. S

CON 209 Conservation-Recreation Field Techniques (3-0)  3 hrs.
The student in this course should acquire and will be expected to demonstrate the skills required of a Fish & Wildlife Technician. Skills will include map orientation, topographic mapping, mist netting, snowshoeing, cross country skiing, radio-telemetry equipment, skull preparation, deer-boning, and live trapping. Emphasis in the course is placed on intensive field experience and student participation. S

CON 210 Field Natural History (3-0)  3 hrs.
This course is a series of extended field trips into a selection of local ecosystems such as gorges, bogs, streams, and marshes. Students will analyze these ecosystems both as examples of each ecological situation and as areas managed in different ways by man. Natural history topics such as insects, aquatic life, migratory birds, glacial geology, and human interactions with the environment are studied in appropriate areas. (Also listed as BIO 245.) Prerequisites: BIO 121, BIO 122 or permission of instructor. F

CON 211 Ornithology (3-2)  4 hrs.
The study of birds with special emphasis on anatomy, physiology, life histories and identification of birds common to Western New York. Lecture and laboratory work supplemented by several field trips, including early morning bird observations. A Monday trip to Cornell's Laboratory of Ornithology is required. A morning trip to a local birding area is also required. (Also listed as BIO 225.) Prerequisite: BIO 121, BIO 122 or permission of instructor. S

CON 214 Fisheries Management (3-0)  3 hrs.
Fisheries Management stresses the relationship between humans, fish and their environments. Students are introduced to the principles of fishery management including, history, theory, and management strategies. The importance of habitat management, and population dynamics and their interactions are explored. Management strategies will be introduced through case studies of selected fisheries. S
CON 215 Unique Ecological Communities (3-0) 3 hrs.
The purpose of this course shall be to provide students with field and travel experiences relative to their course work in Natural Resources Conservation. This expedition course, to different areas of the country, will emphasize identification and natural history of birds, mammals, reptiles, plants, and a variety of ecological communities. Students will be provided with opportunities to observe employment opportunities in conservation and gain experience in camping and group travel. Examples of travel experiences include trips to: Florida Everglades, Wilderness Alaska, Costa Rican Rainforests, and various National Parks. JP/SU

CON 216 Wildlife Management (3-0) 3 hrs.
This course will provide intensive classroom and field experience in wildlife management theory, including population dynamics and the relationship between wildlife and their habitat. Practical techniques used for aging, sexing, banding, trapping and transferring game and non-game wildlife are presented. Rearing and releasing endangered and game species, habitat evaluation, postmortem examination, nuisance control, and wildlife populations estimation techniques are discussed. F

CON 217 Environmental Planning and Impact Analysis (3-0) 3 hrs.
This is an introductory course in the multi-disciplinary field of environmental planning. Techniques used to identify, inventory, and evaluate natural resources are examined. Local case studies, regulatory laws, and the environmental decision-making process are reviewed. Topics are developed further through assigned readings and classroom discussions. Students put concepts into use with realistic projects involving local environmental land use issues. (Also listed as ENV 217.) F

CON 218 Fish Culture Techniques (3-0) 3 hrs.
The Fish Culture Techniques class will introduce students with a key interest in Aquatics to the principles and various techniques used in Aquatic Ecology, Fish Culture, and Aquaculture. It will involve an in-depth study of the early life history, propagation, and rearing techniques of a number of fresh water fish through literature, reviews, lecture, and hands-on experience. Particular emphasis will be placed on recent advances and methodology of raising walleye (Stizostedion vitreum) and other coolwater species. (Field Trips) Prerequisite or concurrently: CON 214. S

CON 219 Introduction to Aquaculture (3-0) 3 hrs.
This course is designed for students enrolled in the A.A.S. Fisheries Technology degree program as an introduction to aquaculture practices and techniques. Students are exposed to both the historic and current status of aquaculture. Emphasis is placed on culture methods, fish handling, and data collection techniques. Walleye cultured at the FLCC Muller Conservation Field Station, Fish Culture and Aquatic Research Center will be collected and stocked. Trips to other culture facilities will expose students to different culturing techniques. Factors of water quality, fish health and nutrition, system designs, and advances in Recirculation Aquaculture Systems (RAS) will be investigated. F

CON 220 Glacial Geology of the Finger Lakes (3-0) 3 hrs.
This course is an introduction to glaciation emphasizing historic events within the Finger Lakes region. The mechanics of glacial motion, erosion, and deposition will be studied and then used to interpret our modern landscape. Students will be introduced to the technique of air photo interpretation. Our modern biodiversity and distributional patterns of organisms will be related to postglacial events. Scenic values associated with glacial landscapes will be a focal point of the class field trips. (Also listed as SCI 220.) S

CON 221 Conservation/Horticulture
Topics I (1-0)
This course is designed to provide students with specialization in an area related to their occupational or educational interest and to provide students the opportunity to become more familiar with conservation and horticulture practices. Topics typically involve a field component and may be held as a residential course at the Muller Conservation Field Station. JP/SU

CON 222 Conservation/Horticulture
Topics II (2-0)
This course is designed to provide students with specialization in an area related to their occupational or educational interest and to provide students the opportunity to become more familiar with conservation and horticulture practices. Topics typically involve a field component and may be held as a residential course at the Muller Conservation Field Station. JP/SU

CON 223 Conservation/Horticulture
Topics III (3-0)
This course is designed to provide students with specialization in an area related to their occupational or educational interest and to provide students the opportunity to become more familiar with conservation and horticulture practices. Topics typically involve a field component and may be held as a residential course at the Muller Conservation Field Station. JP/SU

CON 225 Introduction to Wildlife Diseases (3-0) 3 hrs.
This course is intended to provide students with a basic understanding of wildlife diseases and environmental contaminants which adversely affect the health of wildlife populations. Infectious and noninfectious wildlife diseases, as well as parasitology, will be explored through discussion, assignments, guest speakers, and the completion of a technical research paper. Students will then be able to apply knowledge of these topics to other aspects of environmental conservation including environmental chemistry, ecology, wildlife rehabilitation, and environmental law. Prerequisites: BIO 121, BIO 122, CON 102 or permission of instructor. S

CON 226 Fisheries Field Assessment (3-0) 3 hrs.
This course is an intensive, one-week session that gives the student in-depth experience in fish inventory methods, data interpretations, operation of water analysis equipment, navigation, and general vessel operation and maintenance. The majority of class time will be in the field, allowing the student to gain hands-on training in fisheries management techniques. The class is divided into five daily modules. The order in which the modules are taught are weather dependent; therefore, the starting and ending times will vary. Students should plan on being available from 6 a.m. to midnight each day. (Satisfactory or Unsatisfactory grade.) Prerequisite: permission of instructor. SU
CON 228 Small Woodlot Management (3-0) 3 hrs.
This course will provide a practical guide to the optimum utilization of several acres of privately owned woodlands. Topics covered will include woodland values, tree identification, forest ecology, measurement and evaluation of forest products, forest management alternative, and wood space heating. Field instruction will emphasize chainsaw use and preparation of fuel wood, including felling, bucking, transportation, splitting, and seasoning. F

CON 229 Stream Ecology and Monitoring (3-0) 3 hrs.
This course provides students with an introduction to hydrology, stream ecology and sampling design. Students will intensively study aquatic macro-invertebrate identification. Non. Students will learn through field and laboratory experiences with data collected, analysis, and production of a final professional report. Prerequisite: MAT 121, CSC 134, CSC 135 or permission of instructor. S

CON 230 Recreation Law (3-0) 3 hrs.
This course is designed to explore New York State and Federal recreational law. Specific topics include: marine laws, parks, recreation and historical preservation law, Title 9, landowner liability, local municipalities and their role in recreational law. The history and philosophy of recreational law enforcement, including the responsibilities of state, federal, and local agencies will be discussed. S

CON 231 Environmental Conservation-Outdoor Recreation Law I (3-0) 3 hrs.
This course is an introduction to the New York State and Federal conservation-recreation laws. Specific topics include: fish and wildlife laws, plant laws, endangered species protection, NYS recreation laws (boating, snowmobiling, and ATV use), duties of Environmental Conservation Officers and NYS Park Police Officers. (Also listed as CJC 231.) F

CON 232 Environmental Conservation-Outdoor Recreation Law II (3-0) 3 hrs.
This course will cover the main environmental laws and problems that deal with a wide range of conservation-recreation topics such as air pollution, SEQRA, environmental impact statements, water pollution, freshwater wetlands regulations, property rights and landowner liability, hazardous waste, medical waste, pesticide use, storage, and disposal. It is exclusive of the topics covered in CON 231, although the same text is used. (Also listed as CJC 232.) S

CON 235 Wetland Assessment and Management (3-0) 3 hrs.
This course focuses on freshwater wetland types, hydrology, biochemistry, and community structure. Wetland formation, succession, and recent history of wetland alteration are examined. Wetland values, delineation, management, restoration, and creation are discussed. Several field trips will be made to encourage hands-on experience. S

CON 246 Limnology (3-2) 4 hrs.
An introduction to the scientific study of inland waters, limnology concerns itself with all the factors that affect living populations within those waters. Through lecture and field experiences, the student will become familiar with physical and chemical processes in water, especially those that have a direct effect on biological organisms. Standard methods and highly technical instrumentation will be used on board the college’s educational vessel. A survey of life forms and identification skills will be emphasized as well as aquatic community structure and interactions. (Also listed as BIO 246.) F

CON 253 Survival Skills (3-0) 3 hrs.
This course will provide the student with extensive opportunity to learn and practice survival skills including identification, collection, and preparation of edible wild plants; survival fishing, hunting, and trapping techniques (in accordance with New York State Fish and Game Law); construction of shelters; fire building skills; and other practices appropriate in a survival situation. For the first three days, instruction will occur on-site in the Bristol Hills; for the last four days, students will, in groups of two, be expected to provide themselves with protection and food entirely from the natural surroundings. Prerequisite: PE 252 camp or permission of the instructor. (Participants must be in good health and willing to sustain physical exertion. It is understood that students may not register for other courses for the duration of this course.) B

CON 255 Wildland Fire Suppression (S-130/S-190) (2-0) 2 hrs.
This course provides the training necessary for the Federal Interagency “RED” Card for wildland firefighter. Topics covered include: ignition, behavior, and spread of wildfires; the role of topography and fuels in wildfires; prescribed fires as a management tool; use of fire suppression equipment; methods of fire prevention and suppression; State and Federal wildland fire control agencies. Graded on a satisfactory/unsatisfactory basis. (Also listed as WFS 130.) B

CON 256 Fire Ecology (3-0) 3 hrs.
This course is designed to give students an appreciation and understanding of the ecological role of fire in a variety of North American ecosystems. Advantageous adaptations of species inhabiting fire prone ecosystems will be discussed. The effects of fire on plants and animals will be discussed within the context of ecological time scales. The effect of past state and federal policies concerning wild fire will be examined using various case studies. Students will also be introduced to the use of prescribed burning as a habitat restoration technique. (Also listed as WFS 256.) S

CON 260 Principles & Techniques of Nature Interpretation (3-0) 3 hrs.
An in-depth investigation of the fundamental principles and concepts of nature interpretation will be developed. Historical development, current trends, methods and field techniques in nature study, outdoor education, interpretive programming, and facilities will be examined. Prerequisite: CON 210 or permission of instructor. S

CON 265 Field Techniques for Naturalists and Photographers (3-0) 3 hrs.
An introductory course emphasizing basic field techniques that are used in outdoor photography. Special emphasis will be placed on field techniques for photographing wildlife, plants, landscapes, outdoor
recreation, and environmental activities. The course will also place special emphasis on the use of natural light to produce quality photographs. A lesser emphasis will be placed on photographic equipment, film types, and methods of utilizing photographs. Prerequisite: ART 207 Photography I or permission of instructor. B

CRIMINAL JUSTICE
(Courses do not fulfill social science requirements.)

CJC 100 Introduction to Criminal Justice (3-0) 3 hrs.
This course examines the functions and interrelationships of the component parts of the criminal justice system—the police, courts, and corrections. Relevant constitutional law and Supreme Court decisions are reviewed, and contemporary problems and issues in criminal justice are highlighted. B

CJC 105 Criminal Law I (3-0) 3 hrs.
A study of the New York State Penal Law. Sections of the Penal Law will be discussed and analyzed. Specific attention will be given to offenses that are considered to be both serious and frequently committed. Legal definitions, interpretations, and classifications of crimes will be examined. General legal principles, recent court decisions, and case law will also be considered. B

CJC 110 Criminal Law II (3-0) 3 hrs.
A study of the New York State Criminal Procedure Law. Specific topics include court procedures, laws of arrest and search warrants. Special emphasis will be placed on Constitutional limitations, criminal proceedings, and legal terminology. B

CJC 115 Law of Evidence (3-0) 3 hrs.
The law of evidence as it relates to the use of evidence before judicial tribunals; rules excluding evidence and the rules of prescribing the manner of presenting evidence in a Court or an Administrative Proceeding. B

CJC 117 Issues in Constitutional Law (3-0) 3 hrs.
A study of Constitutional Law, including constitutional aspects of criminal law and procedure. Special emphasis will be placed on civil liberties, and individual rights guaranteed and protected by the Constitution. Jurisprudence, legal principles, government restraint, and Constitutional limitations will also be examined. Specific attention will be given to Supreme Court cases in order to emphasize the constitutional aspect of criminal justice. B

CJC 120 Correctional Procedures (3-0) 3 hrs.
Development of corrections; the correctional client in local, state, and federal correctional facilities; and court decisions implementing due process and civil rights for correctional clients. B

CJC 125 Juvenile Justice (3-0) 3 hrs.
The course examines theories of causation relating to juvenile delinquency. Topics include the role of police, courts, corrections, and community programs in delinquency prevention, control and treatment. Specific attention will be given to juvenile violent behavior and constitutional rights of the juvenile. B

CJC 130 Probation Administration (3-0) 3 hrs.
Development and historical significance of probation; organization and administration; probation services, preparation of reports, sources of information and family court services. B

CJC 200 Cooperative Education (6-0) 6 hrs.
Each full-time student in Criminal Justice is required to take six credit hours in Cooperative Education in an area of career choice. Students will be assigned to an agency or department within the four county Finger Lakes area. This is designed to supplement and expand the theoretical and doctrinal concepts delivered in a classroom environment. B

CJC 205 Philosophy of Criminal Investigation (3-0) 3 hrs.
An examination of the methods, skills, and basic procedures involved in the investigation of a criminal matter. Topics include interrogation and interviewing, crime scene processing, search and seizure, report writing, and crime scene sketches. Special emphasis will be placed on serious crimes, criminal profiling, and victimology. B

CJC 210 Family Court (3-0) 3 hrs.
A study of the jurisdiction and areas of responsibility of Family Court, functions and proceedings, probate, and parole. B

CJC 215 Current Practices in Corrections (3-0) 3 hrs.
Review of conflicting correctional ideologies, alternatives to incarceration, climate and change in corrections, community corrections, and the role of research. B

CJC 220 Contemporary Trends in Probation (3-0) 3 hrs.
Recent trends in probation, community-oriented services, group methods, and State and Federal research projects, including an in-depth look at treatment modalities for juvenile and adult offenders in the probation rehabilitation process. B

CJC 225 Police Community Relations (3-0) 3 hrs.
The police role in community relations, police professionalism, police responsibility and accountability, police relations with government, and programs and institutions promoting a meaningful police image. B

CJC 231 Environmental Conservation-Outdoor Recreation Law I (3-0) 3 hrs.
This course is an introduction to the New York State and Federal conservation-recreation laws. Specific topics include: fish and wildlife laws, plant laws, endangered species protection, NYS recreation laws (boating, snowmobiling and ATV use), duties of Environmental Conservation Officers and NYS Park Police Officers. (Also listed as CON 231.) F

CJC 232 Environmental Conservation-Outdoor Recreation Law II (3-0) 3 hrs.
This course will cover the main environmental laws and problems that deal with a wide range of conservation-recreation topics such as air pollution, SEQRRA, environmental impact statements, water pollution, freshwater wetlands regulations, property rights and landowner liability, hazardous waste, medical waste, pesticide use, storage, and disposal. It is exclusive of the topics covered in CJC 231, although the same text is used. (Also listed as CON 232.) S
EARLY CHILDHOOD EDUCATION

ECE 100 Emergent Literacy (1-0) 1 hr.
This course covers developmentally appropriate activities that support the development of literacy from infancy through preschool. The contributions of oral language, scribbling and drawing, storybook reading, and environmental print are explored, as are the roles of teachers, peers, and parents. Participants will review a substantial sample of fiction and nonfiction literature that is appropriate for preschool children. Participants will work with young children as they explore strategies to support and assess emergent literacy. B

ECE 105 Expression in the Preschool: Music and Movement (1-0) 1 hr.
Expression in the Preschool: Music and Movement is a one-credit-hour course designed to provide an overview of the inclusion of these topics in the early childhood setting. The potential of vocal and instrumental music to engage children in an active learning environment is stressed. In this course, music and movement activities are considered tools that support learning, and students will explore ways that careful structuring of developmentally appropriate musical activities can support cognitive, physical, social, and emotional growth of children and contribute to the development of a healthy classroom environment. B

ECE 110 Expression in the Preschool: Play (1-0) 1 hr.
This course describes the development of play from infancy through the preschool years. It explores social, functional, constructive, and dramatic play. Special emphasis is given to the ways play supports the development of self, social understanding, self-regulation, the consolidation of knowledge, and language. Through service learning, participants will observe children playing and learn how to facilitate and evaluate play. B

ECO 100 Survey of Economics (3-0) 3 hrs.
This course is a survey of economic theory. It will include a study of micro-economic issues such as supply and demand, economic decision making, competition and its effects and pricing. Also, it will include a study of macroeconomic issues such as inflation, recession, pollution, money, fiscal and monetary policy. B

ECO 210 Principles of Macroeconomics (3-0) 3 hrs.
An introduction to the analysis of principles and problems at the macroeconomic level. Students will examine the public and private sectors, national income, unemployment, inflation, income distribution, and fiscal and monetary policies as they relate to the American economy. B

ECO 211 Principles of Microeconomics (3-0) 3 hrs.
An introduction to the analysis of principles and problems at the microeconomic level. Students will examine consumer behavior; costs of production and profit maximization for an individual firm under varying degrees of competition; pricing and employment of resources; labor relations; and international trade and finance. B

EDUCATION

EDU 200 Foundations of American Education (3-0) 3 hrs.
A study of the historical, philosophical, social, and cultural influences on education in America, including European and non-European influences on American educational thought. Prerequisites: Admission to Teacher Education program, 30 credit hours completed with 2.0 GPA or higher; ENG 102; PSY 130 or PSY 200; HIS 100, 101, 110 or 111; 6 credit hours of foreign language or equivalent and SOC 100. F

EDU 210 Schools in America: Organization and Issues (3-2) 4 hrs.
The course focuses on the dynamics of the school setting and on the interaction between and among students, teachers, administrators, families, and others in the community. Issues covered in this course include schools as social systems, school governance, group processes, curriculum design, social class and educational equity, and attention to diverse learners. This course includes 30 hours of guided observation field experience in the K-12 school setting. Prerequisites: EDU 200 and COM 110. S

EMERGENCY MEDICAL SERVICES

EMCR 130 Certified First Responder 2 hrs.
This course offers basic training to the professional rescuer who arrives first on the scene of a medical emergency. The purpose of this course is to improve the quality of emergency medical care to patients in the pre-hospital setting by personnel involved in on-scene rescue. This course will give the pre-hospital care provider the skills and knowledge in basic life support skills such as assessment, CPR-AED, airway management and bleeding control. Students will be trained to the New York State Department of Health and National Department of Transportation standards. Students who complete the curriculum and pass both the NYS practical and written exam will be certified as CFRs.

EMCR 135 Certified First Responder Refresher 1 hr.
This course is designed for individuals who have been certified by NYS Department of Health as a Certified First Responder for the purpose of maintaining their competency in providing emergency medical care. The content reviews the concepts and materials covered in the CFR course. After successful completion of this course, students are eligible to take the NYS certification exam. Recertification is required every three years. Persons who have previously taken the CFR course for three credits or the CFR refresher for one credit are not eligible to receive credit for this course again. Prerequisite: Proof of certification as a CFR. B

EMCR 145 Introduction to Paramedicine 6 hrs.
This initial course establishes the parameters that a paramedic operates within the pre-hospital setting.
Topics include roles and responsibilities of a paramedic, medical and legal considerations, EMS communications, and documentation. This course provides students with a general overview and principles of anatomy and pathology along with life span development. The paramedic student will be provided with the fundamentals of pharmacology including routes of drug absorption, administration, distribution, bioformation and elimination, dosage calculations, and packaging. This course also begins to establish the parameters that a paramedic operates within the pre-hospital setting. During this course students will begin clinical requirements in communications and morgue labs. 

