

## 2012 – 2013 SUNY SULLIVAN FALL CATALOG

### Part 5 - COURSE DESCRIPTIONS

The course descriptions which follow are listed alphabetical order by their three-letter prefixes. Courses are not necessarily offered every semester. The College reserves the right to cancel any course if the enrollment falls below a predetermined minimum level or for other reasons at the discretion of the Vice President for Academic and Student Affairs.

#### Course Prefixes

ANT=Anthropology	GRB=Green Building Management
ART=Art	HIS=History
BUS=Business	HON=Honors
CAR=Residential Carpentry	HUM=Humanities
CAS=Club Management: Casino	IAS=Freshman Seminar
CEL=Residential Electrical	MAT=Mathematics
CMP=Club Management	MED=Medical
COM=Communication and Media Arts	MHA=Mental Health
CPT=Computing	MUS=Music
CRJ=Criminal Justice	NUR=Nursing
CUL=Culinary	PED=Physical Education
DEN=Developmental English	PHO=Photography
DMA=Developmental Math	PLA=Legal
DOR=Operation Rebound	POL=Political Science
ECE=Early Childhood Education	PSY=Psychology
ECO=Economics	REL=Recreation and Leisure
EDU=Education	RES=Respiratory Care
EMG=Emergency Management	SCI=Science
ENG=English	SOC=Sociology
FIR=Fire Protection Technology	SUR=Surveying
FLA=Foreign Language	THE=Theater
GEO=Geography	WTT= Wind Turbine Technology
GMP=Club Management: Golf Track	

**Please Note: The following courses are only offered in the spring semester:**

<b>Course #</b>	<b>Course Title</b>		
ART 1002	Childhood Art	GRB 2400	Care of Green Spaces
ART 1310	Advertising Design	GRB 2500	Troubleshooting Green Bldg Systems
ART 2001	Drawing II	GRB 2600	Green HVAC
ART 2610	Computer Graphics II	HUM 1110	20 <sup>th</sup> -Century Art
ART 2630	Graphic Design	MED 2104	Basic Pharmacology
ART 2720	Digital Web Media	MED 2120	Med Terminology II
BUS 1650	Office Management	MED 2220	Medical Assisting II
BUS 1934	Meeting Planning and Conventions	MED 2250	Med Assistant Externship
BUS 2416	Managerial Accounting	MHA 2110	Professional Ethics in Human Services
BUS 2460	Federal Income Tax Procedures	MHA 2511	Intro to Developmental Disabilities
BUS 2502	Business Law II	MHA 2906	Practicum in Direct Support
BUS 2602	International Business	NUR 1010	Commonalities in Nursing Care
CAR 2002	Advanced Residential Carpentry II	NUR 1013	Clinical for NUR 1010
CAR 2004	Advanced Residential Carpentry IV	NUR 1014	Lab for NRU 1010
CAR 2005	Advanced Residential Carpentry V	NUR 2030	Health Problems in Life Cycles II
COM 2300	Audio Production	NUR 2032	Health Problems II Seminar
COM 2125	Mass Media Criticism	NUR 2033	Clinical for NUR 2030
COM 2600	Advanced Media Production	NUR 2035	Advanced Clinical Calculations
COM 2601	Media Internship I	NUR 2100	Nursing Issues and Trends
CPT 1208	Operating Systems & Networking	PED 1204	Badminton
CPT 1303	Introduction to Simulation and Game Development	PED 1306	Basketball
CPT 1305	Computer Applications for the Legal Office	PHO 2405	Photography II
CPT 1405	Programming in Visual Basic	POL 1322	Constitutional Law
CPT 1408	Website Design & Construction	PSY 2506	Abnormal Psychology
CPT 1411	Business on the Internet	PSY 2508	Child Development & Guidance
CPT 2207	Advanced Computer Applications	PSY 2512	Forensic Psychology
CPT 2403	Simulation and Game Development Programming II	REL 1014	Summer Camp Leadership
CPT 2607	Data Structures	REL 1016	Motor Learning
CPT 2611	Systems Analysis	REL 2005	Management of Event Operations
CRJ 1107	Police Operations	SCI 1005	Environmental Geology
CRJ 1113	Criminal Investigation	SCI 1006	Environmental Geology Lab
CRJ 1116	Cultural Diversity & Crim Justice	SCI 1042	SpTp: Chemistry of Everyday Life
CRJ 1117	Police-Community Relations	SCI 1043	SpTp: Chemistry of Everyday Life Lab
CRJ 2103	Introduction to Corrections	SCI 1117	Introduction to Marine Biology
CRJ 2111	Juvenile Justice	SCI 1118	Introduction to Marine Biology Lab
CRJ 2608	Introduction to Criminology	SCI 1701	Science and Civilization
CUL 1206	Principles of Baking	SCI 1703	Contemporary Health
CUL 1702	Applied Nutrition Lab	SCI 2122	A&P Human Performance II
CUL 1804	Advanced Baking Techniques	SCI 2123	A&P Human Performance II Lab
CUL 2121	Banquet and Catering Practice	SCI 2152	Principles of Biology II
CUL 2131	International Cuisine	SCI 2153	Principles of Biology II Lab
CUL 2227	Pastry Production	SCI 2202	General Chemistry II
CUL 2241	The Art of Confections	SCI 2203	General Chemistry II Lab
CUL 2504	Hospitality Cost Control	SCI 2210	Organic Chemistry II
EDU 1207	Observation/Participation in ECE	SCI 2211	Organic Chemistry II Lab
EDU 2201	Socio & Philo Foundations Education	SCI 2300	Non-calculus Physics II
EDU 2300	Infants and Toddlers	SCI 2301	Non-calculus Physics II Lab
GRB 1300	Energy Management	SCI 2302	Calculus Physics II
GRB 1400	Green Building Materials	SCI 2303	Calculus Physics II Lab
		SCI 2826	Fundamentals of Chemistry II
		SCI 2827	Fundamentals of Chemistry II Lab