**Prerequisites:** Student must be accepted into the Paramedic Certification Program. Must hold a minimum certification of Basic EMT and maintain that certification throughout the entire program. Must have a minimum of one year field experience.

**EMCR 155 Paramedic Airway Management** 3 hrs.

This course is the second in a series of courses leading to eligibility for certification as a New York State Paramedic. The course covers the anatomy and physiology of the respiratory system and airway. Emphasis on oxygen therapy and advanced and difficult airway management techniques will be covered during this portion of the program. Endotracheal intubation, paralytics, and surgical airways are some of the procedures taught. Clinical requirements required in this portion of the program will include the operating room labs. **Prerequisite:** Must be accepted into the Paramedic Certification Program. Must hold minimum certification of Basic EMT and must maintain that certification throughout the program. Must have a minimum of one year field experience. EMCR 145.

**EMCR 165 Paramedic – Trauma** 5 hrs.

This course is the third in a series leading to eligibility for certification as a New York State Paramedic. It establishes the parameters that a paramedic operates within the pre-hospital setting. Topics include anatomy of the vascular system with emphasis on the pathophysiology of shock. The course also prepares the student on the anatomy of the musculoskeletal system. The student will also study trauma to the various body systems, including burns, along with kinematics and mechanism of injury. The student will be provided with a solid understanding of patient assessment—the foundation for providing quality patient care. This course will also include scene management in various situations. Students will also be required to attend clinical requirements in emergency departments, burn trauma and phlebotomy labs. Along with these clinical requirements, the student will begin his/her field internship with approved advanced life support agencies and designated preceptors. **Prerequisite:** Must be accepted into the Paramedic Certification Program. Must hold minimum certification of Basic EMT and must maintain that certification throughout the entire program. Must have a minimum of one year field experience. EMCR 155.

**EMCR 175 Paramedic – Cardiology** 12 hrs.

This course establishes the parameters that a paramedic operates within the pre-hospital setting. Topics will include cardiac emergencies. Basicanatomy, physiology, pathophysiology of the heart, and identification of arrhythmias are presented along with the appropriate pre-hospital management modalities. Twelve lead ECG interpretations, pharmacotherapy, defibrillation, cardioversion, and pathophysiology of more common cardiovascular diseases are included in topics. Also, the student will be prepared for certification by the American Heart Association In Advanced Cardiac Life Support along with Pediatric Advanced Life Support, which includes care for the pediatric and neonate patients. During this course of the semester, the student will continue clinical requirements in respiratory therapy, coronary care units, and emergency departments shadowing with physicians and nurses. Students will continue their necessary requirements for field clinical experience as they continue to ride with approved advanced life support agencies and their preceptors. **Prerequisite:** Must be accepted into the Paramedic Certification Program. Must hold a minimum certification of Basic EMT and must maintain that certification throughout the entire program. Must have a minimum of one year field experience. EMCR 165.

**EMCR 185 Paramedic – Medical Emergencies** 12 hrs.

This course is the last in a series to establish the parameters that a paramedic operates within the pre-hospital setting. Topics include medical emergencies frequently covered in the pre-hospital setting, with an emphasis on pathophysiology and management. Topics include abdominal, genitourinary, neurological, behavioral, and respiratory emergencies. Topics will also include basic anatomy, physiology and pathophysiology of the endocrine system, including allergies, anaphylaxis, toxicology, hematology, pulmonology, and infectious diseases. Also covered will be behavioral and environmental emergencies. Certain segments of the general population have special needs based on age, psychological, and physical conditions. Areas covered include providing care to geriatric patients with emotional and psychological emergencies and addressing emergency care to patients involved in abuse, assault, and domestic violence. During the course, students will be required to complete all remaining clinical requirements in pediatric emergency departments, pediatric intensive care units, obstetrics, medical/surgical intensive care units, adult care, and emergency departments shadowing with physicians and nurses. Students will also be required to complete their necessary requirements for field clinical experience they receive while riding with approved advanced life support units and preceptors. At the end of this semester, the student will meet with the Paramedic Review committee to determine eligibility to take the New York State Department of Health Practical and Written exam. **Prerequisites:** Students must be accepted into the Paramedic Certification Program. Must hold a minimum certification of the Basic EMT and must maintain that certification throughout the entire program. Must have a minimum of one year field experience. EMCR 175.

**EMCR 200 Emergency Medical Technician with Defibrillation (1-3-2)** 6 hrs.

This course is designed for professional rescuers who are treating and transporting the sick and injured patient to medical care facilities. The purpose of this course is to give the pre-hospital care providers the skills and knowledge to assess, treat, package, and transport the patient to the medical care facility. Students will be trained to the New York State Department of Health and National Department of Transportation standards. Students who complete the curriculum and pass both the NYS practical and written exam will be certified as EMTs. B
EMCR 205 Emergency Medical Technician with Defibrillation Refresher (1-3) 2 hrs. This course is designed for individuals who have been certified by NYS Department of Health as Emergency Medical Technicians for the purpose of maintaining their competency in providing emergency medical care. The content reviews the concepts and materials covered in the EMT course. After successful completion of this course, students are eligible to take the NYS certification exam. Recertification is required every three (3) years. Persons who have previously taken the EMT course for 3 credits or the EMT refresher for 2 credits are not eligible to receive credit for this course again. Prerequisite: Proof of certification as an EMT.

EMCR 251 EMT Paramedic Refresher (6-0) 5 hrs. This course is designed for individuals who have been certified by NYS Department of Health as an Emergency Medical Technician-Paramedic for the purpose of maintaining their competency in providing advanced adult and pediatric life support. The content reviews the concepts and materials covered in the Paramedic course. After successful completion of this course, students are eligible to take the NYS certification practical and written exams. Recertification is required every three (3) years. Persons will only be able to receive college credit for this course once. Prerequisite: Proof of certification as a paramedic or RN or PA with special criteria is now required. Call the EMS office at (585) 396-4585 for further details regarding specific criteria.

EMCR 260 Critical Care Emergency Medical Transport—Paramedic (5.5-2.5) 6 hrs. The Critical Care Emergency Medical Transport course is designed to prepare paramedics and nurses to function as members of a critical care transport team. Critical patients that must be transported between facilities require a different level of care from hospital or emergency field patients. Participants will gain an understanding of the special needs of critical care patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment, and develop the skills to maintain the stability of hospital equipment and procedures during transport. CEEMTP is open to any paramedic or nurse who has worked in that capacity for two years. Conditional waivers for paramedics granted by UMBC. Current BLS CPR, ACLS, PALS, and BTLS, PHTLS, or TNCC is required.

EMCR 261 Critical Care Emergency Medical Transport—Paramedic Refresher 1 hr. The CEEMTP certificate and renewal are valid for three years. Part of this renewal process is to provide documentation of thirty-six (36) credits of continuing education (CE) as the ALS level with an emphasis in critical care. One of the ways to obtain continuing education is to attend the CEEMTP original program offered. Lectures and labs are broken into the following modules: Critical Care Environment, Breathing Management, Surgical Airway Management, Hemodynamic Management, Cardiac Management, Pharmacological Management, GI, GU and Renal Management, Neurological Management, Complications of Transport and Special Considerations. A student could arrange through the EMS Programs Coordinator to attend the various modules to gain the required continuing education credits. The student would receive written documentation as to the modules attended with the appropriate credits. The student only need attend the hours needed for the refresher. Prerequisite: Current CEEMTP certification.

EMCR 310 Advanced EMT-Intermediate (1-3) 4 hrs. This course is a more complex course designed for professional rescuers who are interested in expanding and building on their knowledge and skills in the pre-hospital setting. A heavy concentration in the area of trauma evaluation and rapid field evaluation and intervention are covered. Competencies include early recognition, assessment, treatment of the patient, and use of advanced airway management, intravenous infusions, and the use of a defibrillator. The Advanced EMT-Intermediate will be able to provide advanced pre-hospital care to acutely ill or injured patients by ambulance services and mobile advanced life support units under medical control. Pretesting is required for all students in this class. Prerequisites: Current NY State Certification as Emergency Medical Technician through either the Emergency Medical course or EMT Refresher course and one year, minimum, active field experience.

EMCR 315 Advanced EMT-Intermediate Refresher (1-3) 2 hrs. This course is designed for individuals who have been certified by the NYS Department of Health as an Advanced Emergency Medical Technician-Intermediate for the purpose of maintaining their competency in providing emergency medical care. The content reviews the concepts and materials covered in the AEMT-I course. After successful completion of this course, students are eligible to take the NYS certification exam. Recertification is required every three (3) years. Persons will only be able to receive college credit for this course once. Prerequisite: Proof of certification as an EMT-I.

EMCR 320 Advanced EMT Critical Care (2-3-2) 6 hrs. This course is designed to prepare the student to administer many Advanced Life Support (ALS) procedures on patients in the pre-hospital setting. This course builds upon the EMT-D and EMT-Intermediate courses. The student who successfully completes the didactic, clinical, and field internship will be eligible to sit for the NYS certifying exam. The EMT-Critical Care will work under the direction of medical control physicians to provide one of the highest levels of pre-hospital care available in New York State. Prerequisites: Current NYS Certificate as an Advanced EMT-Intermediate through the Advanced EMT-Intermediate course or Advanced EMT-Intermediate Refresher course. The student must have been or be currently field active with an EMS agency that provides ALS care. Pretesting will be required for all students that enroll in the course.

EMCR 325 Advanced EMT Critical Care Refresher (3-1) 6 hrs. This course is designed for individuals who have been certified by the NYS Department of Health as a Critical Care Advanced Emergency Medical Technician for the purpose of maintaining their competency in providing emergency medical care. The content reviews the concepts and materials covered in the Critical Care course. After successful completion of this course, students are eligible to take the NYS certification exam. Recertification is required every three (3) years.
Persons will only be able to receive college credit for this course once. **Prerequisite:** Proof of certification as a Critical Care Technician. B

## ENGLISH

**Where ENG 101 is listed as a prerequisite, ENG 104 may be substituted.**

**Where ENG 102 is listed as a prerequisite, ENG 105 may be substituted.**

### ENG 101 Freshman English (3-0) 3 hrs.
Students will develop critical thinking skills, applying them to the writing of college level essays. Students will also learn research techniques and how to incorporate documented research material into a paper. FLCC placement tests will determine placement into ENG 101, ENG 104, or GST 102. B

### ENG 102 Introduction to Literature (3-0) 3 hrs.
Continuing the educational goals of ENG 101 (critical thinking and confident writing), this course helps students to develop reader response and critical analysis papers related to several genres of literature. Writing intensive. **Prerequisite:** ENG 101. B

### ENG 104 Freshman English I Honors (3-0) 3 hrs.
This course may substitute for or be taken in addition to ENG 101. Those who qualify through high interest and skills may be recommended into the Honors English courses or apply to the chairperson of the Department of Humanities. This research writing course is based on readings in different disciplines which are discussed and analyzed to show the interrelatedness of knowledge. B

### ENG 105 Freshman English II Honors (3-0) 3 hrs.
An advanced reading and writing course for students with strong backgrounds in these areas. Readings will encompass four genres: the novel, short story, poetry, and drama. Papers emphasize analytical and writing skills. This course is designed for the student who has a special interest in examining literature in depth and in learning about critical modes. This course is a substitute for ENG 102. **Prerequisite:** ENG 104 or ENG 101 with permission of instructor. B

### ENG 106 Foundations of Literature: Stories of the Bible, Mythology, and Folk Tales (3-0) 3 hrs.
This course provides a cultural base for students interested in reading and studying literature. A wide variety of stories from the Bible, mythology, and folk tales are read and analyzed for universal qualities and as sources for analogies, symbols, and themes found in much of the world’s literature. **Prerequisite:** ENG 101 or ENG 104. B

### ENG 160 Research and Writing in the Information Age (3-0) 3 hrs.
Research and Writing in the Information Age is an exploration of the ever-changing methods of research available in the information age and the methods to present information in a multimedia culture. Students will apply modern search techniques; critically evaluate, organize and document the information they have located; and then use current technology to present information effectively, orally, visually, and in writing. Multimedia techniques, such as digital imaging, Web authoring, and computer-generated presentations will be covered. By the end of the course, the student should be able to use computerized databases and the Internet effectively and efficiently as tools for research (in addition to print sources), whether for scholarly papers or for personal use, and be able to present that information effectively in a variety of traditional and multimedia formats. **Prerequisites:** ENG 101 (C or better) or permission of instructor and CSC 100 (or higher) or equivalent computer experience. B

### ENG 201 American Literature: 1620 - 1865 (3-0) 3 hrs.
A study in selected readings from the important literature of the United States. Emphasis is placed on the most significant writings of representative authors from colonial times to 1865. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 202 American Literature: 1865 - Present (3-0) 3 hrs.
A study in selected readings from the important literature of the United States. Emphasis is placed on the most significant writings of representative authors from 1865 to the present. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 203 World Literature I (3-0) 3 hrs.
A chronological survey of selected readings from the important literature of Greece, Rome, the Far East, and continental Europe, from ancient times to the Renaissance. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 204 World Literature II (3-0) 3 hrs.
A continuation of ENG 203. A chronological survey of selected readings from the important literature of Europe, the Far East, South America, and Africa, from the Neoclassical, Romantic, Realism, and Modern Periods. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 205 Modern Novel (3-0) 3 hrs.
A study of leading British, American, and continental novelists since 1900. Attention is given to ideas, literary form, and critical principles. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 206 The Short Story (3-0) 3 hrs.
The study of the short stories of 19th century and contemporary writers. The different stories include themes of love and loss, families and relationships, and questions of faith. Discussion, analysis, and writing formulate the activities. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 207 Topics in Literature (3-0) 3 hrs.
This course is designed to treat literature as it illustrates certain themes of human concern and the content will vary from semester to semester. Specimen topics might include Alienation in Modern Literature, Women in Literature, the Initiation Theme in Literature, Utopias: Alternative Life Styles, Literature into Film, and Science Fiction. **Prerequisite:** ENG 102 or permission of instructor. B

### ENG 236
ENG 208 Survey of Black American Literature (3-0) 3 hrs.
This course will serve as an overview of Black American Literature, beginning with works written in the dialect of slavery and the rural south, and continuing through (and past) what is generally known as the Harlem Renaissance Movement—an era traditionally delineated by the decade of the 1920's that produced mainstream recognition of African-American Art in all its forms. Works by Paul Laurence Dunbar, Langston Hughes, Zora Neale Hurston, W.E.B. DuBois, Countee Cullen, Claude McKay, and others will be included. While studying the literature, students will also study the spirit(s) of the times as reflected in and shaped by the arts. Prerequisite: ENG 102 or permission of instructor. B

ENG 209 Introduction to Children's Literature (3-0) 3 hrs.
A survey of quality literature past and present for children and young adults. In this course there will be an exploration of a range of works written for or read by children and early adolescents in an effort to understand better the nature and value of children's literature. The exploration will start with picture-books and progress through read-to-me, read-with-me books and continue up to works designed for young adults. An examination of Caldecott and Newberry Award Winners will help the student understand what makes certain works written for and read by children good. Prerequisite: ENG 102 or permission of instructor. B

ENG 212 The American Novel (3-0) 3 hrs.
The American Novel course will examine the historical development of the American novel from the romantic period to the present. Romanticism, realism, and naturalism will be studied as literary movements. Prerequisite: ENG 102 or permission of instructor. B

ENG 213 Introduction to Dramatic Literature (3-0) 3 hrs.
This course is an introduction to the history and genre of drama. By exploring some of the best-known plays throughout theatre history and how they were performed students will develop an understanding of, and appreciation for the theatre. Lectures, films, and attendance will provide students with a partial overview of the vast range of theatre history and literature. Prerequisite: ENG 101 Freshman English. (also listed as THE 210) S

ENG 215 Literature of the Environment (3-0) 3 hrs.
The purpose of this course is to develop a deeper understanding and appreciation for writings on nature. The focus is on American nature writing presented chronologically from William Wood (1634) to Barry Lopez (2000). The selected writings are illustrative of the three main dimensions of nature writing: natural history information, personal responses to nature, and philosophical interpretation of nature. Prerequisite: ENG 101 or permission of instructor. S

ENG 221 Creative Writing (3-0) 3 hrs.
This course focuses on the writing of short stories and poetry. Techniques and skills of these forms are examined in class and practiced in student writing. Previous experience in fiction writing or in poetry is not required, but the student is expected to be proficient in the mechanics of writing. Prerequisite: ENG 101 or permission of instructor. B

ENG 222 Creative Writing II (3-0) 3 hrs.
A writing seminar for serious practitioners of literary forms. Participants will engage in organizing a personal writing project and will present writing in the seminar for appraisal. Previous experience in various forms of writing is assumed. Prerequisite: ENG 101 or permission of instructor. B

ENG 223 Journalism (3-0) 3 hrs.
This is an introductory course into the skills of the practicing journalist. Emphasis will be on the study of news gathering and news writing techniques. Students will employ these skills in the production of material suitable for use in the school newspaper and other news publications. Prerequisite: ENG 101. B

ENG 226 Professional and Technical Writing (3-0) 3 hrs.
This course is designed to prepare students for writing in a fast-paced, computer-based world. The writing — memos, instructions, process descriptions, technical reports, and proposals — serves to make technology understandable to the reader. Accessibility, accuracy, clarity, conciseness, correctness, design, format, layout, neatness, and readability are stressed. Some computer experience is helpful. Prerequisite: ENG 101. B

ENG 227 Shakespeare's Plays (3-0) 3 hrs.
Five to seven of Shakespeare's plays will be read and discussed, with selections from the comedies, romances, histories, and tragedies represented. Films of some plays will be shown so that students will be introduced to Shakespeare as both playwright and poet. Close reading of the texts is emphasized. Prerequisite: ENG 102 or permission of instructor. B

ENGINEERING SCIENCE

ESC 100 Introduction to Engineering (1-0) 1 hr.
An introductory descriptive course about engineering. Topics include: the various branches of engineering and their history, famous engineers, engineering education today, and the career paths in engineering. F

ESC 105 Engineering Graphics (1-5) 3 hrs.
This course includes technical sketching, visualization, design, and the use of computer aided design (CAD). Topics include geometric construction and modeling, lettering, freehand sketching, orthographic projection, isometric projection, oblique projection, sectional views, dimensioning, working drawings, and the use of CAD software. Emphasis is on developing both manual sketching and CAD skills to convey engineering designs in accordance with industry standards. S

ESC 210 Engineering Design I (2-0) 1 hr.
This course is the first part of a two-course sequence in engineering design. It involves the paper design and analysis of a mechanical system whose major component is associated with robotics. The students will work in teams. Team members will include engineering and technology members, reflecting a real life industry setting. Prerequisite: permission of instructor. F
ESC 211 Mechanics I (Statics) (3-0) 3 hrs.
This introductory course presents the theory and application of the principles of statics for use in subsequent courses and in engineering practice. The subject of statics deals with bodies at rest or in equilibrium, including a study of forced systems, vectors, analytical methods of solution, friction, center of gravity and centroids, moments of inertia of areas. Prerequisite: MAT 272, PHY 151. F

ESC 212 Mechanics II (Dynamics) (3-0) 3 hrs.
This course is the second semester of a two-semester sequence in Engineering Mechanics. It presents the fundamental laws of Newtonian dynamics for particles and rigid bodies, provides a rigorous methodology for solution of problems, and presents a wide variety of examples of application. The course relies heavily on the use of vectors and vector algebra. Subject areas discussed are kinematics of particles, including rectilinear, relative and curvilinear motion; kinetics of particles, including Newton's Laws, dynamic equilibrium, angular momentum, work, energy principle, conservation of energy, and impulse-momentum; kinematics of rigid bodies, including Newton's Laws, angular momentum, plane motion, work and energy; introduction to vibrations (time permitting). Prerequisite: ESC 211. S

ESC 213 Strength of Materials (3-0) 3 hrs.
A study of the basic concepts of strength of materials; stress and strain in external loading, shear and torsion; centroids and moments of inertia; shear, moment, and stress in beams; load, shear and moment diagrams; design and deflection of beams (statically determine and indeterminate); combined stresses; welded, bolted and riveted joints; columns. Prerequisite: ESC 211. S

ESC 220 Engineering Design II (2-0) 1 hr.
This course is a continuation of Engineering Design I. It involves the completion of the design that was started in the first course and culminates in the manufacturing of a prototype of the paper design. The students will work in teams. Team members will include engineering and technology members, reflecting a real life industry setting. Prerequisite: ESC 210. S

ESC 222 Electric Circuits (3-2) 4 hrs.
This course is designed as the introductory course in linear circuit analysis normally offered to engineering students in the sophomore year. It provides an introduction to the theory of circuit analysis. Subject areas include: basic circuit quantities, voltage and current sources, purely resistive circuits, Kirchoff's Laws, equivalent resistances, nodal analysis, loop analysis, linearity, source transformation, Thevenin and Norton theorems, capacitance and inductance, RC, RL, and RLC circuits, sinusoidal response, phasors, power. An introduction to op-amps is included. There is a strong emphasis on problem solving, and many examples will be worked in class. Homework will be assigned at each class. Prerequisite: PHY 152 or permission of instructor. S

ESC 235 Introduction to Thermal Science (3-0) 3 hrs.
First course in thermal science. Basic concepts and fundamental laws of thermodynamics. Heat transfer by conduction, convection, and radiation. Engines, power and refrigeration cycles. Prerequisite: MAT 272, PHY 151. F

ENVIRONMENTAL SCIENCE

ENV 110 Pesticides in the Aquatic Environment (1-0) 1 hr.
The intent of this course is to provide the student with a broad awareness of the effects of pesticides in aquatic and ground water systems; secondarily, to provide information toward licensing. B

ENV 217 Environmental Planning and Impact Analysis (3-0) 3 hrs.
This is an introductory course in the multi-disciplinary field of environmental planning. Techniques used to identify, inventory, and evaluate natural resources are examined. Local case studies, regulatory laws, and the environmental decision-making process are reviewed. Topics are developed further through assigned readings and classroom discussions. Students put concepts into use with realistic projects, involving local environmental land use issues. (Also listed as CON 217.) F

FRENCH

FRN 101 French I (3-0) 3 hrs.
This is a beginning language course designed for students with no previous experience in French, or whose experience does not make placement in a higher level French course advisable. The course is designed to provide students with the fundamentals of French pronunciation and grammar as well as an introduction to Francophone culture. The course will stress the development of communication skills, especially speaking, but will also promote reading, writing, and listening skills. F

FRN 102 French II (3-0) 3 hrs.
This course is a continuation of the introductory level course (FRN 101), with increased emphasis on vocabulary enrichment, grammar, and reading comprehension. Prerequisite: FRN 101 or one or two years of high school French. S

FRN 105 Conversational French I (1-1) 1 hr.
The purpose of this course is to develop French language conversational ability by providing students with additional opportunities to practice speaking and listening skills. It will also complement the parent foreign language course (i.e., French 101) by reinforcing the grammar, vocabulary, and cultural points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in French 101 in the same semester that he/she is enrolled in the conversation course. B

FRN 106 Conversational French II (1-1) 1 hr.
The purpose of this course is to continue developing French language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., French 102) by reinforcing the grammar, vocabulary, and cultural points presented in the course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in French 102 in the same semester that he/she is enrolled in the conversation course. B

FRN 175 Foreign Language Immersion (3-0) 3 hrs.
The purpose of this course is to provide students with a linguistic and cultural travel experience relative to their
course work in French. This travel course is conducted in different locations throughout the world where the target language is spoken. The course will emphasize communication in the target language, as well as develop an understanding and appreciation of the host country’s culture. Where possible, students will be lodged in “homestay” accommodations. SU

FRN 201 French III (3-0) 3 hrs.
This course provides vocabulary expansion and a review of basic grammatical structures introduced in the first year of study. Emphasis is on the continued development of French language skills through the study and discussion of authentic readings in Francophone literature and culture. Students will learn strategies to improve reading comprehension and fundamental composition writing skills. Prerequisite: FRN 102 or two to three years of high school French. B

FRN 202 French IV (3-0) 3 hrs.
This is a continuation of the intermediate level course (FRN 201). Emphasis is on further expansion of communication skills in French, both spoken and written. Students will refine critical reading and writing skills through further exploration of Francophone literature and culture. Prerequisite: FRN 201 or three to four years of high school French. B

FRN 203 Conversational French III (1-1) 1 hr.
The purpose of this course is to continue developing French language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., French 201) by reinforcing the grammar, vocabulary, and literary points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in French 201 in the same semester that he/she is enrolled in the conversation course. B

FRN 204 Conversational French IV (1-1) 1 hr.
The purpose of this course is to continue developing French language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., French 202) by reinforcing the grammar, vocabulary, and literary points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in French 202 in the same semester that he/she is enrolled in the conversation course. B

FRESHMAN SEMINAR

FS 100 Liberal Arts First Year Seminar (2-0) 2 hrs.
Students will examine the origin of liberal arts and what it means today. Students will explore strategies for success at college, learn how to plan a successful transfer to a four-year college or university, and explore some of the career options available with the background in liberal arts. Students will develop knowledge of how to succeed in college, expand their involvement in the college community, and explore global awareness through on and off campus activities. B

GENERAL STUDIES

(Courses do not fulfill humanities, social science, science or mathematics requirements. GST courses only fulfill general electives.)

GST 101 First Year Student Seminar (3-0) 2 hrs.
First Year Student Seminar is designed to acquaint students with the nature and purpose of a college education and provide them with knowledge of the resources for helping them acquire the skills and techniques necessary to achieve their academic goals. B

GST 102 College Composition (3-0) 3 hrs.
This course approaches writing as a process and is designed to aid students in developing and refining writing ability. Emphasis is placed on the prewriting, writing, and revising stages of paragraph and essay writing. B

GST 106 Grammar and Sentence Basics (1-0) 1 hr.
The focus of this five week course is to provide students with instruction in basic grammar and sentence construction. This course is graded S (Satisfactory) or U (Unsatisfactory). B

GST 107 Paragraph Basics (1-0) 1 hr.
The focus of this five week course is paragraph development and the use of organizational patterns. This course is graded S (Satisfactory) or U (Unsatisfactory). B

GST 108 Essay Basics (1-0) 1 hr.
The focus of this five week course is the development of multiple paragraph essays and includes prewriting, drafting, revising and editing. This course is graded S (Satisfactory) or U (Unsatisfactory). B

GST 116 Introduction to College Studies (3-0) 3 hrs.
An examination of learning theories and strategies necessary for college success. Topics include: note taking; memory development; textbook reading; test taking; current research techniques; goal setting; and time and stress management. Students will also complete a community project. The course objective is for students to become independent learners who will succeed in college. B

GST 117 College Success Strategies (1-0) 1 hr.
This five week course will address goal setting, motivation, time and stress management, note-taking and test taking strategies. B

GST 118 Reading Strategies for College (1-0) 1 hr.
This five week course will focus on college reading strategies, reading comprehension, and read/study systems. B

GST 119 The RESEARCH Paper (1-0) 1 hr.
In this five week course, students will be guided through the steps needed to complete a research paper. B

*The student can enroll in one, two, or all three of the modules. The course is similar to GST 116 and is considered its equivalent if all three modules are elected.

GST 121 Effective Reading (3-0) 3 hrs.
This course is designed to improve a student’s understanding of written materials in college. Emphasis is placed upon the development of vocabulary skills
and literal and critical comprehension skills. Specific instruction is based upon an assessment of the student’s current level of performance. Class size is limited to provide opportunities for individualization and/or small group instruction. B

GST 122 Effective Reading II (3-0) 3 hrs.
This course is a continuation of GST 121 Effective Reading. By permission of the Department Chair. B

GST 126 Speed Reading (3-0) 3 hrs.
This course will utilize modern methods for increasing the reading speed while emphasizing the retention and comprehension of written material. An excellent course, not only for college students, but also for those whose work or interests demand a great deal of reading. Course is graded on a Satisfactory or Unsatisfactory basis. B

GST 131 Critical & Analytical Thinking (3-0) 3 hrs.
The emphasis in this course is on critical thinking strategies as they apply to reading, writing, listening, and problem solving. Concepts such as problem solving, perceiving, language, and inferring are addressed. B

GST 141 Basic Mathematical Concepts for Nursing Students (1-0) 1 hr.
Provides incoming nursing students help in mathematics skills essential to the safe administration of medications. The emphasis will be on (1) complete understanding of fractions, decimals, and percentages and how they work, (2) dimensional analysis, (3) conversion from one standard of measure to another, (4) basic equational relationship, and (5) how to solve problems. Students will be informed by the Nursing Department of the need to take this course. This course will be offered in late August and Jan Plan and will be open only to nursing students. Course is graded on a Satisfactory or Unsatisfactory basis. B

GST 142 Fundamental Mathematics and
Algebraic Skills (3-0) 3 hrs.
A beginning course in mathematics designed to prepare the student for further pursuits in algebra or statistics. This is an introductory course in algebra for the student who has had no algebra or minimal algebra skills. Topics include integers, algebraic expressions, exponents, one variable first-degree equations and inequalities, applied problems, polynomials, factoring, and coordinate plane and two-number equations. (Used for general elective credit only.) B

GST 192 Personal Growth and
Development (3-0) 3 hrs.
A group experiential course involving discussion and some written materials. Emphasis will be placed on the process and encouragement of change and maturation as they pertain to each individual. B

GST 196 Career Explorations (3-0) 3 hrs.
The course will cover procedures for conducting a successful job search. Job skills will be identified, occupations investigated, and communication skills developed in the areas of resume writing, letter writing, and interviewing techniques. Course is graded on a Satisfactory or Unsatisfactory basis. B

GST 201 Teacher Assistant I (3-0) 3 hrs.
This course is designed to prepare paraprofessionals to assist certified teachers in the education of children. Students will develop the instructional techniques necessary to function as a teacher assistant, gain an understanding of the functioning of a school system, and explore current trends in education. F

GST 202 Teacher Assistant II (3-0) 3 hrs.
This course is also designed to help prepare paraprofessionals to assist certified teachers in the education of children. Students in the course will develop the skills necessary to effectively manage students’ behavior and environment, develop an understanding of the various levels of child growth and development, and learn to communicate and cooperate effectively with students and co-workers. S

High School Equivalency Preparation (SCP 087/088) no credit
This course is run in the Fall and Spring to help students prepare for the High School Equivalency (G.E.D.). There is no cost for the course. B

Adult Basic Education Program (SCP 087/088) no credit
This course runs in the fall and spring and is designed to help students without a high school diploma to improve basic reading, writing, and mathematics skills. It often leads to enrollment in the High School Equivalency Preparation course. It is held in the day and evenings. There is no cost for the course. B

GEOGRAPHIC INFORMATION SYSTEMS

GIS 100 Introduction to Geographic Information Systems (3-2) 5 hrs.
This course includes lecture, discussion, and laboratory experience to provide an overview of Geographic Information Systems through a mix of theory and project case studies. Fundamental concepts and terminology, the role of GIS in spatial data management, methods of data collection and input, data modeling and representation, storage and retrieval of spatial data, concepts of file and database systems, and manipulation and analysis features of GIS will be covered. Prerequisite: Computer literacy in Windows. SU/F

HISTORY

HIS 100 Shaping of Western Society I (3-0) 3 hrs.
A study of selected major traditions, values, institutions, and ideas which have shaped Western civilization from antiquity through the Renaissance era (c. 1650). Topics to be studied within the framework of the individual and society may include the developments of law and the state, social change, the Judeo-Christian experience, and popular movements. May be taken to fulfill either a Humanities (HUM 100) or Social Science (HIS 100) elective requirement. (Also listed as HUM 100.) B

HIS 101 Shaping of Western Society II (3-0) 3 hrs.
A study of selected topics organized around the theme of the individual and society that have occurred within
the Western tradition since the 18th century and progressing to the present day. Topics to be studied may include political revolution, industrial capitalism and socialism, social change, war and peace, and recent developments within Europe and between Europe and non-European nations. HIS 100 or HUM 100 is NOT a prerequisite. May be taken to fulfill either a Humanities (HUM 101) or Social Science (HIS 101) elective requirement. (Also listed as HUM 101.) B

HIS 110 United States History I (3-0) 3 hrs.
A study of the foundation of American History with emphasis on political, economic, social, and intellectual ideas from its settlement through 1877. B

HIS 111 United States History II (3-0) 3 hrs.
A continuation of the first semester course. Beginning with the reconstruction, the nation’s development is traced to the present time. B

HIS 122 Modern World History (3-0) 3 hrs.
This course is a survey of modern historical developments of principle non-western societies/cultures including India, China, Japan, Korea, the Middle East/Islam, and Africa. It broadly addresses the development of these civilizations and the influences of major historical trends and events up through the present, including early history and culture; western influence; conflict/war; reform movements; contemporary events; and related international affairs. B

HIS 206 The Indian in American History (3-0) 3 hrs.
An introduction to the role played by the Native American peoples in the history of the American nation from pre-Columbian times to the present. The student will examine the white images of the Indian as they evolved in our nation and the relations between white and Indian in order to understand more clearly the contemporary Indian Americans as people. Special emphasis will be given to northeast Native people, in particular the Iroquois. Prerequisite: HIS 111 or permission of instructor. B

HIS 215 Ireland History, Culture, and the Politics of Peace (3-0) 3 hrs.
This course will examine Irish history and culture through a wide spectrum of topics, covering: mythology, folklore, literature, music, art, history, and politics. Issues of cultural identity will be discussed with special focus on literary response to social events in the course of Irish history. This course emphasizes reading, writing, and oral presentation with strong emphasis on critical evaluation and discussion of historical, social, cultural, and political issues. Students will be exposed to Irish art and Irish music and theatre. B

HIS 261 War & Society in the 20th Century (3-0) 3 hrs.
Focusing on the period 1890 to 1950—from the First World War, through the Second World War and emergence of the Cold War—this course will examine the crucial interaction between war and society in the conflict-ridden twentieth century: how war has sparked dramatic social change and how society has given both form and substance to modern war. Prior completion of HIS 101, HIS 111 or HIS 122 is strongly recommended, but not required. B

HIS 269 The United States History since 1945 (3-0) 3 hrs.
Liberal ascendency and the Cold War; the Fair Deal; modern Republicanism; the Great Society; an assertive America, culminating in Vietnam; the New Right; the post Cold War world. Prerequisites/Corequisites: HIS 111 or 122, or a score of 85 or higher on the Regents Exam in U.S. history. S

HONORS

HON 100 Interdisciplinary Honors Seminar I (3-0) 3 hrs.
A course developed around major themes that will be approached from the perspective of various academic disciplines. This course is designed to facilitate in depth study of the topics selected each semester. Prerequisite: Open to all students interested in a particular seminar topic as well as Honors students. See Honors Director for details. B

HON 200 Interdisciplinary Honors Seminar II (3-0) 3 hrs.
This course description is the same as HON 100. The Honors Seminars will alternate between problem topics such as "Challenges of the Technological Society" and such philosophical considerations as "Justice: Absolute and Transitional Aspects." Prerequisite: Open to all students interested in a particular seminar topic as well as Honors students. See Honors Director for details. B

HORTICULTURE

HRT 110 Introduction to Ornamental Horticulture (3-0) 3 hrs.
Emphasis on the numerous specialties in Ornamental Horticulture. Also a study of plants as living organisms, theory of pruning, fertilizing for healthy plants, hormones in plants, grafting and soil conditioning, Nutrient response of plants, soil fertility, fertilizers, fertilizer calculations, and spreader calibration will also be covered. This is recommended as a beginning course in Ornamental Horticulture. F

HRT 111 Tree Culture & Maintenance (3-0) 3 hrs.
(Course can be used as either a conservation or horticulture elective.) Designed for individuals who desire a knowledge of tree health, value assessment, pruning, cavity work, wound treatment, climbing, general repair of trees, techniques of fertilization and transplanting. Practical aspects and field experience are emphasized. S

HRT 130 Introduction to Floriculture (3-0) 3 hrs.
This course deals with flower production, use, and merchandising. Special emphasis on production and forcing of flowers for holidays as well as floral arrangements. Practical greenhouse experience included. S

HRT 151 Plants Materials (3-0) 3 hrs.
This course exposes students to the identification, selection, adaptation, and utilization of common ornamental and native plants in New York State. Landscape value and wildlife usage of plants will be discussed where appropriate. The student will gain identification
proficiency in association with a knowledge of plant pattern and environmental planning. A field project of individualized interest will be included. Field trips to area arboreta are included. (Also listed as BIO 151.) Corequisite: BIO 121 or permission of instructor. F

HRT 160 Unique Horticulture Facilities (1-1) 2 hrs.
This three- to four-day course provides students with field and travel experiences relative to their coursework in ornamental horticulture. This travel course is conducted in different locations in the Northeastern United States that are noted for their botanical gardens and horticulture facilities. Students will be provided with the opportunities to observe a wide variety of plant species and learn about their identification and care. Employment opportunities at the visited facilities will be explored. S

HRT 200 Pest Management & Control (3-0) 3 hrs.
Designed to provide the students with a working knowledge in developing environmentally sound programs in limiting harmful plant diseases and pests. The course will emphasize the principles and practices of integrating chemical, culture, and biological controls; and pesticides and the environment. Training students in the types and usage of pesticides and pesticide equipment will be included. Field trips. S

HRT 201 Landscape Design (3-0) 3 hrs.
This course presents the currently accepted landscape design principles and helps develop skills in graphic landscape presentation. Included will be the theory and principles of landscape design for private homes or commercial enterprises, along with relationships between principles of landscape design and elements of the environment that lead to sound ecological practices. Graphic presentation and discussion of design elements will be emphasized. S

HRT 202 Landscape Construction and Maintenance (3-0) 3 hrs.
This course will familiarize students with construction of walks, drives, walls, patios, fireplaces, garden structures, lawns, flowerbeds; and the planting and staking of trees and shrubs. Maintenance practices for the landscape, including actual pruning of small trees and shrubs, irrigation, and Spring and Fall preparation of the landscape will be studied. Topics on business establishment and operation as well as bidding the job will be discussed. S

HRT 203 Turf Management (3-0) 3 hrs.
This course deals with grasses and grass varieties, cultural requirements of turfgrass, establishment, mowing, dethatching, aerating, fertilizing, irrigation, and weed control. F

HRT 204 Plant Propagation and Nursery Management (3-0) 3 hrs.
This course will familiarize the student with methods of increasing plant numbers and producing a salable product. Topics include growth structures, media, plant culture, sexual and asexual propagation, grafting, and nursery management. Practical greenhouse and field experience included. B

HRT 205 Turf Management for Golf Courses (3-0) 3 hrs.
Designed to help prepare a student as a golf course superintendent. The course will cover construction of golf courses, care of trees and fairways, irrigation, personnel management, and scheduling. S

HRT 220 Horticulture Practicum/Internship (3-0) 3 hrs.
A field course requiring the student to work with appropriate horticulture employers and agencies to gain practical on-the-job experience. S

HOTEL & RESORT MANAGEMENT

HTM 100 Principles of Hotel/Resort Operations (3-0) 3 hrs.
An overview of the history, organizational structure, and economics of the hotel business and career opportunities in the hospitality industry. The emphasis of the course will be an examination of the technical operations integral to hotel and resort management. Areas of study will include: hotel and resort operations; front office operations; food, beverage and restaurant operations; housekeeping and engineering; sales; and staff management. B

HTM 120 Front Desk Operations (3-0) 3 hrs.
This course will provide detailed analysis of the policies and procedures utilized in managing an effective front desk. Areas of study will include guest check-in and check-out, front office operations and structure, reservations, phone service and the switchboard, the accounting process, and the night audit. Each student will focus on a service-oriented approach to proper guest contact. S

HTM 125 Housekeeping Systems (3-0) 3 hrs.
This course is designed to examine the day-to-day functions of an effective housekeeping department. Cleanliness standards, housekeeping procedures, inspecting, and cleaning supplies and equipment will be discussed. The student will also explore engineering department equipment and practices with an emphasis on preventive maintenance. S

HTM 130 Introduction to Food and Beverage (3-0) 3 hrs.
This course examines the complexities of food and beverage management. Both hotel food service operations and free-standing restaurants will be discussed. Students will explore menu planning, pricing, sanitation and safety, kitchen layout, storage facilities and principles, food preparation techniques, purchasing and inventory, beverage control, responsible beverage management, and food service presentation methods. B

HTM 135 Rooms Division Management (3-0) 3 hrs.
This course will provide detailed analysis of the policies and procedures utilized in managing the rooms division of a hotel. Predominant areas of study will include the front office and housekeeping. The student will explore guest check-in and check-out, front office operations and structure, reservations and the switchboard, the accounting process, and the night audit. The day-to-day functions of an effective housekeeping department, cleanliness standards, housekeeping procedures, inspecting, and
cleaning supplies and equipment will also be discussed. Each student will focus on methods for cultivating a service-oriented attitude in rooms division employees. S