**Please Note: The following courses are only offered in the fall semester:**

<b><u>Course #</u></b>	<b><u>Course Title</u></b>	<b><u>Course #</u></b>	<b><u>Course Title</u></b>
ART 1205	Design & Color	MHA 1514	Basic Report Writing
ART 1601	Typography	MHA 1930	Human Services Skills Exploration
ART 1610	Computer Graphic I	MHA 2512	Human Behavior Social Environments
ART 2311	Graphic Design Workshop	NUR 1001	Fundamentals of Nursing
ART 2620	Digital Animation	NUR 1003	Fundamentals of Nursing Seminar
ART 2710	Computer Graphics II	NUR 1004	Clinical for NUR 1001
BUS 1103	Introduction to Hospitality and Tourism	NUR 1005	Lab for NUR 1001
BUS 2413	Intermediate Accounting	NUR 1015	Clinical Calculations
CAR 2001	Advanced Residential Carpentry I	NUR 2020	Health Problems in Life Cycles I
CAR 2003	Advanced Residential Carpentry III	NUR 2022	Health Problems I Seminar
COM 2200	Media Writing Techniques	NUR 2023	Clinical for NUR 2020
COM 2400	Video Production	NUR 2024	Lab for NUR 2020
CPT 1200	Computer Information Systems	PED 1253	Racquetball
CPT 1301	Logic & Problem Solving	PED 1334	Softball
CPT 1403	Simulation and Game Development Programming I	PED 1350	Soccer
CPT 2211	Database Management	PED 1812	Project Adventure
CPT 2216	C++ & Object Oriented Programming	PHO 1405	Photography I
CRJ 1115	Introduction to Criminal Justice	POL 1350	Introduction to American Law
CRJ 1320	Criminal Law & Procedure	PSY 2502	Child Psychology
CUL 1160	Cake Decorating	PSY 2503	Adolescent Psychology
CUL 1205	Bakery Management	REL 1003	PE, Sport, Recreation & Leisure
CUL 2114	Restaurant Operations	REL 1507	Health Sciences Applied to Coaching
CUL 2140	Garde Manger	REL 2104	Therapeutic Recreation
CUL 2225	Bakery Production	REL 2202	Sport & Event Practicum
CUL 2252	Bread and Roll Production	SCI 1018	Introduction to Physical Geology
EDU 2200	Introduction to Education	SCI 1019	Introduction to Physical Geology Lab
EDU 2204	Children's Literature	SCI 1030	Introduction to Astronomy & Lab
EDU 2203	Teaching Exceptional Children	SCI 1111	General Botany
EDU 2510	Home, School & Community	SCI 1112	General Botany Lab
GRB 1100	Introduction to Green Building	SCI 1824	Fundamentals of Chemistry I
GRB 1200	Intro to Renewable Energy Systems	SCI 1825	Fundamentals of Chemistry I Lab
GRB 2100	Building Automation & Controls	SCI 2110	Field Biology
GRB 2200	Solar & Wind Systems	SCI 2111	Field Biology Lab
GRB 2300	Commercial Electrical	SCI 2120	SpTp: A&P Human Performance I
MED 1110	Medical Terminology I	SCI 2121	SpTp: A&P Human Performance I Lab
MED 1501	Health Care Law & Ethics	SCI 2208	Organic Chemistry I
MED 2210	Medical Assisting I		
MHA 1510	Introduction to Human Services		