HTM 205 Principles of Food Production (3-3) 4 hrs.
This course is an introduction to the basic principles of food preparation. Topics of study include kitchen organization and efficiency, equipment usage, recipe utilization and manipulation, food composition, preparation methods, ingredient uses and availability, product evaluation, sanitation techniques, and kitchen safety. Prerequisites: HTM 100 and HTM 130. S

HTM 210 Hospitality Computer Applications (3-0) 3 hrs.
This course allows the student to interact with LODGEMATE, a state-of-the-art, Front Office Property Management System. Students will simulate an actual front desk experience as they enter the system and manage hypothetical guest accounts. Current hotel computerization trends will also be examined, including the latest technological advances and software packages. Additionally, students will explore hospitality applications of the PageMaker desktop publishing package. Prerequisite: HTM 100 or HTM 120. S

HTM 220 Hospitality Marketing and Sales (3-0) 3 hrs.
This course allows the student to analyze basic sales management policies and procedures. The functions of a working hotel sales department will be discussed with an emphasis on the utilization of property management system data in sales planning, brief preparation, sales presentations, and client contact. The student will also consider trade show and exhibit sales techniques, sales blitz planning and execution, and marketing research and promotional programs. Prerequisite: HTM 100. F

HTM 225 Meeting Planning and Conference Management (3-0) 3 hrs.
This course discusses the specialized field of meeting and conference management and its impact on the hotel industry. Each student will consider the component parts of a successful meeting and analyze these parts from both a meeting planner and hotel management team standpoint. Areas of study will include: site selection and negotiations, program development, banquet food service, function room set-up, conference support services, and meeting evaluation. Prerequisite: HTM 100. F

HTM 230 Hotel Law (3-0) 3 hrs.
Hotel law is designed to introduce the student to the legal issues surrounding the practices of the hospitality industry. Topics to be covered include, but are not limited to, contract law, negligence, bailment, rights of innkeepers, rights of guests, liability with respect to the sale of food and alcohol, regulation and licensing, employment issues, and casino law. F

HTM 250 Hotel and Resort Management Internship (3-0) 3 hrs.
The Hotel and Resort Management Internship Program enables Finger Lakes Community College students to supplement their academic studies and increase career awareness through field work related to the hospitality industry. The students’ activities during the internship will include both participation and observation so that they can develop applicable skills and an understanding of the overall organization and operation of a hotel facility. B

HUMAN SERVICES

HUS 102 Human Services in Contemporary America (3-0) 3 hrs.
An introduction to the contemporary Human Services field. It includes a philosophical and theoretical orientation to Human Services; exploration of agency structure, personnel and services; and an agency visitation. Professional and personal human services competencies, ethics and the law are also examined. B

HUS 204 Field Experience I (4-0) 4 hrs.
Field Experience with individual and group supervision. The student will spend six-eight hours per week in direct agency service under supervision, for a total of ninety hours during the semester and class time in small group supervision. Emphasis will be on developing and strengthening work-related competencies. Prerequisites: HUS 102, PSY 150 and permission of instructor. B

HUS 205 Field Experience II (4-0) 4 hrs.
Field experience with individual and group supervision. The student will spend six-eight hours per week in direct agency service under supervision, for a total of ninety hours during the semester and class time in small group supervision. Field Experience II affords students a second placement with possibilities of exposure to a different area of human services or a similar, more intense experience. It also includes a major research project. Prerequisites: HUS 102, HUS 204, PSY 150 and permission of instructor. B

HUMANITIES

HUM 100 Shaping of Western Society I (3-0) 3 hrs.
A study of selected major traditions, values, institutions, and ideas which have shaped Western civilization from the Classical Greeks through the Renaissance era (c 1650). Topics to be studied within the framework of the individual and society may include the developments of law and the state, social change, the Judeo-Christian experience, and popular movements. Students will work with readings, simulations, type studies, visual media, and individualized activities to better understand the present through a study of the past. May be taken to fulfill either a Humanities (HUM 100) or Social Science (HIS 100) elective requirement. (Also listed as HIS 100.) B

HUM 101 Shaping of Western Society II (3-0) 3 hrs.
A study of selected topics organized around the theme of the individual and society that have occurred within the Western tradition since the 18th century and progressing to the present day. Topics to be studied may include political revolution, industrial capitalism and socialism, social change, war and peace, and recent developments within Europe and between Europe and non-European nations. Students will work with readings, visual media, role playing, simulations, type studies, and individualized activities to better understand how the contemporary world evolved. HIS 100 or HUM 100 is NOT a prerequisite. May be taken to fulfill either a Humanities (HUM 101) or Social Science (HIS 101) elective requirement. (Also listed as HIS 101.) B
MASSAGE

MAS 110 Swedish Massage (3-4)  4 hrs.
In this course, the student will learn the history, theory, and technique of the Swedish Massage. The five strokes of the Swedish System and the application of these strokes in full body massage will be taught. Other topics will include techniques for draping and body positioning of clients. An overview of the indications and contraindications for Swedish massage, basic hygiene, equipment, lubricants, and supplies will be presented. Instruction in “Body Mechanic” for the massage therapist and self-care techniques will be covered. Corequisite: BIO 171 with a grade of C or better.  F

MAS 205 Medical Massage (5-2)  5 hrs.
This course will cover an introduction to medical massage, including various healthcare settings: hospital for both inpatients and outpatients, private practice, and clinics. Topics include specific medical terminology, specific techniques for pathologies and injuries, subjective and objective assessment and planning documentation for insurance cases, and the benefits of massage as prevention versus medicine. Prerequisites: BIO 171 and 172, BIO 165 and 265, MAS 110, 210, 211, 215 each with a grade of C or better. Corequisites: MAS 220, MAS 245, MAS 250.  F

MAS 210 Shiatsu I (4-3)  4 hrs.
This course will present the fundamentals of classical Shiatsu theory, the emerging styles of classical and modern Shiatsu modalities, the history of Chinese medicine, traditional Chinese medical concepts as they relate to Shiatsu, Oriental anatomy, the anatomy of energy, and Oriental physiology. The methods of assessment and the techniques for formulating a treatment will also be covered. This course will prepare students for MAS 211 Shiatsu II. The students will be introduced to the practice of Shiatsu with hands-on demonstrations and practice, during the two-hour laboratory component of the course. Prerequisites: BIO 171 and MAS 110 with grades of C or better. Corequisites: BIO 172 and BIO 165.  S

MAS 211 Shiatsu II (1-3-3)  4 hrs.
This course will emphasize hands-on demonstrations and practice of the Shiatsu technique. The philosophy of Oriental thought and Oriental medical theory taught in MAS 210 Shiatsu I will be expanded upon and will be the basis for the evolution of the Shiatsu technique practiced in this course. Central theoretical concepts will be reviewed through a combination of lecture and hands-on palpation of energy centers, meridians, and acupressure potent points (tsubos). Students will practice energy assessment and will learn to give a full Shiatsu treatment. The practice of Shiatsu involves body mechanics which train the practitioner to originate thought, energy, and movement from the Hara. Therefore, the study of Shiatsu includes not only the practice of a physical technique, but requires the integration of Oriental philosophical principles to reach a state of centeredness and calm necessary to energy assessment. Students will learn the concept of “Bodymind” as one entity. Prerequisites: BIO 171 and 172, BIO 165, MAS 110, MAS 210 each with a grade of C or better. Corequisites: BIO 265, MAS 215.  F

MAS 215 Connective Tissue and Neuromuscular Massage Therapies (3-4)  4 hrs.
This course will cover two bodywork modalities utilized in the relief of myofacial (soft tissue) pain/dysfunction syndromes: 1) neuromuscular therapy (NMT), which emphasizes the role of the nervous system in muscle pain, and 2) connective tissue therapy (CTT), which focuses on freeing muscle structures from hardened and adhered connective tissue. Prerequisites: BIO 171 and 172, BIO 165, MAS 110, MAS 210 each with a grade of C or better. Corequisites: BIO 265, MAS 211.  S

MAS 220 Law and Ethics (2-0)  2 hrs.
This course informs students about the legal and ethical aspects for the profession of a licensed massage therapist (LMT). Topics included in the course are: legal standards, professional conduct, unprofessional conduct, professional misconduct, and disciplinary procedures. Other topics include the examination of the code of ethics of an LMT, standards for practice, and ethical decision making. Paperwork and procedures necessary for applying to take the New York State Massage Therapy licensing exam will be reviewed. Prerequisites: BIO 171 and 172, BIO 165 and 265, MAS 110, MAS 210, MAS 211, MAS 215 each with a grade of C or better. Corequisites: MAS 205, MAS 250, MAS 245.  S

MAS 225 Alternative Therapies (3-0)  3 hrs.
This course explores the variety of options available today for use in the pursuit of holistic health. Alternative therapies will be viewed as complementary to the existing medical system. The course will look at the theories, clinical research, politics, and controversies around the use of various alternative healing modalities. It will provide the student with information to evaluate the use of complementary therapies in healing and health maintenance. The format of this course includes lecture, class discussion, guest speakers, audiovisual aids, and student presentations. This course is open to anyone interested in alternative therapies. (Also listed as NUR 220.)  B

MAS 240 Massage Field Experience  2 hrs.
Seventy hours of field experience will be spent in a massage/complimentary treatment center. The student will enter the facility under terms laid down by said facility. The facility will provide direct supervision and the field coordinator indirect supervision for the student. Five hours of classroom experience will also be included. Prerequisite: MAS 110, MAS 210 with a grade of C or better. SU

MAS 245 Massage Therapy Research (2-0)  2 hrs.
This course introduces students to research and critical appraisal in the complementary and alternative health care field with a special emphasis on massage therapy research. It will focus on the need to ask questions about the practice of massage therapy and how to construct good clinical questions. Topics will include: becoming a reflective massage therapist, finding evidence to support the work of the massage therapist, understanding the scientific evidence, evaluating the evidence and then applying the evidence to practice. Prerequisites: MAS 211, MAS 215. Corequisites: MAS 220, MAS 250.  S

MAS 250 Massage Therapy Practicum (0-4)  2 hrs.
This course affords massage therapy students the opportunity to administer their massage skills to fellow students, acquaintances, and members within the community. Supervised by massage therapy faculty, these clinic sessions will closely simulate a massage
therapist’s practice. Students will utilize communication skills, intake procedures, massage techniques, as well as post-massage feedback from clients and instructors. Students keep detailed records of their work and reflect upon their experience and progress in workbook study. A percentage of each student’s practice sessions are community service massages. The practicum provides students with a wide range of experience and provides members of the community with the benefits of therapeutic massage. Prerequisites: BIO 171 and 172, BIO 165 and 265, MAS 110, MAS 210, MAS 211, MAS 215 each with a grade of C or better. Corequisites: MAS 205, MAS 220, MAS 245. S

MAS 255 Massage Travel/Study Experience (3-0)
This course provides students with an observational and hands-on study of various massage techniques and healing modalities that derive from other cultures. This course may be conducted in different locations throughout the world where specific styles of massage therapy techniques originated. Students will also partake in lecture about the cultural history and underlying theory that these practices are based on, as well as travel within the country to visit historical sites that are relevant to the history of massage therapy and wellness in the specific culture. Due to the extensive travel requirements, a limited number of students will be enrolled in each section. Unless otherwise specified by the course instructor, the course will be limited to students who are matriculated in the Therapeutic Massage/Integrated Health Care Program with a minimum of two semesters completed, or have a New York State Massage Therapy License. SU

MATHEMATICS

MAT 101 College Mathematics I (3-0) 3 hrs.
This course is intended for the liberal arts student. The purpose of this course is to share the excitement and enjoyment of contemporary mathematical thinking. The course answers the question, “What do mathematicians do, practice, or believe in?” The use of mathematics in areas of business and industry, politics, networking and telecommunication, and elementary statistics will be studied with the intent to develop reasoning ability, logical thinking, critical reading, and written and oral communication. The topics are selected so that they are self-contained. These include management science, social choice, statistics, and growth and symmetry. Prerequisite: High school algebra or equivalent. B

MAT 110 Business Mathematics (3-0) 3 hrs.
This course is directed toward the student who wishes to study mathematics with business and financial applications. The philosophy of the department is that this course is a mathematics course using business-related topics to enhance the student’s abilities in, and appreciation for, mathematics. The course topics are chosen so as to be of interest to a broad range of students. Among the topics chosen are trade discounts, cash discounts, markup and markdown, simple interest, simple discount, compound interest, present and future value of annuities, savings programs (IRAs, 401K’s, etc.) loans, mortgages, credit cards, etc. Prerequisite: High school algebra or equivalent. B

MAT 121 Statistics I (3-0) 3 hrs.
A first course in statistics designed to introduce descriptive statistics of one and two variables and probability and to assimilate those concepts into an understanding of probability distributions. Topics include central tendency, variability, graphing, linear correlation and regression, dependent and independent probability, and discrete and continuous probability distributions. Scientific calculator required. Prerequisite: GST 142 or equivalent. B

MAT 122 Statistics II (3-0) 3 hrs.
A continuation of Statistics I (MAT 121) with an introduction to statistical research. Topics included are statistical inferences of hypothesis testing and estimation for means, proportions, and variances; determination of sample size; uses of the Chi-square distribution; analysis variance, linear correlation and linear regression; non-parametric statistics and statistical research. Also included is an application of computer usage - specifically Minitab. Prerequisite: MAT 121. B

MAT 145 College Algebra (3-0-1) 3 hrs.
This course is directed towards the student learning algebraic concepts necessary to enter Trigonometry (MAT 151) and Pre-Calculus (MAT 152). Topics included in this course are the concept of a function; linear, quadratic and absolute value equations, functions and inequalities; rational equations; radical equations; exponent rules and simplification; systems of equations; and right triangle trigonometry. Solutions to these equations and inequalities may be found numerically, algebraically, and/or graphically. Throughout the course, applications are emphasized as a reason for learning algebra. Prerequisite: GST 142 or equivalent. Graphing calculator required; see department chair for specific model. B

MAT 151 Trigonometry (3-0) 3 hrs.
A standard course in trigonometry designed to prepare the student for other courses that require knowledge of trigonometry. Topics include definition of the trigonometric functions, acute angles and right triangles, radian measure, graphs of trigonometric functions, trigonometric identities, inverse trigonometric functions, law of sines, and law of cosines. Prerequisite: MAT 145 or equivalent. F

MAT 152 Precalculus (3-0-1) 3 hrs.
A continuation of the concept of functions learned in College Algebra expanding to exponential, logarithmic, polynomial, and rational functions. In addition, topics for consideration include transformations, composition, inverse functions, and trigonometric functions. This course provides in-depth study of a variety of functions, solving equations, and applications of functions. Moreover the course provides a bridge to the beginning groundwork of Calculus with the study of rates of change, extrema, and concavity. Prerequisite: The student is expected to have completed three years of high school Regents mathematics or completed MAT 145. Graphing calculator required; see department chair for specific model. B

MAT 180 Mathematics for Elementary School Teachers I (3-0) 3 hrs.
This course is the first of a two-semester sequence designed for prospective elementary teachers. The course presentation and material will conform to the NCTM
MAT 220 Discrete Mathematics Structures (3-0) 3 hrs.
This course covers the basic foundation principles for the study of mathematical structures that are finite or countably finite in number (discrete). Topics to be studied include set theory, logic, algebraic structures, graph theory, propositional calculus and switching theory. Prerequisite: MAT 152. B

MAT 271 Calculus I (4-0) 4 hrs.
A first course in Calculus focusing on the mathematics of changing rates. The derivative of polynomial and transcendental functions is investigated from a numerical, graphical, and algebraic approach. Applications for the use of derivatives are also explored. Introduction to the definite integral and the Fundamental Theorem of Calculus is included in this course. Prerequisites: MAT 151, 152. Graphing calculator required; see department chair for specific model. B

MAT 272 Calculus II (4-0) 4 hrs.
Anti-differentiation and integration of transcendental functions and their applications, hyperbolic functions, indefinite integral and vectors. Prerequisite: MAT 271. Graphing calculator required; see department chair for specific model. B

MAT 273 Calculus III (4-0) 4 hrs.
A continuation of the usual Calculus sequence. Topics include infinite sequences and series, partial derivatives, multiple integration, vector calculus, and an introduction to differential equations. Prerequisite: MAT 272. Graphing calculator required; see department chair for specific model. F

MAT 274 Differential Equations (3-0) 3 hrs.
A survey course of the study of elementary differential equations. Differential equation solution techniques are studied in conjunction with simplified modeling applications. Topics include variable separation, undetermined coefficients, parameter variation, series solution, Laplace transforms, and Euler's methods. Prerequisite: MAT 272. S

MAT 276 Linear Algebra (3-0) 3 hrs.
A survey course of the study of finite dimensional vector spaces, linear transformations and matrices. Topics covered include vector and matrix operations, determinants, systems of linear equations, linear independence, eigenvalue, and eigenvectors. Prerequisite: MAT 271. B

MAT 280 Mathematics for Elementary School Teachers II (3-0) 3 hrs.
This course is the second of a two-semester sequence designed for prospective elementary education teachers. The course presentation and material will conform to the NCTM Standards and, therefore, will present mathematics in the context of problem solving, communication (both oral and written), reasoning, including direct and indirect proofs, and mathematical connections. Students will explore mathematical concepts and theories underlying the topics including: set theory, numeration, and different number systems, operations on integers, rational and irrational numbers, prime and composite tests, divisibility, and modular arithmetic. Prerequisite: ENG 101. B

MUSIC

MUS 100 Music Appreciation (3-0) 3 hrs.
A course for the general interest student, the intent of which is to heighten the student's awareness of the place of music in our culture and enhance his or her enjoyment of the art form itself. B

MUS 105 Basic Musicianship (3-0) 3 hrs.
Study of scales, intervals, key signatures, meters, rhythmic reading, and chords. This course is for students with little or no background in music performance or theory. S

MUS 106 Music Theory I (Lecture) (3-0) 3 hrs.
MUS 106L Music Theory I (Lab) (0-3) 1 hr.
An introductory course designed for the general student and for individuals concentrating in Music or Music Recording Technology. Students learn the fundamentals of harmony, music reading, part writing in root position, simple chorale analysis, keyboard skills, and sight singing. Attendance at two hours of aural dictation and one hour of keyboard lab weekly is required in addition to the lectures. Lecture and lab will be graded separately. Prerequisite: A score of 13 or higher on theory placement exam or a grade of C or better in MUS 105. F

MUS 107 Music Theory II (Lecture) (3-0) 3 hrs.
MUS 107L Music Theory II (Lab) (0-3) 1 hr.
Continuation of Music Theory I. Continuation of part writing triads, study of secondary dominants, continuation of study of chord and non-chord tone function in tonal system (including modulation), analysis of chorales, and introduction to analysis of easy keyboard literature of the 18th and 19th Centuries. Attendance at two hours of aural dictation and one hour of keyboard lab weekly is required in addition to the lectures. Lecture and lab will be graded separately. Prerequisite: MUS 106. S

MUS 108 Class Piano (3-0) 3 hrs.
This course provides an introduction to keyboard performance in a group setting for students with little or no prior background. It is especially appropriate for non-piano majors who must gain basic keyboard proficiency. Although music majors will be given priority, class piano is also suitable for any student who wishes to learn how to play. The course emphasizes sight reading, transposition, harmonization, and improvisation, as well as exposing the student to solo and ensemble repertory from a number of styles. F

MUS 109 Vocal Jazz Ensemble (3-0) 1 hr.
A select group of “day students” chosen annually through audition who perform jazz and pop standards. Prerequisite: Audition and approval of instructor. B

246
MUS 111 Master Composers (3-0)  3 hrs.
A study of some of the well-known musical compositions by master composers from Bach to Stravinsky.  F

MUS 115 Music History I:  
Medieval to Baroque (3-0)  3 hrs.
A study of the evolution of music from Gregorian chant and music of the troubadours through the writings of J.S. Bach.  Prerequisite: MUS 107 or permission of instructor.  F

MUS 116 Music History II:  
Classic to Modern (3-0)  3 hrs.
The history of music from the rise of sonata form in the works of Haydn and Mozart to twelve-tone, aleatory, and electronic music of the twentieth century.  Prerequisite: MUS 107 or permission of instructor.  S

MUS 117 Master Composers II (3-0)  3 hrs.
In Master Composers II, students will continue to study particular examples of mainstream music literature from the 17th century to the present. The course aims to create a foundation for the broad perception of historic style across genres by developing a repertory of specific representative pieces which the student has had the opportunity to examine closely.  Prerequisite: MUS 111 (Also recommended: MUS 105 or the equivalent skill level.)  S

MUS 118 Guitar Ensemble (0-3)  1 hr.
Members rehearse and perform guitar instrumental arrangements.  B

MUS 119 Percussion Ensemble (0-3)  1 hr.
Members rehearse and perform percussion instrumental arrangements.  B

MUS 120 Finger Lakes Chorale (0-3)  1 hr.
SCP 013  no credit hours
A mixed chorus of approximately seventy singers from both the College and community which performs large choral works from all principal style periods.  B

MUS 125 Finger Lakes Camerata (0-3)  1 hr.
A select group of twenty-four singers chosen annually through audition who perform a cappella works and music for chamber chorus.  B

MUS 126 College Singers (0-3)  1 hr.
A group of approximately fifty “day students” who rehearse and perform music in a variety of styles.  B

MUS 127 Jazz Ensemble (0-3)  1 hr.
SCP 002  no credit hours
Members rehearse and perform contemporary jazz/rock arrangements and originals. Instrumental ability and some band experience are required.  B

MUS 129 Performance Class I (0-3)  1 hr.
Members rehearse and perform instrumental arrangements.  B

MUS 131-135, 137, 160, 161, 163-165, 167, 168, Applied Music (1-0)  1 hr.
Instruction in voice, piano, organ, guitar, and a variety of band, orchestral and keyboard instruments.  All students who take Applied Music pay an additional fee for the lessons in addition to the tuition charge.  A

MUS 170 Techniques of Audio Recording I (3-0)  3 hrs.
A study of mixer formats, patch bays, decibels, acoustics, and microphones. Emphasis is on gaining practical knowledge through working with recording equipment. Consideration is also given to production concepts and aesthetics. Students will work on both studio and field recording projects.  F

MUS 171 Piano Tuning I (3-0)  3 hrs.
An introduction to the tuning and temperament theory of keyboard instruments from 1500 to 1850. Students will study and practice the tuning of historical temperaments on modern and historical keyboard instruments.  Corequisite: MUS 106 or permission of instructor. Purchase of piano tuning tool kit required.  F

MUS 173 Piano Tuning II (3-1)  3 hrs.
Continuation of Piano Tuning I:  A study of the tuning of Well Temperament advancing to modern Equal Temperament.  Prerequisite: MUS 106, MUS 181, MUS 171.  Corequisite: MUS 107, MUS 182.  S

MUS 174 Keyboard Business (3-0)  3 hrs.
Consideration of the business aspects of each step in the marketing of music, music services, and music products. The student learns about recording studio operation, record companies, record distribution, merchandising, promotion, administration, the media, and careers in music.  S

MUS 175 Keyboard History and Technology I (3-1)  3 hrs.
This course is an introduction to the design theory and maintenance of keyboard instruments from 1500 to 1850. Students will study and practice the maintenance and repair of modern and historical keyboard instruments. Purchase of tool kit required.  Corequisites: MUS 106, MUS 145 or permission of instructor.  F

MUS 182 Keyboard History and Technology II (3-1)  3 hrs.
Continuation of Keyboard History and Technology I. An introduction to the repair, maintenance and regulation of upright piano actions. Students will study and practice the maintenance and repair of modern and historical keyboard instruments. Purchase of tools is required.  Prerequisite: MUS 106, MUS 171, MUS 181.  Corequisite: MUS 107, MUS 173.  S

MUS 185 Introduction to Music Therapy (2-0)  2 hrs.
Introduction to Music Therapy is one of several courses devoted to surveying options and specializations for Therapeutic Massage, Nursing, and Music students. The course explores the nature and aims of music therapy with respect to varying client groups and within current trends in health care and education.  F

MUS 206 Music Theory III (Lecture) (3-0)  3 hrs.
MUS 206L Music Theory III (Lab) (0-3)  1 hr.
Intermediate level work with harmony, voice leading, and analysis grounded mainly in the stylistic practice of the 18th and 19th Century tonal repertory. Includes introduction to form. Aural labs and keyboard labs
MUS 274 Piano Tuning IV (3-1) 3 hrs.
Continuation of Piano Tuning III. Advanced aural tuning and mastering. Prerequisites: MUS 206, MUS 281, and permission of instructor. S

MUS 275 Audio Recording Special Project (0-7) 3 hrs.
Students are required to plan and produce a master tape recording, consisting of four to six commercial length songs. Prerequisites: MUS 170, 174 or 176, 270, 271 and permission of instructor. B

MUS 281 Keyboard History and Technology III (3-1) 3 hrs.
Continuation of Keyboard History and Technology II. Skills acquired from Keyboard History and Technology II and Piano Tuning II are applied to modern grand piano action regulation and repair. Purchase of tools is required. Prerequisite: MUS 107, MUS 182, MUS 173. Corequisite: MUS 206, MUS 273. F

MUS 282 Keyboard History and Technology IV (3-1) 3 hrs.
Continuation of Keyboard History and Technology III and a capstone course. Fine piano and concert piano voicing, adjustment, miscellaneous repair subjects, preparation for the Piano Technicians Guild technical exam. Purchase of tools is required. Prerequisite: MUS 206, MUS 281, MUS 273. Corequisite: MUS 207, MUS 274. S

MUS 290 Audio V: Sound Reinforcement and Live Recording (3-1) 3 hrs.
This course provides an introduction into sound reinforcement systems and practical live recording applications. Emphasis is placed on sound system components, design and function with a hands-on approach to set up, maintenance, troubleshooting, operation, analysis and safety. Other course topics will include the study of a variety of recording formats and digital multi-track equipment leading to individual on-location recording projects. Some basic tools required. Prerequisites: Audio IV or permission of instructor. B

NURSING

NUR 100 Fundamentals of Nursing (4-6) 6 hrs.
This is an introductory course in fundamental principles of nursing, addressing man’s basic needs as identified by Maslow and related to the stages of development. Health is presented as a wellness-illness continuum. The concept of Nursing is presented by introducing the nursing core components of professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaboration, and managing care. Prerequisite/corequisite: ENG 101 or its equivalent and BIO 171 with a grade of C or better. F

NUR 101 Nursing Care of the Adult and Child I (5-9) 8 hrs.
This is the first of a two-semester sequence concerned with commonly occurring health problems and chief impact on man in relation to developmental stages and Maslow’s needs. Health is presented as alterations in wellness/illness as a human experience. Nursing is presented, utilizing the nursing process applied to client problems. Included are the nursing core components of professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaboration, and managing care. Major units of study include: experience of wellness/illness, commonalities in the illness experience, coping with problems of oxygenation, nutrition, metabolism, elimination, and motor activity. Laboratory experiences in hospitals and
other health agencies are planned concurrent with theory. 

Prerequisites: Successful challenge or waiver of NUR 100 or completion of NUR 100 with a C+ or better and BIO 171 with a grade of C or better. Prerequisites/Corequisites: BIO 172 with a grade of C or better. S

NUR 105 Nursing Process (1 week -15 hours) (1-0) 1 hr.

This course is an overview of the Nursing Process aimed at guiding the learner in the use of the process in planning care. Each step - assessment, diagnosis, planning, intervention, and evaluation - will be analyzed in relation to the Nursing Care Plan. Special focus will be applied to the process of nursing diagnosis, i.e., the identification and description of client problems amenable to nursing care. Goal setting and the process of writing care plans will also be considered as major topics. (Satisfactory or Unsatisfactory grade.) Prerequisite: NUR 100 or an L.P.N./R.N. JP/SU

NUR 110 Gerontologic Nursing (3-0) 3 hrs.

This course is designed for nursing students and health care providers interested in the area of gerontology. Topics can be applied in primary, secondary, or tertiary settings. Topics will include the cognitive disorders, drug interactions, group work, and rehabilitation techniques in the elderly. An overview of gerontology is offered. B

NUR 202 Nursing Care of the Adult and Child II (5-12) 9 hrs.

This is the second of a two-semester sequence concerned with increasingly complex health problems and their impact on man’s ability to progress through his developmental stages and meet his needs as defined by Maslow. Emphasis is placed on the more common alterations in health along the wellness-illness continuum. Nursing is presented, utilizing the nursing process applied to client problems. The nursing core components of professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaboration, and managing care are further developed. Major units of study include coping with problems of: motor activity and sensory function, self esteem, oxygenation, nutrition, metabolism and elimination, and environmental crises. Hospital laboratory and community experiences are correlated with theory. Prerequisites: Successful completion of NUR 101 and BIO 171 and 172 with a C or better. F

NUR 203 Maternal-Child Health Nursing (8 weeks) (5-12) (1 week) (15-0) 5 hrs.

This course is composed of 8 weeks of maternal-child nursing and is the study of the expanding family unit and the role of the nurse and others in providing for childbearing health needs of families. The aim is to enable the student to acquire a background of knowledge, understandings, attitudes and skills which will prepare the student to participate effectively in the care of mothers and infants through the maternity cycle and of children from birth through adolescence. One week of this course is devoted to group discussion of topics related to human sexuality. Prerequisites: Completion of NUR 101, NUR 202, or permission of instructor; PSY 100, PSY 200. Spring Semester. A Summer session may be offered for accelerated students. Traditional students who have a B- in NUR 101, are satisfactory clinically, and have the recommendation of their clinical instructor may take the Summer session on a space available basis. S

NUR 204 Psychiatric/Mental Health Nursing (7 weeks) (5-12) 4 hrs.

This course is intended to provide the nursing student with a basic knowledge of the dynamics of behavior and nursing needs of clients with commonly occurring functional and organic mental disorders. Major emphasis is placed on the importance of the nurse client relationship and the therapeutic use of self in the clinical setting. Additional emphasis is placed on the nurses’ role in interdisciplinary treatment planning and in community mental health. The clinical laboratory includes affiliations with both inpatient and outpatient psychiatric services. The student will develop and acquire the skills, attitudes, abilities, and appreciations necessary to provide nursing care to clients with psychiatric disorders and to apply the nursing process in the care of the psychiatric client. Prerequisites: Successful completion of NUR 101, NUR 202, or permission of instructor, PSY 100, PSY 200. Spring Semester, Summer Session. Traditional students who have a B- in NUR 101, are satisfactory clinically, and have the recommendation of their clinical instructor may take the Summer session on a space available basis. S

NUR 206 Nursing Clinical Practicum (1 week - 40 hrs) 1 hr.

This intensive, one-week elective is offered during January Intersession or Summer Session to provide reality-oriented, nursing practice based upon knowledge and skills accrued by nursing students during their Freshman or Sophomore year at Finger Lakes Community College. The course is intended to permit the nursing student the curricular freedom to identify personal learning needs and initiate these learnings under the guidance of an expert clinical nursing instructor in an acute care hospital setting. This course offers the student the unique exposure to a full day or evening shift of clinical experience for a week’s time, thereby allowing for continuity and intensity of clinical learning not provided in other nursing clinical laboratory courses. Prerequisite: Successful completion of NUR 100 or NUR 101 and current enrollment in the nursing program. JP/SU (This elective also available for R.N.’s.) B

NUR 210 Pharmacodynamics of Nursing Practice (3-0) 3 hrs.

A basic course designed to familiarize the learner with those groups of drugs frequently employed in the treatment of commonly occurring health problems. The course will include the study of drugs that affect the following body systems: nervous, cardiovascular, endocrine, gastrointestinal, hematopoietic, immune, and respiratory. Drugs utilized in the treatment of infections and cancer will also be studied. Course restricted to R.N.’s and senior level students enrolled in an R.N. program. L.P.N.s and any other students must secure permission of instructor or department chair to take this course. B

NUR 215 Nursing Seminar (2-0) 2 hrs.

Supplements the learning in other nursing courses by providing the sophomore nursing student with global concepts of the professional registered nurse and
responsible the graduate of the Associate degree program. This course includes lecture and discussion on such topics as the definition of nursing, nursing as a profession, ethical/legal consideration, nursing theory, and current trends affecting nursing practices. Reviews requirements for R.N. licensure application, responsibilities for triennial registration, and limited work permit filing in New York State. Focuses on role of the nurse as member within the discipline of nursing. 

**Prerequisite:** Successful completion of NUR 101 and concurrent enrollment in NUR 202 or NUR 203 and NUR 204.

**OFT 200 Office Management (3-0)** 3 hrs.  
This course provides practical information about human relations, office technology, and management process. The study of the principles of business accounting with reference to office operations will be covered. The application of management and business administration of the modern office in the public and private sector. The application of management principles to office operations will be covered. The course provides practical, informational about human relations, office technology, and management process. 

**Prerequisite:** OFT 140 or equivalent, OFT 140 or permission of instructor.

**OFT 131 Keyboarding Improvement (1-2)** 1 hr.  
The course is designed to improve students' typing speed and accuracy, integrates the microcomputer and the leading-edge technology, Windows. The seven-week course is based on a diagnostic approach for improving keyboarding skills. Each unit consists of pretests, timings, and post-test timings for evaluation and measurement of improvement. The course is graded on a satisfactory or unsatisfactory basis. 

**Prerequisite:** OFT 100 or equivalent, OFT 140 or equivalent, or permission of instructor.

**OFT 140 College Keyboarding I (4-0)** 3 hrs.  
This course integrates the microcomputer, the leading-edge technology, Windows®, and primary word processing application software to develop keyboarding skills. Students learn the alphabetic, numeric, and symbols characters and the keypad by the “touch” method. Also included is formatting and editing of simple business/personal correspondence, reports, term papers, and tables. The desired speed at the end of the course for the Administrative Assistant major is 30 words per minute and 20 words per minute for all the other majors.

**OFT 141 College Keyboarding II (4-0)** 3 hrs.  
This course integrates the microcomputer, the leading-edge technology, Windows®, and primary application software to refine keyboarding skills. Emphasis is also placed on formatting and the development of speed and accuracy in preparing advanced business correspondences, reports, tabulations, and other business documents. The desired speed at the end of the semester is 45 words per minute. 

**Prerequisite:** OFT 140 (speed requirement 30 words per minute) or permission of instructor.

**OFT 150 Basic Accounting (4-0)** 3 hrs.  
A study of the principles of business accounting with emphasis on the accounting cycle for students in the Administrative Assistant and Paralegal programs.

**OFT 156 Office Communications (4-0)** 3 hrs.  
This course stresses the development of skills in business letter writing and English grammar and usage. There is also concentration on spelling improvement, speaking skills, listening skills, and interviewing techniques. 

**Prerequisite:** Students must have taken OFT 140 or equivalent, be concurrently taking OFT 140, or have the permission of instructor.

**OFT 200 Office Management (3-0)** 3 hrs.  
This course is a comprehensive overview of the administration of the modern office in the public and private sector. The application of management principles to office operations will be covered. The course provides practical, informational about human relations, office technology, and management process. 

**Prerequisite:** BUS 120 or BUS 124 or permission of instructor. (Also listed as BUS 200.)
OFT 210 Word Processing I (4-0) 3 hrs.
This course provides comprehensive, hands-on instruction in Microsoft Word. Students learn the theories and practical applications of document creation for business or home use. Students will learn to create, edit, print, format, and store office documents. This course also introduces additional word processing functions including mail merge, sorting, document management, charts, and macros. Prerequisite: OFT 140 or equivalent, must have taken or be taking concurrently OFT 141, or permission of instructor. B

OFT 211 Word Processing II (4-0) 3 hrs.
This course provides hands-on training in word processing and presentation applications software to learn desktop publishing techniques. Students build on their knowledge developed in OFT 210 to create professionally-looking documents including flyers, brochures, and newsletters. Prerequisite: OFT 210 or permission of instructor. S

OFT 213 Office Automation (4-0) 3 hrs.
This course provides comprehensive, hands-on training in the integration features of the Microsoft Office Suite. Students will learn the integration of Microsoft Word, Excel, and Access. Prerequisite: OFT 210 or permission of instructor. S

OFT 247 Office Procedures I (4-0) 3 hrs.
This is a course which provides preparation for the administrative business office. This course includes techniques and topics such as the work environment, communication skills, computer hardware and software, records management, ethics, business documents, mail handling, and office machines. F

OFT 248 Office Procedures II (3-1) 3 hrs.
A continuation of OFT 247. Course content includes telework, telecommunications, time management, business presentations, travel arrangements, meetings and conferences, telephone efficiency, leadership skills, and planning your career path. (OFT 248 may be taken before OFT 247.) S

OFT 253 Machine Transcription (4-0) 3 hrs.
This course provides training in the seven elements of machine transcription: knowledge of equipment (microcomputers), listening, professional attitudes, proofreading, keyboarding, formatting and English grammar and usage. Prerequisite: OFT 141 or permission of instructor. B

BUS 250 Business Internship Program 6 hrs.
This course is also open to Administrative Assistant students. See page 222. B

PARALEGAL

PLG 100 Introduction to Legal Practice (3-0) 3 hrs.
This course will introduce students to the organization and operation of the legal system and fundamental legal concepts. The course gives an overview of constitutional law, civil litigation, contracts, agency law, and commercial paper. Offered on a regular, rotating basis. Prerequisite/Corequisite: ENG 101 and successful completion of GST 121 if recommended during placement testing.

PLG 110 Computer Law and Policy (3-0) 3 hrs.
This course provides fundamental information needed to have a basic understanding of issues related to cyberlaw such as ethics, security, privacy, content control, computer crime, and e-commerce among other topics. For students in the Paralegal program, the course only qualifies as a professional elective. F

PLG 115 Computers in the Law Office (3-0) 3 hrs.
This course introduces the fundamentals of how to use computer technology to accomplish tasks performed by legal assistants or paralegals in a law office. Computer applications will include word processing, spreadsheets, databases, presentations, timekeeping and billing, and case management. Prerequisite: PLG 100 and basic computer knowledge, or permission of instructor. B

PLG 120 Business Structures (3-0) 3 hrs.
This course will introduce the student to the various types of business structures used by businesses today including: sole proprietorships, general partnerships, limited partnerships, S corporations and C corporations. The course will define and describe each type of business structure and give the student an understanding of the practicalities involved in establishing each type of structure. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 125 Legal Research and Writing I (3-0) 3 hrs.
This course is designed to introduce the student to the fundamental concepts of legal research and analysis through the use of FLCC’s law library. The student will be introduced to primary and secondary sources of law. Emphasis will be placed on finding and analyzing both statutory and case law along with proper citation format. Further, the student will also be introduced to the preparation of simple legal documents. Prerequisite/ Corequisite: PLG 100 and ENG 101 or permission of the instructor. F

PLG 210 Real Property Law and Practice (3-0) 3 hrs.
Real Property Law and Practice is designed to introduce the student to the principles and practices of real property law. Topics covered include: elements of real property law, contracts, deeds, encumbrances, legal descriptions, title protection, mortgages, closings, and leases. Emphasis will be placed on the completion of "instruments" and the processes involved in filings and recordings. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 225 Legal Research and Writing II (3-0) 3 hrs.
This course is a continuation of Legal Research and Writing I with an emphasis on clear and effective legal writing. In this course, the student is exposed to more complicated legal research problems requiring careful research and detailed legal analysis. Students will also be instructed in computer assisted legal research. Assignments include various pleadings and court briefs. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. S

PLG 230 Family Law (3-0) 3 hrs.
This course is designed to introduce students to the basic concepts of family law including: antenuptial agreements, valid and void marriages, annulments,
PLG 235 Administration of Wills, Trusts, and Estates (3-0)
This course will introduce the student to laws relating to estate planning, the administration of estates (both testamentary and intestate), and the establishment and administration of trusts. Emphasis will be placed on the practicalities of estate law including interview techniques, preparation of wills, trusts and administrative documents, and filing requirements, and procedures. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 240 Courts and Litigation (3-0) 3 hrs.
This course is designed to introduce the student to the federal and state court system and offer instruction in civil litigation procedures commencing from the initial client interview and file organization to the trial and any subsequent appeals. It will include instruction on procedures authorized under the code of civil procedure. Special emphasis will be placed on the content and preparation of documents used in civil law suits. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 245 Tort Law (3-0) 3 hrs.
This course is designed to give the student an introduction to the principles of personal injury law. Topics to be covered include: negligence, assault, battery, false imprisonment, intentional infliction of emotional distress, trespass to land, trespass to chattel, conversion, defamation, strict product liability, and professional malpractice. Emphasis will be placed on the role of a paralegal in personal injury litigation with preparation and discussion of pertinent documents and filing issues. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 250 Paralegal Internship 3 hrs.
This course provides the student with the opportunity to gain practical work experience under the supervision of an attorney or experienced paralegal in day-to-day, on-site office work. The student must complete a minimum of 128 hours of internship work at the internship site during the first eight weeks of the semester, which may be a public or private law office, corporate or government legal department, abstract company, or other appropriate law-related site. It will be the student’s responsibility to secure an internship site with the help of the program director. During the eight weeks of the semester, the student must attend four internship seminar sessions in which issues regarding the student’s experiences and the paralegal profession will be discussed. Prerequisite: Attendance at an orientation session held the semester before the internship; completion of 30 credit hours at least nine of which must be paralegal classes including PLG 100 and PLG 125 with a grade of C or better; and an overall grade point average of 2.50. Internships are subject to the approval of program director as well as availability. Offered on a regular, rotating basis.