## Course Descriptions

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### **ANT 1102 Cultural Anthropology, 3 credits, GE 3, GE 6**

This course introduces the student to the great variety in human social life and customs throughout the world. Ways of classifying societies and analyzing cultural diversity are described and applied and questions of how individual life and personality are affected by living under these diverse forms are discussed.

### **ART 1001 Drawing I, 3 credits, GE 8**

Students explore and develop basic skills in the following areas: form and proportion, light and shade, perspective, still life, and gesture drawing in various media. Students enhance and develop their ability to render objects dramatically, while developing their own personal style.

### **ART 1002 Childhood Art, 3 credits, GE 8**

Students are introduced to the creativity and aesthetics inherent in the art of children. Through hands-on experiences, students explore various forms of artistic expression and the creative processes appropriate for children. Students also have the opportunity to research and build a resource file of age-appropriate art activities for children.

### **ART 1205 Design & Color, 3 credits, GE 8**

Students are introduced to the principles of design on the 2D surface including movement, relationships, tension, order, and rhythm. Students create visual solutions with clarity, reason, and drama through layouts and computer experimentation, the study of color and typography, and the culmination of all design principles and elements.

### **ART 1310 Advertising Design, 3 credits**

This is an intensive problem-solving class with the emphasis on conceptual thinking and development of a professional attitude. Critical thinking provides a foundation in strategy, concept, and design. The class incorporates actual advertising design projects and focuses on the design and structure of the printed page. Using computers, students study the creation and use of grids and other layout devices to explore the integration of typography and visual elements. Prerequisite: ART 2610 Computer Graphics II

### **ART 1601 Typography, 3 credits**

Students are introduced to the study of the style, arrangement, and appearance of design in typography. The course covers a wide range of technical processes and design elements with assignments that define typography's symbolic and communicative aspects. Both the visual concerns and functional principles are explored through the use of the computer. Prerequisite: ART 1610 Computer Graphics I

### **ART 1610 Computer Graphics I, 3 credits**

This course serves as an introduction to the use of the computer in the graphic arts. Students learn how to create and modify art using image editing, drawing, and publishing programs. Students also learn the relationships between software programs.

### **ART 2001 Drawing II, 3 credits**

Students explore the aspects of drawing as illustration for advertising and graphic design: pen and ink illustration, marker and color pencil renderings, as well as editorial, conceptual, layout, and line art illustration. Students also create original illustrations and tight conceptual studies in order to develop the ability to quickly and clearly relate ideas visually. Prerequisite: ART 1001 Drawing I

### **ART 2308 Creative Visualization, 3 credits, GE 8**

Most people think of creativity as something you're born with when, in reality, creativity is a gift that we all possess and need only nurture and develop. Taking chances and opening up to alternative viewpoints enhances creativity and, in turn, effectiveness in both professional and personal aspects of life. Through discussion, group brainstorming, looking at specific problems from as many viewpoints as possible and learning to produce as many ideas as possible, the application of individual creative flow are cultivated unleashed in new and relevant ways.

### **ART 2311 Graphic Design Workshop, 3 credits**

This course combines studio, computer work with classroom instruction. Components of design theory are incorporated with problem definition to provide students with experience in concepts, execution and presentation of assignments. Students are expected to use creative thinking to solve communication problems. Lecture and visual media provide a broad introduction to professional possibilities. Prerequisite: ART 2610 Computer Graphics II

### **ART 2610 Computer Graphics II, 3 credits**

Design projects require the in-depth use of software programs introduced in Computer Graphics I. Special

emphasis is placed on the integration of software packages and the preparation of files for final output to various sources. Prerequisite: ART 1001 Drawing I

### **ART 2620 Digital Animation, 3 credits**

This is an intensive course involving 3D modeling and 2D and 3D animation. The concepts of timing, keyframing, tweening and movement are explored. Students learn methods of creating efficient 3D models using different modeling and animation software packages. The process of animation from story development through storyboard and pencil sketches to final rendering and editing are included. Emphasis is placed on students developing their own creative visions. Prerequisites: ART 1001 Drawing I, ART 1205 Design and Color, ART 1610 Computer Graphics I, ART 2610 Computer Graphics II, or permission of the instructor.