PLG 255 Bankruptcy Law (3-0) 3 hrs.
This course is designed to give the student an understanding of bankruptcy law and its practical applications from both the debtor and creditor perspectives. Topics to be covered include: review of the Federal Bankruptcy Code and New York State Bankruptcy Laws, individual liquidation and reorganization, business liquidation and reorganization, the bankrupt estate, property exemptions, automatic stay and discharge. The student will have an opportunity to analyze a hypothetical financial situation and prepare a bankruptcy petition. Prerequisite: PLG 100 and PLG 125 with a grade of C or better. Offered on a regular, rotating basis.

PLG 260 Paralegal Practice (2-0) 2 hrs.
Paralegal Practice is a seminar designed to give students a more complete appreciation of the duties and functions of a paralegal. The course covers the historical development of the role of the paralegal, legal and ethical responsibilities, client interviewing, fact investigation, and law office administration. The course also provides preparation for completion of the New York State Notary Public examination, and training in job search skills. Prerequisites: PLG 100, PLG 125. Prerequisites/ Corequisites: PLG 210, PLG 225, PLG 230, PLG 235, PLG 240. Offered on a regular, rotating basis.

PHILOSOPHY

PHL 101 Introduction to Philosophy (3-0) 3 hrs.
A discussion course focusing on the most crucial questions mankind can ask, like: What is truth? Is there a God? What is ultimate reality? What is good? What ought I do? The class will discuss opposing answers to these questions and examine the evidence for each. B

PHL 103 Ethics (3-0) 3 hrs.
Students will become involved in examining alternative bases for value systems. Ideas of historical and contemporary philosophers on the “good,” the “right,” the “moral” will be applied to today’s personal and social moral issues. B

PHL 105 Philosophy of Religion (3-0) 3 hrs.
An examination and discussion of key religious issues from the philosopher’s perspective of reason and analysis, including: Nature and Role of Religion, Reason and Faith, Existence of God, Mysticism, Immortality, Symbols and Myths, and Modern World View. B

PHL 110 Sustainable Earth: Spiritual and Scientific Consilience (3-0) 3 hrs.
Students will examine the impact of human populations on earth ecosystems. Students will explore psychological, cultural, spiritual, economic, and political factors that accelerate the deterioration of earth’s ecosystem and alternate perspectives of those factors which might lead to a more life sustaining society. Emphasis will be placed on discovering common ground between science and spirituality. Students will serve as discussion leaders for course topics of their choice. A community involvement component will be required. (Also listed as CON 110.) Prerequisite: permission of instructor. S
PHL 170 Ethical Considerations in Health Care (3-0) 3 hrs.
The purpose of this course is to involve the student in reading and discussing medical issues from an ethical perspective to create depth in our awareness of the moral problems which we cannot ignore and more often than not, cannot necessarily solve. The scope of this course will entail examination of different ethical approaches to moral problems in medicine and their success or failure in a broad range of medical issues: the physician-patient relationship, the role of the nurse, euthanasia and "death with dignity," rights to health care/costs of health care and an examination of important concepts such as autonomy, paternalism, rights, consent, confidentiality, etc. B

PHYSICAL EDUCATION
A student cannot repeat a course, for credit, to satisfy physical education degree requirements unless prior written permission is given to the student by the Chair of the Department of Physical Education and Integrated Health Care.

PE 102 Basic Rhythms (1/2 - 1 1/2) 2 hrs.
In this course, you will have the opportunity to experience and learn dance steps and movement patterns for dances such as: Foxtrot, Waltz, Cha-Cha, Tango, Rumba, and the Polka. Folk dances such as: Hora, Trioka, Greensleeves, and many popular line dances. You will learn to identify musical beats and rhythms appropriate for each dance. B

PE 103 Judo I (1/2 - 1 1/2) 1 hr.
This course includes instruction to the theory and practice of the fundamental skills of Judo. B

PE 105 Ice Skating (1/2 - 1 1/2) 1 hr.
Co-educational activity introducing the student to the various dimensions and benefits of ice skating, selection of equipment and fundamental skills. A minimal fee is required. B

PE 106 Bowling (1/2 - 1 1/2) 1 hr.
This co-educational activity includes instruction in the fundamental skills, rules, and etiquette that govern the activity. A minimal fee is required. B

PE 107 Golf (1/2 - 1 1/2) 1 hr.
This co-educational activity includes instruction in the fundamental skills, rules, and etiquette that govern the activity. A minimal fee is required. B

PE 108 Badminton (1/2 - 1 1/2) 1 hr.
This co-educational activity includes instruction in the fundamental skills, rules, and etiquette that govern the activity. B

PE 110 Physical Conditioning (1/2 - 1 1/2) 1 hr.
A blend of aerobic activity and weight training designed to improve one's overall fitness level and encourage participation in physical fitness activities for a lifetime. Fitness testing, discussions/lecture, and individualized workouts will be incorporated throughout the semester. B

PE 112 Yoga for Beginners (1/2 - 1 1/2) 1 hr.
Basic postures and breathing exercises devised in ancient India are taught to encourage development of a greater body-mind alliance so often ignored in our everyday existence. Relaxation, general body toning, flexibility, and meditation techniques are combined to give the student an awareness of enhanced human potential. Concepts of Yoga philosophy are also discussed to provide a base for practiced techniques. B

PE 113 Techniques of Angling (1/2 - 1 1/2) 1 hr.
This course introduces the student to trout fishing in the Finger Lakes area. Techniques and skills are developed along with use and selection of equipment. Equipment is furnished by the Physical Education Department. A minimal fee is required. B

PE 114 Karate (1/2 - 1 1/2) 1 hr.
Mind and body coordinating inner control through total training in the techniques and strategy of Karate-Do, blended with meditation and fitness. B

PE 115 Tennis (1/2 - 1 1/2) 1 hr.
This co-educational activity includes instruction in the fundamental skills, techniques, and rules that govern the lifetime activity of tennis. B

PE 116 Racquetball (1/2 - 1 1/2) 1 hr.
Racquetball is designed to offer the student a basic introduction to the lifetime sport of racquetball. The course will include terminology, skills, and techniques of racquetball. A minimal fee is required. B

PE 117 Basic Weight Training (1/2 - 1 1/2) 1 hr.
This course will explore basic techniques of weight training, focusing on the various exercises applied in a weight training program, demonstration of proper technique, and development of an overview of a comprehensive training program. B

PE 118 Skiing/Snowboarding I (1/2 - 1 1/2) 1 hr.
This course covers techniques, skills and practice drills designed to improve your skiing/snowboarding ability. Discussion and instruction will encompass the latest equipment, safety, and etiquette on the slopes. Time will be provided for practice and review of skills learned in class. A minimal fee is required. S

PE 119 Skiing /Snowboarding II (1/2 - 1 1/2) 1 hr.
The skier/snowboarder will continue to enhance and improve on the skills and techniques taught in Skiing/Snowboarding I. Instruction will be geared toward improving your skiing/snowboarding abilities. Further discussion on equipment, care, safety, and etiquette. A minimal fee is required. S

PE 121 Walk and Jog (1/2 - 1 1/2) 1 hr.
This course is designed for students of any fitness level who are interested in improving their general physical condition. This course will help the students increase their cardiovascular endurance and promote weight loss through walking or jogging. B

PE 122 Concepts of Wellness (1-1) 2 hrs.
The purpose of this course is to introduce students to the concepts of wellness and how these concepts can be incorporated into their lives. This course will guide the student to the understanding that wellness is not a static condition but rather a continual balance of the physical, social, emotional, and intellectual aspects of human need. The course will also provide students with the skill to
improve their quality of life and lead them to a higher state of well-being and optimal health. B

PE 140 Beginning Swimming (1/2 - 1 1/2) 1 hr.
This course is designed for the student who is a non-swimmer or does not demonstrate proficiency in the water. It will include instruction in the basic areas of water safety, rescue techniques, and basic swimming strokes. The general Red Cross swimming program will be followed. B

PE 141 Scuba (1/2 - 1 1/2) 2 hrs.
This course is an introductory course in the sport of scuba diving and is designed for the student with advanced swimming skills. The student will have the opportunity to learn the basic skills of scuba diving and to experience the unique underwater world of adventure. Equipment is furnished by the Physical Education Department. A minimal fee is required. B

PE 143 Sailboarding (1/2 - 1 1/2) 1 hr.
The course is designed to introduce the student to the recreational activity of sailboarding. It will include basic skills, concepts, and equipment for sailboarding. A minimal fee is required. B

PE 150 Beginning Camping (1/2 - 1 1/2) 1 hr.
This course is designed to provide the beginner with the basic fundamentals of camping. Strong emphasis will be placed on the appropriate relationship between man and his natural environment. A one-half-day trip and a three-day required weekend trip. A minimal fee is required. B

PE 151 Canoe & Kayak Paddling Experiences (1/2-1 1/2) 2 hrs.
This course allows both beginners and those with experiences to learn and perfect canoe and or kayak techniques. Included in this course will be methods of steering, safety, equipment care and selection, choosing appropriate bodies of water and the enjoyment of paddling as a recreational activity. The college will furnish equipment. The course is designed to introduce the student to Canoe and Kayak knowledge and techniques through lecture, seminar activities and several half to full day outings. Safety, trip planning, mastering correct paddling techniques and an appreciation for the natural environment are main focal points throughout the course. B

PE 152 Selected Physical Activity (1/2 - 1 1/2) 1 hr.
This course is designed for those students who, for medical or physical reasons, cannot participate in other physical education courses. A course study and activity will be established on an individual basis. Enrollment into this course will be by permission of instructor only. B

PE 162 T’ai Chi Chuan I (1/2 - 1 1/2) 1 hr.
T’ai Chi Chuan literally means “Supreme Ultimate Fist.” It is a century-old Chinese discipline for health, relaxation, meditation, and self-defense. Sometimes called Chinese or Taoist Yoga, it emphasizes relaxation and inner calm rather than strength. B

PE 163 T’ai Chi Chuan II (1/2-1 1/2) 1 hr.
T’ai Chi Chuan II, an extension of T’ai Chi Chuan I, takes the student to the next level of training. The course includes form correction, basic push hand and sticking hands training, and introduces the T’ai Chi Cane Form (a basic weapon form). Prerequisite: T’ai Chi Chuan I. B

PE 164 Stress Reduction Through Exercise (1/2 - 1 1/2) 2 hrs.
This course will explore the many ways that stress affects us both physically and emotionally. Stress management techniques taught include meditation, progressive relaxation, autogenics, and others. B

PE 165 Oriental Healing Arts (1/2 - 1 1/2) 1 hr.
This course is designed to introduce an alternative health practice through Qi Gong (energy circulation) training. These techniques promote general health by teaching the student how to cultivate and balance energy in the body. B

PE 166 Biofield Therapy (1/2 - 1 1/2) 1 hr.
This course teaches external healing techniques based upon the theory of the human energy field. Students will learn to re-pattern and balance this energy to facilitate healing. Emphasis on therapeutic touch. B

PE 167 Aerobics (1/2-1 1/2) 1 hr.
This course centers on step aerobic exercise designed to improve one’s cardiovascular and overall fitness levels. Focus will be on exercise routines and movement patterns that will be performed to music. B

PE 168 Nutrition and Health (1/2 - 1 1/2) 1 hr.
This course is designed to introduce the student to nutritional concepts and the role of nutrition in maintaining health and wellness. A minimal fee is required. B

PE 169 Aquatic Safety (1/2 - 1 1/2) 1 hr.
A ten-week introduction to the sport of water skiing. Equipment is furnished by the Physical Education Department. A minimal fee is required. B

PE 170 Hunting Fundamentals (2-1) 2 hrs.
A ten-week student participation course for non-hunters designed to develop an understanding of hunting safety, techniques, and ethics. Included are areas concerning conservation law, competitive rules, safety, mental conditioning, and firearms. A minimal fee is required. B

PE 171 Recreational Shooting (2-0) 2 hrs.
This course is designed for the student who would like a more complete understanding of firearms, recreational and competitive shooting. Included are areas concerning conservation law, competitive rules, safety, mental conditioning, and firearms. A minimal fee is required. B

PE 172 Hunting Fundamentals (2-1) 2 hrs.
A ten-week student participation course for non-hunters designed to develop an understanding of hunting safety, techniques, and ethics. Included are areas concerning identification and safe handling of hunting implements, hunter responsibility, personal preparedness, and wildlife harvest techniques. Emphasis will be placed on important game species of New York. A Saturday class may be scheduled. The successful completion of the course will qualify the student to take the New York State Hunter Education exam. Enrollment into this course will be by permission of instructor only. F

PE 180 Mime (3-0) 3 hrs.
A basic course dealing with the study and application of the various techniques of the art of mime. The objective of the course is to become proficient in self-expression through the body. (Also listed as THE 181.) F

PE 185 Fencing (1/2-1 1/2) 1 hr.
A beginning course in Fencing with emphasis on the history of the sport, as well as introducing the student to basic foil techniques such as footwork, offensive and defensive maneuvers, and limited bouting. B

PE 190 Care and Prevention of Athletic Injuries (3-0) 3 hrs.
Discusses the Sports Medicine Team concept as it applies to the care and prevention of injuries in the athletic or physically active population. Discusses the roles of the certified athletic trainer and provides an introduction to various sports medicine professions, such as strength
and conditioning, exercise science, physical therapy, and athletic massage. B

PE 202 Creative Dance (1/2 - 1 1/2) 2 hrs.
This form of dance allows for the expression of ideas and feelings through the medium of human movement. This course provides an opportunity for self-expression and creativity. Discussion and workshops dealing with the basic elements of dance. B

PE 203 Judo II (1/2 - 1 1/2) 1 hr.
Instruction in the theory and practice of more advanced skills, including eight basic throws and three hold down techniques. Knowledge of how to fall is required. Improvement of one’s speed and conditioning will be stressed. Prerequisite: Judo I. B

PE 210 Defensive Tactics (1/2 - 1 1/2) 2 hrs.
This course is designed to provide training in the many aspects of self defense. Course includes both aggressive and non-aggressive techniques. Course is geared to both Criminal Justice and general student population. B

PE 212 Health (3-0) 3 hrs.
Focuses on lifestyle factors and their relationships to well-being, behaviors, and disease. Health content areas, defined by NYS Education Department, are explored. Topics include: drug use and abuse, nutrition, personal and community health, safety education (identifying dangerous environments, prevention of child abduc-tion, fire and arson), communication skills for producti-ve relationships (i.e., conflict resolution), identifying and reporting suspected child abuse/maltreatment, and Safe Schools Against Violence in Education Legislation Certification. B

PE 214 Responding to Emergencies (3-0) 3 hrs.
This course will teach the student how to recognize an emergency and how to respond. The student will be prepared to make appropriate decisions regarding first aid care and how to provide care for injuries or sudden illness until professional medical help arrives. Upon completion of this course, student will be eligible for American Red Cross Certification in Responding to Emergencies and American Red Cross Community CPR. A minimal fee is required for Red Cross Certification. B

PE 224 Cross-Country Skiing (1/2 - 1 1/2) 1 hr.
This course is designed to introduce the student to the recreational activity of cross-country skiing. It will include the basic skills, concepts, and equipment for cross-country skiing. B

PE 230 Philosophy, Principles, and Organization of Athletics in Education (3-0) 3 hrs.
Designed for the student who wishes to pursue a career in coaching in New York State elementary and secondary schools. Course covers philosophy and principles of athletics as integral parts of physical education and general education. Requirement for coaching certification. F

PE 231 Theory and Techniques of Coaching (2-0) 2 hrs.
Provides experience in techniques of coaching a specific sport. Designed for persons who are preparing to meet the New York State certification requirements to coach in public schools. Via an internship, students will get hands-on experience working with an area program specific to the sport they desire to coach. Prerequisite: PE 230 or permission of instructor. B

PE 232 Health Sciences Applied to Coaching (3-0) 3 hrs.
Course designed for students who wish to pursue a career in coaching in New York State elementary and secondary schools. Selected principles of biology, human anatomy and physiology, psychology, and sociology related to coaching. This course also meets the requirements of American Red Cross Sport Safety Training including Adult and Child CPR. B

PE 242 Lifeguarding (3-0) 3 hrs.
This is the standard Red Cross Senior Lifeguarding course and is offered to those demonstrating the necessary swimming proficiency. The successful completion of the course includes the Red Cross Senior Lifeguarding Authorization Card. A minimal fee is required for Red Cross Certification. B

PE 243 Advanced Swimming (1/2 - 1 1/2) 1 hr.
This course is designed for the more advanced swimmer and the necessary instruction based on individual need will be emphasized. It will also include survival techniques, basic lifesaving procedures, and an introduction to diving. B

PE 244 Water Safety Instruction (1-1) 2 hrs.
An advanced course to provide the student with the opportunity to earn the American Red Cross Water Safety Instructor’s Certificate. Prerequisites: Must be 17 years of age and must have completed the Instructor Candidate Training Course. A minimal fee is required for Red Cross Certification. B

PE 245 Advanced Wilderness Camping (2-0) 2 hrs.
This course is offered during the summer months. The week-long canoe trip will be in the Canadian Wilderness, offering the student an opportunity to better understand the ecological balance and to take part in a wilderness camping environment. A one-half-day trip and a three-day required weekend trip. Prerequisite: PE 150 or equivalent experience. A minimal fee is required. B

PE 245 Wilderness Camping (1/2 - 1 1/2) 1 hr.
Designed to provide an enrichment of learning through the use of outdoor experiences. This advanced course will give the student an opportunity to better understand the ecological balance and to take part in a wilderness camping environment. A one-half-day trip and a three-day required weekend trip. Prerequisite: PE 150 or equivalent experience. A minimal fee is required. B

PE 247 Recreational Shooting I (3-0) 3 hrs.
This course is designed to complement Recreational Shooting I. It provides the student with advanced training in shooting skills. Emphasis will be placed on physiological, anatomical, psychological, advanced shooting principles, individual and team concepts. A minimal fee is required. B

PE 248 Recreational Shooting II (3-0) 3 hrs.
This course is designed to complement Recreational Shooting I. It provides the student with advanced training in shooting skills. Emphasis will be placed on physiological, anatomical, psychological, advanced shooting principles, individual and team concepts. A minimal fee is required. B

PE 250 Wilderness Camping (1/2 - 1 1/2) 1 hr.
Designed to provide an enrichment of learning through the use of outdoor experiences. This advanced course will give the student an opportunity to better understand the ecological balance and to take part in a wilderness camping environment. A one-half-day trip and a three-day required weekend trip. Prerequisite: PE 150 or equivalent experience. A minimal fee is required. B

PE 251 Advanced Wilderness Camping (2-0) 2 hrs.
This course is offered during the summer months. The week-long canoe trip will be in the Canadian Wilderness, offering the student an opportunity to better understand the ecological balance and to take part in a wilderness camping environment. A one-half-day trip and a three-day required weekend trip. Prerequisite: PE 150 or equivalent experience. A minimal fee is required. B

PE 252 Semi-Survival Camping (1/2 - 1 1/2) 1 hr.
This course is designed for the student who is interested in a wilderness survival experience. Skills will include camping, hiking, orienting, and foraging skills. There is a required one-half-day trip and a three-day trip. Prerequisite: permission of instructor. B

PE 271 Recreational Shooting II (3-0) 3 hrs.
This course is designed to complement Recreational Shooting I. It provides the student with advanced training in shooting skills. Emphasis will be placed on physiological, anatomical, psychological, advanced shooting principles, individual and team concepts. A minimal fee is required. B
PE 275 Introduction to Physical Education (3-0) 3 hrs.  
Student develops an understanding of the concepts of physical education as they apply to a teaching career. Course will include an overview of philosophy, history, roles, and qualifications of a teacher. B

PE 290 Athletic Training Practicum I (1-2) 2 hrs.  
Laboratory participation for students will be accomplished under actual athletic training room conditions. Students will learn, practice, and apply athletic training techniques. Prerequisites: BIO 171 and BIO 172. B

PE 291 Athletic Training Practicum II (1-2) 2 hrs.  
Continuation of Athletic Training Practicum I. Prerequisites: BIO 171 and BIO 172. B

PE 500-520 Sports Officiating (1 1/2 - 1/2) 1 hr.  
These are one-credit courses designed to provide the individual with a familiarity of the rules and mechanics of specific sports. Courses cover the official rules and techniques of refereeing and practical experience in officiating. These courses prepare the individual for rules examination specific to each sport. B  
PE 500 Basketball  
PE 510 Softball  
PE 520 Volleyball

PE 900-965 Intercollegiate Sports 1 hr.  
Designed for the student who has athletic skill beyond the recreational level. Skills are refined and integrated into concepts of team play. Competitive opportunities within conference and region are part of these courses.  
PE 900 Baseball S  
PE 901 Baseball S  
PE 904 Softball S  
PE 905 Softball S  
PE 910 Men's Basketball S  
PE 911 Men's Basketball S  
PE 914 Women's Basketball S  
PE 915 Women's Basketball S  
PE 930 Men's Soccer F  
PE 931 Men's Soccer F  
PE 934 Women's Soccer F  
PE 935 Women's Soccer F  
PE 950 Woodsmen Team I S  
PE 951 Woodsmen Team II S  
PE 955 Men's & Women's Cross Country I F  
PE 956 Men's & Women's Cross Country II F  
PE 960 Men's Lacrosse S  
PE 961 Men's Lacrosse S  
PE 964 Women's Lacrosse S  
PE 965 Women's Lacrosse S  
Prerequisite: Permission of instructor. Continued enrollment is at the discretion of the instructor.