### **ART 2630 Graphic Design, 3 credits**

Students develop visual awareness which requires refinement of design and appropriateness of format and typography in relation to concept and specific target audiences. The student creates advertising through the study of the creative process, idea generation, understanding and evaluating information, applying research, and creating powerful communication idea-driven solutions. Students explore the computer environment as well as the traditional mediums and are encouraged to use their conceptual and analytical thinking skills. Overview, refinement and presentation of a final portfolio is a requirement of this course. Prerequisite: ART 2311 Graphic Design Workshop

### **ART 2710 Computer Graphics III, 3 credits**

This course provides an introduction to industry-standard computer programs and techniques used in the production of portable (disk and other portable media) and web-based multimedia. Students learn 2-D and 3-D animation, digital video editing, digital sound editing, interactive design, interactive authoring, and world wide web design. Prerequisite: ART 2610 Computer Graphics II

### **ART 2711 SpTp: Computer Graphics Marketing, 3 credits**

This course will further the student's knowledge of graphic design and marketing strategies. Local businesses looking for design work will be the core of the course work. Prerequisite: ART 2710 Computer Graphics III

### **ART 2720 Digital Web Media, 3 credits**

This course is an introduction to industry-standard programs and techniques used in the production of portable and web-based media. Subject areas covered are: basic Hyper Text Markup Language (HTML), utilization of web-compatible audio and video files, computer graphics, digital photographs, animation, and electronic interactive design. Students also learn procedures to upload media to servers. Prerequisite: ART 2710 Computer Graphics III

### **BUS 1101 Business Mathematics, 3 credits**

This course covers the mathematics used in everyday business and accounting. Among the topics included are: fractions and decimals, the use of algebraic equations, percents and their applications, sales and trade discounts, markup, payroll, checking accounts, simple and compound interest, discounting of notes, present value, taxes, and business statistics.

### **BUS 1103 Introduction to Hospitality and Tourism, 3 credits**

In this course, students study the growth and development of the hospitality and tourism industry. Topics include hotels, restaurants, major transportation companies, sustainable tourism, and various areas of industry specialization.

### **BUS 1125 Business Communications, 3 credits**

Students use word processing software to learn how to write effective business letters, including sales letters, credit letters, collection letters, adjustment letters, letters of application and resumes, and the preparation of problem-solving business reports.

### **BUS 1223 SpTp: Keyboarding Skills, 1 credit**

This course will develop touch keyboarding skills involving the input of alphabetic, numeric (10 key pad), and symbol information on a keyboard. Basic understanding of the vocabulary and concepts used in keyboarding operations for inputting and retrieving information will be developed.

### **BUS 1298 Word Processing for Personal Use, 3 credits**

Students learn to use a popular word processing software package to create and edit letters, reports, and term papers while using correct keying techniques.

### **BUS 1301 Principles of Marketing, 3 credit hours**

This course is an introduction to the complex marketing process, its functions, institutions and activities. Students complete a comprehensive survey of the marketing mix, consumer behavior, channels of distribution, marketing methods, policies, and organization.

**BUS 1302 Principles of Advertising, 3 credits**

This course provides an overview of the basics of advertising and its relationship to the field of marketing. Students explore advertising history, the various media, government control, research and trademarks.

**BUS 1304 Principles of Salesmanship, 3 credits**

The basic principles of sales theory are explored in both retail and industrial applications. This course also draws heavily from the behavioral sciences, especially psychology and sociology. Areas covered include the role of selling in the American economy, consumer motivations, planning an effective sales presentation and the introduction to the field of sales management.

**BUS 1310 Principles of Management, 3 credits**

This course covers principles of managerial practice. The concepts center on an analysis of the four major functions of management: planning, organizing, leading and controlling. This course examines the integration of management principles with other business procedures. Topics include business ownership, organizational structure, human relations, marketing and finance.

**BUS 1341 Entrepreneurship, 3 credits**

This course introduces the student to the widespread operations of small business and covers the essentials of starting a small business from the generation of the idea through the actual operations. Through lecture, film, discussion and interactive classroom training, the student examines the necessary managerial and operational skills for ownership and becomes acquainted with the available resources for small business. Areas covered include development of a business plan, entrepreneurship principles, business start-up procedures, recordkeeping, management practices, product development and marketing, break-even analysis, cash flow management, and government assistance programs.