PHYSICS

PHY 119 College Physics II (3-2) 4 hrs.  
The continuation of College Physics I. Topics include oscillations, sound, light, optics, electricity, and magnetism. Prerequisite: PHY 118. B

PHY 151 General Physics I (3-3) 4 hrs.  
A calculus-based course with laboratory. Topics include kinematics, dynamics, rigid body motion, and thermodynamics. Prerequisites: MAT 271 and high school physics, or SCI 101. B

PHY 152 General Physics II (3-3) 4 hrs.  
A continuation of PHY 151. Topics include oscillations, electricity and magnetism, and selected topics from optics. Prerequisites: PHY 151 and MAT 272. B

PHY 253 Physics III: Waves and Modern Physics (3-3) 4 hrs.  
The continuation of the General Physics sequence. Topics include waves equation, electromagnetic radiation, interference, diffraction, relativity, and introduction to quantum mechanics. Prerequisites: PHY 152 and MAT 273. Corequisite: MAT 274 or permission of instructor. S

POLITICAL SCIENCE

POL 100 American Government (3-0) 3 hrs.  
A study of the basic structure, popular basis, functions, and process of the executive, legislative, and judicial branches of government. B

POL 110 State and Local Government (3-0) 3 hrs.  
An introduction to the study of state and local governments. Included is a current analysis of the legal, social, and economic environment in which state and local governments function, the nature of political activity within states and localities, and what these units of government have done or failed to do in important areas of public policy such as taxes, education, welfare, pollution, energy, planning, housing, transportation, crime, police, and corrections, and major trends and developments affecting state and local politics. B

POL 130 International Relations (3-0) 3 hrs.  
This course surveys key aspects of International Relations including international security and international political economy, both of which drive foreign policy decision making among and between countries pursuing their national political, economic or social interests. Topics covered include the creation and nature of a sovereign state, the use of power, the making of foreign policy before and after the Cold War, international conflict and cooperation during periods of war and peace, terrorism, global democracy and capitalism, globalization, international trade, the creation of wealth and the problem of eradicating poverty in both developed and less developed nations, the protection of human rights, international law and organizations such as the United Nations and the World Trade Organization that serve to guide international interaction between countries. This course will prepare students for upper level courses in various and expanding fields of international studies. B

PHY 118 College Physics I (3-2) 4 hrs.  
An algebra and trigonometry-based course with laboratory. Includes vectors, motion in two dimensions, force laws, conservation principles, and thermodynamics. Prerequisites: MAT 145, and high school physics, or SCI 101. B
PSYCHOLOGY

PSY 100 Introduction to Psychology (3-0)  
This course is a comprehensive overview of the scientific study of behavior and mental processes. It will familiarize students with the scientific methods used in the field of psychology. It will also introduce various topics within the field, such as consciousness, motivation, learning, memory, cognition, development, personality, psychological disorders and their treatments, social psychology, and the biological bases of behavior. B

PSY 124 Organizational Behavior (3-0)  
Organizational Behavior is an introductory business course that will provide information to the student about individuals, groups, organizational structure, and function. Topics to be studied include: Human Relations, Decision Making, Human Perception, Dynamics of Groups, Human Needs and Motivation, Concept of Organization, Leadership, Morale, and the Quality of Work Life with attention to ethical considerations. (Also listed as BUS 124.) B

PSY 150 Interviewing & Counseling (3-0)  
A survey of basic counseling techniques, including an overview of the various schools of counseling—the dynamics of communication, interviewing, resolving resistances by dealing with case materials, and role playing. B

PSY 200 Developmental Psychology (3-0)  
A study of the development of human behavior throughout the life cycle with emphasis on the principles of physical, social, cognitive, and personality development. Prerequisite: PSY 100. B

PSY 205 Adolescent Psychology (3-0)  
This course provides an overview of human development during adolescence. Biological, cognitive, and socio-emotional development during adolescence are studied. Families, schools, and cultures are emphasized as contexts for development. Prerequisite: PSY 100. B

PSY 210 Social Psychology (3-0)  
A study of how people think about, influence, and relate to one another. This course focuses on how attitudes develop, the interrelationship between attitudes and behavior, and how societies and groups influence the way individuals act. An examination of social relationships focuses on interpersonal attraction, prejudice, aggression, conflict, and helping behavior. Prerequisite: PSY 100. B

PSY 215 Biological Psychology (3-0)  
This course is an introduction to the interaction between our biology and everything we do, think, and feel. More specifically, it is a survey of the theories and research pertaining to the scientific study of anatomy, physiology, and pharmacology of behavior and mental processes. It will focus primarily on the structures and functions of the nervous system and explore how the nervous system affects such phenomena as development, sensation, perception, movement, sleeping, eating, sexual behavior, learning, memory, language, thoughts, emotions, and psychological disorders. It will also consider the relationship between the body and mind, and how and why brain activity gives rise to your unique conscious experience. Prerequisites: PSY 100. Recommended: High school biology or BIO 111. (Also listed as SCI 215.) B

PSY 220 Abnormal Psychology (3-0)  
This course is an introduction to the field of abnormal psychology. It introduces the student to the current edition of the DSM system of classifying disorders. It emphasizes paradigms that organize and interpret data about behavioral disorders. It seeks to make students aware of the different assumptions behind different therapeutic approaches to behavioral disorders. This course is not intended as a course in clinical psychology. Prerequisite: PSY 100, PSY 200, or permission of instructor. B

PSY 225 Child Psychology (3-0)  
The goal of this course is to provide an understanding of child development that will be useful to those who plan to work with children or in settings designed for children. Child development will be considered within an ecological framework that includes the influences of families and institutions as well as psychological processes on the developing child. Special attention will be given to domains of development such as language and play that are important for understanding how children function in child care settings. This course will focus on normal development of the child infancy through age 12. Prerequisite: PSY 100. B

RESPIRATORY CARE

Through an articulation agreement with Genesee Community College, FLCC provides access to an Associate in Applied Science degree program in Respiratory Care. Descriptions of respiratory care courses listed here are excerpted from the Genesee Community College Web site.

RCP 101 Respiratory Care I  
4 hrs.
Introduces major concepts of respiratory care, including cardiopulmonary assessment, oxygen therapy, pulmonary function testing, and the therapeutic rationale for these procedures. Laboratory includes hands-on practice of respiratory care procedures and critical thinking skills. Three class hours and two laboratory hours. Prerequisite or concurrent registration in BIO 105. Corequisite: RCP LB1

RCP 103 Cardiopulmonary Anatomy and Physiology  
Examines the control and function of the cardiopulmonary system and how it relates to other body organ systems. Explores cardiac and pulmonary physiology and pathophysiology in the neonatal, pediatric, adult, and geriatric patient. Prerequisite or concurrent registration in BIO 105.

RCP 114 Respiratory Care 2  
4 hrs.
Provides rationale and delivery of airway management, bronchial hygiene therapy, hyperinflation therapy, humidity and aerosol medication procedures. Three class hours and two laboratory hours. Prerequisite: RCP 101 and RCP 103. Corequisite: RCP LB4.

RCP 115 Mechanical Ventilation  
3 hrs.
Introduces the principles, effects, and classification of mechanical ventilation. Discusses current theory relative to modes, initiation, monitoring, and graphical interpretation. Three credit hours. Two lecture hours,
two and a half lab hours. Prerequisite: RCP 101 and RCP 103. Corequisite: RCP LB5.


RCP 117 Respiratory Pharmacology 1 hr. Introduces general and specific respiratory pharmacological principles, including drug calculations, the autonomic nervous system, and delivery methods. Explores drugs used in the treatment of asthma, chronic bronchitis, chronic obstructive pulmonary disease (COPD) and other pulmonary disorders.

RCP 118 Clinical Practice 1 1 hr. Opportunity to practice cardiopulmonary assessments, respiratory care procedures, critical thinking, and professionalism in a supervised clinical rotation at an area hospital. 128 clinical hours. Prerequisite: RCP114 and RCP 115.

RCP 202 Cardiopulmonary Pharmacology 2 hrs. Introduces general pharmacological principles and management relative to the cardiopulmonary system. Includes management and treatment of specific cardiopulmonary disorders and drugs used in advanced cardiac life support (ACLS). Prerequisite: RCP117.

RCP 203 Neonatal and Pediatric Respiratory Care 3 hrs. Explores neonatal and pediatric respiratory care beginning with the developmental changes in Utero, the transition at birth, and the continuing development thereafter. Examines the risks and problems associated with these developments and the procedures and rationales for delivering the appropriate respiratory care. Reviews specific neonatal and pediatric disease states, and their treatment relative to respiratory care. Prerequisite: RCP114.

RCP 204 Cardiopulmonary Disease 2 hrs. Examines categories of pulmonary diseases including etiology, detection, management, treatment, and prognosis. Prerequisite: RCP114 and RCP 116.

RCP 209 Cardiopulmonary Diagnostics 3 hrs. Introduces equipment used to monitor patients and diagnose cardiopulmonary diseases. Intercepts clinical information obtained from pulmonary function testing, electrocardiography, and hemodynamics. Prerequisite: RCP114 and RCP 116.

RCP 210 Clinical Practice 2 3 hrs. Provides respiratory care clinical experiences at specialty sites such as hospital operating rooms, sleep medicine clinics, and pulmonary function testing areas. Applies cardiopulmonary assessment, critical thinking and respiratory care knowledge to adult patients. Requires demonstration of knowledge by completing a mock certification exam. Supervised respiratory care at adult critical care rotation sites (384 hours required). Prerequisite: RCP118.


RCP 218 Respiratory Care 3 2 hrs. Reinforces the total respiratory education through the use of prior national board exam questions in an interactive format. Introduces teaching skills through preparation and presentation of a classroom lecture. Requires demonstration of knowledge by completing a mock registry exam. Prerequisite: RCP 210.

SCIENCE

SCI 100 Freshman Orientation to Science/Technology (2-0) 2 hrs. This course is intended to provide incoming science/technology freshmen with a variety of “student” skills that will not only ease the transition from high school or work to college, but will enable the attainment of a higher learning level which, in turn, will reduce attrition and ensure graduation. Computer software and class participation in problem-solving exercises will be used to enhance problem-solving skills. Orientation to student services and policies, science study techniques, stress management, technological and environmental issues, calculator skills and other survival skills will be presented. (Carries science credit only in science technology programs.) B

SCI 101 Physical Science I (Introduction to Physics) (3-2) 4 hrs. An introductory course in physics for students who have not had high school physics. Designed for non-science majors as well as those who plan to take College Physics or General Physics. Emphasizes the metric system, forms of energy such as heat, light, electricity, motion, and sound as they relate to our daily lives, and elementary laboratory skills. Provides prerequisite for PHY 118, PHY 119 and PHY 151. Fulfills laboratory science requirements for non-science degrees. Prerequisite: high school algebra or GST 142. B

SCI 102 Physical Science II (Introduction to Chemistry) (3-2) 4 hrs. An introductory course in chemistry for students who have not had high school chemistry. Designed for non-science majors as well as those who plan to take General Chemistry. Emphasizes the metric system, states of matter, elementary atomic and molecular structure, introduction to inorganic and organic chemistry, the Periodic Table, basic laboratory procedures, and descriptive chemistry as it relates to everyday experiences. Provides prerequisite for CHM 121. Fulfills laboratory science degree requirements for non-science degrees. Prerequisite: high school algebra or GST 142. B

SCI 131 Introduction to Geology (3-2) 4 hrs. A study of the principles of physical and chemical geology as a dynamic process by which our earth
can be characterized as it changes through time. The course will include integrated laboratory and field trip experiences. Offered periodically. B

SCI 137 Chaos: The Self-Organizing Universe (3-2) 4 hrs.
An innovative introduction to Chaos which brings the new scientific paradigm to the undergraduate curriculum. Starting from geometric fractals describing trees, leaves, and snowflakes, the quantitative understanding of fractals is achieved through laboratory exercises, including modeling on computers. Relevance of the Chaos theory is explored across scientific disciplines, and extended to non-science areas such as communications, economics, and arts. This course fulfills a science elective course requirement for students whose primary area of study is other than the sciences; however, interested science/mathematics students can take this course as an elective. Prerequisite: high school algebra (Course I) or GST 142. SU

SCI 151 Introduction to Astronomy (3-1) 3 hrs.
A survey of the mechanics of the solar system as they are interpreted by current astronomers. This course includes study of the motions of the earth, time and concepts and determination, planetary motions and characteristics, and general structure of the solar system as it appears to be at the present time. B

SCI 171 Meteorology (3-0) 3 hrs.
Main sections of this course are seasons, roles of water, other atmospheric energies, organization of the atmosphere, global flow storms, stability and instability, climate possibilities. B

SCI 200 Global Ecosystems (0-3) 3 hrs.
The purpose of this course will be to provide students with field experience relative to course work in the area of Science & Technology as presented at Finger Lakes Community College. This excursion will emphasize the ecosystems, climate change, habitat preservation and distributions within the South African Bushveld and forests, as well as identification of flora and fauna in each studied community. All aspects of the region will be studied including geology, geography, flora, fauna, culture and ecological initiatives. SU

SCI 215 Biological Psychology (3-0) 3 hrs.
This course is an introduction to the interaction between our biology and everything we do, think, and feel. More specifically, it is a survey of the theories and research pertaining to the scientific study of anatomy, physiology, and pharmacology of behavior and mental processes. It will focus primarily on the structures and functions of the nervous system and explore how the nervous system affects such phenomena as development, sensation, perception, movement, sleeping, eating, sexual behavior, learning, memory, language, thoughts, emotions, and psychological disorders. It will also consider the relationship between the body and mind, and how and why brain activity gives rise to your unique conscious experience. Prerequisites: PSY 100. Recommended: High school biology or BIO 111. (Also listed as PSY 215.) B

SCI 220 Glacial Geology of the Finger Lakes (3-0) 3 hrs.
This course is an introduction to glaciation emphasizing the historic events within the Finger Lakes region. The mechanics of glacial motion, erosion, and deposition will be studied and then used to interpret our modern landscape. Students will be introduced to the technique of air photo interpretation. Our modern biodiversity and distributional patterns of organisms will be related to postglacial events. Scenic values associated with glacial landscapes will be a focal point of the class field trips. (Also listed as CON 220.) B

SOCIAL SCIENCE

SSC 101 Experiences in Social Science I 1 hr.
A course to orient students to the life and activities of the various social sciences. Students will obtain a brief introduction to the social sciences as well as a social science perception on college life, the purpose of higher education, and student-faculty roles. Students and faculty will make a four-day trip to Philadelphia to experience first hand how social sciences relate to contemporary society. B

SSC 102 Experiences in Social Science II 1 hr.
A course designed to give students an opportunity to examine professional and career choices in the social sciences, the role of the four-year and graduate schools in preparing social scientists, and a four- to five-day travel experience to Washington, D.C., to examine first hand how the social sciences can be applied to study contemporary society. B

SSC 103 Experiences in Social Science III 1 hr.
A course to orient students to the life and activities of the various social sciences. Students will obtain a brief introduction to the social sciences as well as a social science perception on college life, the purposes of higher education, and student faculty roles. Students and faculty will make a four-day trip to Boston to experience first hand how social sciences relate to contemporary society. B

SSC 104 Experiences in Social Science IV 1 hr.
A course to orient students to the life and activities of the various social sciences. Students will obtain a brief introduction to the social sciences as well as a social science perception on college life, the purposes of higher education, and student faculty roles. Students and faculty will make a four-day trip to New York City to experience first-hand how the social sciences relate to contemporary society. B

SSC 125 Foundations of Child Care (3-0) 3 hrs.
This course will examine the contemporary status of child care programs. It introduces the student to child care including in-home, center-based, and institutional. Child care theory and practice as well as public policy will be studied. Prerequisites: HUS 102 and PSY 100. Offered Spring semester. Corequisite: PSY 205 or permission of instructor. S

SSC 150 Human Sexuality (3-0) 3 hrs.
An interdisciplinary course designed to explore a wide range of interests. The aim of this course is to provide students with an understanding of the interactions and interrelationships of human behavior that influence sexual development and behavior. Biological developmental components of human sexuality will also be addressed. The underlying theme is the influence of
our social and cultural system on the development of sexual needs, standards, and values. Prerequisite: PSY 100, SOC 100, or permission of instructor. B

**SOC 209 Our Cultural Approach to Death (3-0) 3 hrs.** Our culture’s attitudes, beliefs, and rituals in regard to death and the dying process are examined through media, field trips, and value clarification. Present norms and alternate death styles are emphasized to help the student understand existing cultural patterns and accept death as a natural part of the life cycle. B

**SOC 210 Racial and Ethnic Minorities (3-0) 3 hrs.** A sociological analysis of various racial and ethnic minorities in the United States. Cross cultural and historical comparison shall be studied as well as policies developed to cope with intergroup tensions. Prerequisite: SOC 100 or permission of instructor. B

**SPANISH**

**SPN 101 Spanish I (3-0) 3 hrs.** This is a beginning language course designed for students with no previous experience in Spanish, or whose experience does not make placement in a higher level Spanish course advisable. The course is designed to provide students with the fundamentals of Spanish pronunciation and grammar as well as an introduction to Hispanic culture. The course will stress the development of communication skills, especially speaking, but will also promote reading, writing, and listening skills. B

**SPN 102 Spanish II (3-0) 3 hrs.** This course is a continuation of the introductory level course (SPN 101), with increased emphasis on vocabulary enrichment, grammar, and reading comprehension. Prerequisite: SPN 101 or one or two years of high school Spanish. B

**SPN 105 Conversational Spanish I (1-1) 1 hr.** The purpose of this course is to develop Spanish language conversational ability by providing students with additional opportunities to practice speaking and listening skills. It will also complement the parent foreign language course (i.e., SPN 101) by reinforcing the grammar, vocabulary, and cultural points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in SPN 101 in the same semester that she/he is enrolled in the conversational course. B

**SPN 106 Conversational Spanish II (1-1) 1 hr.** The purpose of this course is to continue developing Spanish language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., SPN 102) by reinforcing the grammar, vocabulary, and cultural points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in SPN 102 in the same semester that he/she is enrolled in the conversational course. B

**SPN 130 Spanish for Hotel and Resort Management (3-0) 3 hrs.** The purpose of this course is to provide students with beginning level conversational ability in Spanish with a focus on vocabulary and role-plays specific to those pursuing hospitality careers. The particular needs of students will help to determine the topics covered. While
the emphasis will be on oral communication, students will also develop a basic ability to read and write Spanish. Comparisons and contrasts between Hispanic and US customs and cultural patterns will be drawn, and non-verbal communication cues will be introduced in order to facilitate communication when interacting with Hispanic business counterparts, employees, and guests. B

The following courses are offered only when a sufficient number of students are interested. See the Chair of the Department of Humanities or language instructor.

SPN 140 Occupational Spanish (3-0) 3 hrs.
This course provides immediate access to functional Spanish language skills and cultural competence for non-Spanish speaking students enrolled in a career-specific degree, diploma, or certificate program. It is a practical step toward communication in settings where comprehension is crucial. Cultural awareness will be addressed, as well. The goal is to minimize or eliminate barriers to understanding and communication in the workplace so that once students are employed in their chosen field they can be as effective as possible when interacting with Spanish-speakers on the job. The language component utilizes a phonetic system which allows immediate control of Spanish pronunciation to address the most important Spanish commands, questions, and phrases pertinent to daily communication at work. The vocabulary presented will be tailored to the specific needs of the target occupation. The target occupations include (but are not limited to) Law Enforcement, Nursing, Banking, Office Personnel, Hotel and Resort Management, Social Services, Substance Abuse Counseling, Paramedics and EMTs, Teacher’s Aide, and Landscaping. No prior knowledge of Spanish is necessary. B

SPN 152 Spanish for Medical Personnel (3-0) 3 hrs.
This very career-oriented course is designed for beginners who, due to occupational necessity, must communicate with patients and their families whose native language is Spanish. The student will understand reactions of Spanish-speaking people to every day situations, will be able to express, in simple Spanish, what he/she needs or wants to say, and will also possess a beginner’s level of reading and writing ability. The student will also develop an understanding and appreciation of Hispanic cultural attitudes as they relate to health care. B

SPN 175 Foreign Language Immersion (3-0) 3 hrs.
The purpose of this course is to provide students with a linguistic and cultural travel experience relative to their course work in Spanish. This travel course is conducted in different locations throughout the world where the target language is spoken. The course will emphasize communication in the target language, as well as develop an understanding and appreciation of the host country’s culture. Where possible, students will be lodged in “homestay” accommodations. JP

SPN 201 Spanish III (3-0) 3 hrs.
This course provides vocabulary expansion and a review of basic grammatical structures introduced in the first year of study. Emphasis is on the continued development of Spanish language skills through the study and discussion of authentic readings in Hispanic literature and culture. Students will learn strategies to improve reading comprehension and fundamental composition writing skills. Prerequisite: SPN 102 or two to three years of high school Spanish. B

SPN 202 Spanish IV (3-0) 3 hrs.
This is a continuation of the intermediate level course (SPN 201). Emphasis is on further expansion of communication skills in Spanish, both spoken and written. Students will refine critical reading and writing skills through further exploration of Hispanic literature and culture. Prerequisite: SPN 201 or three to four years of high school Spanish. B

SPN 203 Spanish V (3-0) 3 hrs.
An integrated course including highlights of Hispanic civilization, culture, literature, and art. Also included are a variety of activities to stimulate conversation and writing skills. Prerequisite: SPN 202. B

SPN 204 Spanish VI (3-0) 3 hrs.
A continuation of SPN 203. Prerequisite: SPN 203. B

SPN 205 Conversational Spanish III (1-1) 1 hr.
The purpose of this course is to continue developing Spanish language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., SPN 201) by reinforcing the grammar, vocabulary, and literary points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in SPN 201 in the same semester that he/she is enrolled in the conversational course. B

SPN 206 Conversational Spanish IV (1-1) 1 hr.
The purpose of this course is to continue developing Spanish language conversational ability by providing students with additional opportunities to practice and refine speaking and listening skills. It will also complement the parent foreign language course (i.e., SPN 202) by reinforcing the grammar, vocabulary, and literary points presented in that course. Emphasis will be placed on oral practice. Corequisite: A student must be enrolled in SPN 202 in the same semester that he/she is enrolled in the conversational course. B

TAXIDERMISTRY

TAX 100 Principles of Taxidermy (3-0) 3 hrs.
This course will introduce students to the ethics, regulations, materials, wildlife identification, and basic techniques appropriate for preparing natural specimens. This will give students a basic introduction to what a person must know to start in taxidermy. F

TAX 101 Small Mammal Taxidermy (3-0) 3 hrs.
This course will provide basic but intensive experience in the use of tools, materials, and techniques in the preparation of actual mounts. Students will prepare several mounts, partake in demonstrations, and even specialize in one type of specimen preparation. F

TAX 102 Fish Mount Preparation (3-0) 3 hrs.
Fish Mount Preparation will expose students to a variety of materials, tools, and methods appropriate for the preparation of fish mounts. Each student will produce several mounts. S
TAX 201 Bird Mount Preparation (3-0) 3 hrs.
This course will provide intensive experience in the use of tools, materials, and techniques in the preparation of bird mounts. Students will prepare several bird mounts during the course. Two or three Saturday classes may be scheduled. S

TAX 202 Topics in Advanced Taxidermy (3-0) 3 hrs.
Designed to provide extensive training for taxidermists in the areas of birds, small mammals, and fish preparation. Skills developed will include fleshing, tanning, painting, and presentation of mounts. Course content will vary from semester to semester. Students may repeat this course for credit in each of the different topic areas. Prerequisite: TAX 100 or permission of instructor. F

TECHNOLOGY
(Courses do not fulfill mathematics/science requirements)

TECH 101 Materials and Processes I (2-3) 3 hrs.
Introduction to materials and processes of modern industry from the Engineering Technologist’s point of view. Materials of science and physical properties of industrial materials: ferrous and non-ferrous metals and alloys, plastics, elastomers, and ceramics. Processes covered include all forms of casting, forging, powder metallurgy, and other hot-working, chipless products. Basic algebra is assumed. F

TECH 104 Materials and Processes II (3-0) 3 hrs.
Continuation of materials and processes of modern industry from the Engineering Technologist’s point of view. Cold-working processes. Welding and allied processes. Machining processes and tools. Measurement, gauging, and inspection. Prerequisites: MAT 145 required and TECH 101 recommended. S

TECH 105 Engineering Drawing I (1-5) 3 hrs.
This course introduces the fundamental concepts related to technical drawing and hand drafting. Topics that will be explored include drawing equipment, sketching, line weights, lettering, geometric constructions, orthographic projection and multi-views, axonometric & isometric views, shade and shadow, dimensioning, sections, and working drawings. Architectural floor plans, elevations, sections, and details will also be examined. F

TECH 106 Engineering Drawing II (2D AutoCAD) (1-5) 3 hrs.
Techniques for creating, viewing, and plotting 2D AutoCAD drawings will be presented. Lectures, demonstrations, and labs in a variety of applications will enhance the student’s CAD ability and professional development. Topics include drawing, editing, and dimensioning commands; drawing setup; blocks; attributes; and plotting. Prerequisites: TECH 105 or permission of instructor. S

TECH 115 Technology Freshman Seminar (1-2) 2 hrs.
An exploration of today’s engineering and technology fields and the multifaceted role of the technologist. Orientation to student services, academic policies, stress management, science study skills, time management, and other college survival skills will be presented. Additional topics of study include applied mathematics, use of scientific calculators, teamwork and problem solving skills in the classroom, and laboratory and an introduction to the physical units and dimensions encountered in the technologies. B

TECH 122 Electronic Theory I (2-3) 3 hrs.
An introduction to the basic topics of circuit theory and circuit analysis, both DC and AC; the concepts of voltage, current, and power are introduced, as are the primary linear components: resistors, inductors, and capacitors; the fundamental laws and theorems of circuit analysis are covered, including Ohm’s, Kirchoff’s, Superposition, as well as mesh and nodal circuit analysis. Prerequisites: High school physics or SCI 101, and high school mathematics through Course II or MAT 145. F

TECH 123 Digital Electronics (2-3) 5 hrs.
This course focuses on the theory and application of digital devices and circuits. Topics investigated include digital signals, binary number systems, Boolean Algebra and Karnaugh Mapping circuit reduction techniques. Digital devices/circuits tested include basic logic gates, flip flops, counters, adders, registers, encoders, decoders, multiplexers, demultiplexers, and analog-digital converters. The course will also provide an introduction to microcontrollers and applications. Prerequisites: High school physics or SCI 101, and High school math through Course B or MAT 145. S

TECH 130 Construction Materials (3-0) 3 hrs.
This course provides an introduction to the properties and use of materials employed in construction. Topics that will be covered include foundations & soils, wood (light frame & heavy timber), concrete, masonry, steel, roofing, windows & doors, and finishes. Lecture topics are supplemented with material samples, photographs of built projects, video, and field trips. F

TECH 205 Engineering Drawing III (1-5) 3 hrs.
This course includes advanced drafting skills required in a typical engineering design environment. Topics include drafting views, assembly drawings, threads and fasteners, dimensioning, tolerancing, bearings and shafts, gears, cams, springs, keys, sheet metal and weldments, and the design process. Students will use 2D drafting techniques and parametric solid modeling software. Prerequisite: TECH 106. F

TECH 206 Engineering Drawing IV (1-5) 3 hrs.
A continuation of Engineering Drawing III. Advanced topics include geometric positioning and tolerancing as it relates to symbols, terms, datums, modifiers, geometric characteristics, true position and English / Metric units; and computer numerically controlled (CNC) manufacturing of student’s CAD - documented parts executed via post processor software. The course will include an advanced design project involving design calculation formulas studied in other mechanical courses and design and drafting methods studied in previous drawing courses. S

TECH 216 Statics and Strength of Materials (2-3) 3 hrs.
Study of force systems, equilibrium; two and three force members, vectors, analytical methods of solution, friction, moments of inertia of areas. Study of strength of materials concepts: stress, strain, torsional stress and strain, shear and moment in beams, load, shear, and moment diagrams. Prerequisites: PHY 118 and MAT 145 required and MAT 152 recommended. F
TECH 217 Dynamics and Strength of Materials (2-3) 3 hrs.
Continuation of Strength of Materials topics. Deflection of beams (statically determine and indeterminate), combined load, welded, bolted and riveted connections, and columns. Dynamics topics include kinematics of rigid bodies, work, energy and power, impulse and momentum. Prerequisite: TECH 216. S

TECH 219 3D AutoCAD (2-4) 4 hrs.
Techniques for creating, viewing, plotting, and displaying 3D AutoCAD models will be presented. Lectures, demonstrations, and labs in a variety of in-depth application projects will enhance the student's CAD creative ability and professional development. Topics include 3-D display, User Coordinate Systems, point filters, extrusion, surfaces, solid modeling, plotting, rendering, and software customization. Prerequisite: TECH 106 or permission of instructor. F

TECH 220 Machine Design I (2-3) 3 hrs.
Introduction to the analytic design of machine elements. Study of kinematics of mechanical linkages, cams, gears, gear trains. Ball and roller bearings. Belt and chain drives. Prerequisites: PHY 118 and MAT 145. Corequisite: TECH 216. MAT 152 recommended. F

TECH 221 Machine Design II (2-3) 3 hrs.
Continuation of the analytic design of machine elements. Topics include power transmission shafting, mechanical clutches and brakes, springs, welded and riveted connections, power screws, and working stresses. Prerequisite: TECH 220. Corequisite: TECH 217. S

TECH 242 Construction Management (3-0) 3 hrs.
An overview of principles and practices in the administration of architectural construction projects. Topics include construction methods and materials, planning and scheduling, job cost control, contracts, specifications, safety, and labor relations. Prerequisite: TECH 130. F

TECH 244 Residential Design & Drafting (1-5) 3 hrs.
Students will be introduced to the fundamental concepts required for the drafting and design of residential buildings. The course will simulate a professional setting by working through the steps required for a hypothetical residential project. By the end of the semester, a set of working drawings will be prepared. Topics that will be explored include the building code, the energy code, presentation drawings, construction drawings, site plans, floor plans, elevations, sections, foundations, framing plans, and schedules. Prerequisites: TECH 106, TECH 130. F

TECH 246 Commercial Design & Drafting (1-5) 3 hrs.
Students will be introduced to the fundamental concepts required for the drafting and design of commercial buildings. The course will simulate a professional setting by working through the steps required to prepare construction drawings for a project. By the end of the semester, a set of working drawings will be prepared. Topics that will be explored include the building code, ADA requirements, the energy code, construction drawings, site plans, floor plans, ceiling plans, elevations, sections, foundations, framing plans, and schedules. Prerequisite: TECH 244 or permission of instructor. S

TECH 248 Structural Design (3-2) 4 hrs.
Students will be introduced to fundamental concepts related to the design of building structures. Topics that will be covered include 1) forces, 2) trusses, 3) shear & bending moment diagrams, 4) properties of sections, 5) estimating live & dead loads, 6) designing wood beams, columns, & connections, and 7) designing steel beams, columns, and connections. Prerequisites: TECH 216, MAT 145 required. S

TECH 249 Building Mechanical Systems (3-0) 3 hrs.
This course will present an overview of the principles and practices used in the design of mechanical systems for buildings. The fundamentals of HVAC, plumbing, and electrical systems will be examined. Topics that will be explored include: equipment selection, design of delivery systems, energy conservation strategies, application of building codes, and the integration with/impact on architectural design. Prerequisites: MAT 145 and TECH 130. S

TECH 250 Technology Co-op (3-2) 3-6 hrs.
The co-op program enables the technology student to supplement academic studies with work experience. The student will be employed a minimum of 120 work hours (3 credits) or 240 work hours (6 credits) per semester (either full-time or part-time employment). Students will be required to enter into a co-op contract, successfully complete an orientation and submit a written report at the conclusion of the work experience. This course is a technology elective and enrollment is limited to technology students. Prerequisites: Completion of 30 credits in the degree program, advisor approval of co-op placement and a minimum GPA of 2.5 or GPA of 2.00-2.49 with faculty approval.

TECH 260 Construction Estimating (3-0) 3 hrs.
An introduction to cost estimating of an architectural project. Topics include an overview of the estimating process; an introduction to contracts, bonds and specifications; and the preparation of a final bid for a project including quantity takeoffs, material pricing, labor cost, equipment costs, overhead and profit. Prerequisites: TECH 130, TECH 244, and MAT 145. Corequisite: TECH 246 or permission of instructor. S

THEATRE

THE 100 Play Production I (3-0) 3 hrs.
A study and application of the major features of technical production in the theatre with emphasis on scenery construction, painting, properties, costuming, special effects, and makeup. Work on technical crews for department’s fall mainstage production is required. F

THE 101 Play Production II (3-0) 3 hrs.
This course places emphasis on the following areas of stage design: scene, lighting, costume, and make-up. Secondary emphasis will be on stage properties, sound design, and the use of computers in the theatre. Work on technical crews for department’s spring mainstage production is required. S

THE 102 Acting I (3-3) 3 hrs.
A performance course in the study and application of fundamental acting techniques for the stage. Open to all students. B
THE 103 Acting II (3-3)  3 hrs.  This performance course places emphasis on scene study. Students rehearse and present three different scenes (from major plays) during the semester. Open to all students. Acting I is NOT a prerequisite. S

THE 104 Introduction to the Theatre (3-0)  3 hrs.  A study of theatre as an art through the elements of writing, acting, directing, and play production. The cultural and social influences of the theatre upon society will be discussed. Students will attend and discuss several theatrical productions during the semester. F

THE 105 Rehearsal and Performance (3-3)  3 hrs.  Students rehearse a theatre piece (one-act play, skit, or revue) for presentation on campus and at area high schools. May be taken more than once for credit. S

THE 106 Children's Theatre Tour (3-0)  3 hrs.  A workshop/rehearsal/performance course in children's theatre. Students will prepare a one-act play for presentation at primary and elementary schools in Ontario County. Students may participate as actors or technicians (set construction, props, costumes). Open to all students. May be taken more than once for credit. S

THE 181 Mime (3-0)  3 hrs.  A basic course dealing with the study and application of the various techniques of the art of mime. (Also listed as PE 181.) F

THE 200 Directing Workshop (3-0)  3 hrs.  A workshop in directing techniques with emphasis on play interpretation, stage movement, casting, and rehearsal. Each student works with students in Acting II. Prerequisite: THE 102, THE 103, or permission of instructor. S

THE 210 Introduction to Dramatic Literature (3-0)  3 hrs.  This course is an introduction to the history and genre of drama. By exploring some of the best known plays throughout theatre history and how they were performed, students will develop an understanding of, and appreciation for, the theatre. Lectures, films, and attendance will provide students with a partial overview of the vast range of theatre history and literature. Prerequisite: ENG 101. (Also listed as ENG 213) S

WILDLAND FIRE SUPPRESSION

WFS 100 Orienteering (1-0)  1 hr.  This course will provide students with hands-on experience in the fundamentals of map and compass utilization. Emphasis will be placed on topographic map interpretation and field navigation techniques. In addition to the standard orienteering compass, students will learn how to navigate by Global Positioning System (GPS). F

WFS 101 Fire Science Agencies and Careers (1-0)  1 hr.  This course covers the main federal, state and non-governmental agencies that hire Wildland Fire Fighters. Topics will include the missions of each agency, hiring procedures, the meaning of seasonal employment, job descriptions and job requirements. Students will be given a thorough explanation of positions within and outside of New York State. In addition, the role of volunteer fire fighters will be explored. F

WFS 130 Wildland Fire Suppression (2-0)  2 hrs.  This course provides the training necessary for the Federal Interagency "RED" Card for wildland firefighter. Topics covered include: ignition, behavior, and spread of wildfires; the role of topography and fuels in wildfires; prescribed fires as a management tool; use of fire suppression equipment; methods of fire prevention and suppression; State and Federal wildland fire control agencies. Graded on a satisfactory/unsatisfactory basis. (Also listed as CON 255.) B

WFS 131 Firefighter Type I (1-0)  1 hr.  This interactive course contains activities to allow students to demonstrate the information learned in class. Topics include: fireline reference materials, communications, and tactical decision making. Course meets NWCG (National Wildfire Coordinating Group) standards for S-131 certification (FFT1). Prerequisite: Firefighter type 2 (FFT2). This can be accomplished through completion of CON 255 or any NWCG recognized S-130 course. F

WFS 200 Basic Incident Command System (1-0)  1 hr.  This course introduces students to the principles of the Incident Command System (ICS). Five instructional modules are presented: Principles and Features of ICS, Organizational Overview, Incident Facilities, Incident Resources, and Common Responsibilities Associated with ICS Assignments. Course meets NWCG (National Wildfire Coordinating Group) standards for I-200 certification. S

WFS 210 Portable Pumps and Water Use (2-0)  2 hrs.  This course is designed for individuals to gain competency in the use of portable pumps and water for application on a wildland fire line. Skill areas include supply, delivery and application of water. Students will be required to demonstrate their knowledge of correct water use, basic hydraulics and equipment care. A field exercise requires students to set up, operate and maintain pump equipment. Course meets NWCG (National Wildfire Coordinating Group) standards for S-211 certification. S

WFS 211 Firefighter Type II (2-0)  2 hrs.  This course provides the training necessary for the Federal Interagency "RED" Card for wildland firefighter. Topics covered include: ignition, behavior, and spread of wildfires; the role of topography and fuels in wildfires; prescribed fires as a management tool; use of fire suppression equipment; methods of fire prevention and suppression; State and Federal wildland fire control agencies. Graded on a satisfactory/unsatisfactory basis. (Also listed as CON 255.) B
WFS 215 Fire Operations in the Wildland/Urban Interface (2-0)  
This course is designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fires that threaten life, property and/or improvements in the wildland/urban interface. Course meets NWCG (National Wildfire Coordinating Group) standards for S-215 certification. **Prerequisite:** CON 255/WFS 130 or permission of the Department. 

WFS 230 WFS Crew Boss (2-0)  
This course is designed to produce student proficiency in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Topics include: operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization and post incident responsibilities. **Prerequisites:** CON 255/WFS 130 and WFS 290 or permission of the instructor. 

WFS 256 Fire Ecology (3-0)  
This course is designed to give students an appreciation and understanding of the ecological role of fire in a variety of North American ecosystems. Advantageous adaptations of species inhabiting fire prone ecosystems will be discussed. The effects of fire on plants and animals will be discussed within the context of ecological time scales. The effect of past state and federal policies concerning wild fire will be examined using various case studies. Students will also be introduced to the use of prescribed burning as a habitat restoration technique. (Also listed as CON 256.) 

WFS 290 Intermediate Wildland Fire Behavior (2-0)  
This course is designed to prepare the prospective supervisor to undertake safe and effective fire management operations in a wildland setting. Topics include environmental, topographic and fuel factors influencing wildland fire behavior, extreme behavior and assessment of fire behavior estimates and suppression limitations. Course meets NWCG (National Wildfire Coordinating Group) standards for S-290. **Prerequisite:** CON 255/WFS 130 or any other S-190 recognized course.