**BUS 1402 Fundamentals of Accounting, 3 credits**

This course provides an introduction to accounting practice and theory using the model of the sole proprietorship. The accounting process for recording, summarizing and reporting financial data is analyzed. Topics include the preparation and use of financial statements, the accounting cycle for service and merchandising enterprises and the valuation of assets. Students explore the practical aspects of accounting.

**BUS 1416 Financial Accounting, 4 credits**

This course covers the role of accounting in the decision-making process and the application of current generally accepted accounting principles for measuring and communicating financial data about a business enterprise to external parties. Topics include preparation and use of financial statements, analysis and recording of business transactions, the accounting cycle for service and merchandising enterprises, accrued and deferred items, organization and financing of corporations, and other theoretical and practical aspects of financial accounting.

**BUS 1501 Business Law I, 3 credits**

The first part of this course concerns the legal environment within which business must function. The structure of existing US laws and court systems and the legal processes by which laws are made and applied to actual controversies are explored. The balance of the course is devoted to the subject of contract law and covers aspects of the rights and responsibilities of the parties to a contract. Throughout the course, students survey current business law topics as they occur in the business world.

**BUS 1620 Medical Administrative Procedures I, 3 credits**

In this course students learn medical administrative front office skills. This course focuses on communicating, using and maintaining office equipment, using computers in the office, managing correspondence, managing office supplies, and managing office medical records.

**BUS 1650 Office Management, 3 credits**

This course is an investigation into the operation, control, and management of the business office. Topics include: problem solving, communications systems, human resources, ergonomics, and records management.

**BUS 1652 Human Resources Management, 3 credits**

This course is an introduction to the psychology, purposes, and objectives of supervising the work of others. Topics to be covered include techniques of supervision, employment interviews, testing and evaluating, classroom training, on-the-job training, labor laws affecting workers, and labor-management relations.

**BUS 1824 Medical Insurance and Billing, 3 credits**

This course is an introduction to medical insurance, billing, and the coding process. Students will learn how to bill patients and companies using the universal medical coding system which includes CPT and ICD codes. This course will also cover manual and electronic billing systems, claims submission, reimbursement protocols, and working with different payers. Prerequisites: MED 2120 Medical Terminology I, and BUS 2620 Medical Administrative Procedures II

**BUS 1852 New York State Real Estate I, 3 credits**

Successful completion of this course qualifies students to take the New York State Real Estate Salespersons' Examination. The course covers business and legal aspects of real estate, including study of all legal documents, the law as it applies to the sale of real estate, fair housing, zoning, financing, and development.

**BUS 1934 Meeting Planning and Conventions, 3 credits**

This course is designed to familiarize the student with the techniques of planning conventions and meetings within hotel, resort, and conference center facilities. Students learn such skills as equipment requisitions, meeting room layouts, sales and catering functions, record keeping, services, and organizational timetables. (Formerly Group and Convention Management)

**BUS 2122 Computerized Business Systems, 3 credits**

Students in this capstone course focus on how communication, decision-making, and critical thinking can be facilitated by the use of Microsoft Office software. Conversion of data into information used at all levels of a business is emphasized. Students create and maintain a variety of databases, spreadsheets, desktop publishing documents, mail merge documents, electronic presentation and reports as part of a simulated business environment. This course reinforces and applies the concepts learned in other required business courses.

**BUS 2413 Intermediate Accounting I, 4 credits**

An overview of the accounting system, financial statements and the conceptual framework of accounting is presented in this course. Topics include: a review of generally accepted accounting principles; recognition, valuation and disposition issues; cash and receivables; inventory flow procedures; plant and intangible assets; and revenue recognition. Prerequisite: BUS 1402 Fundamentals of Accounting or BUS 1416 Financial Accounting

**BUS 2416 Managerial Accounting, 4 credits**

This course introduces students to managerial accounting as an information system that provides managers with a basis for decision-making. Topics include accounting systems, job and standard costing systems, breakeven analysis, short and long term decision-making, operating budgets and flexible budgeting. Emphasis is placed on the needs of managers to use internal accounting information to make business decisions. Prerequisite: BUS 1402 Fundamentals of Accounting or BUS 1416 Financial Accounting

**BUS 2418 Computerized Accounting, 3 credits**

This course uses QuickBooks® accounting applications software. Topics include analyzing and recording business transactions, the trial balance, financial statements, receivables, payables, inventory and payroll. Pre-req BUS 1402 Fundamentals of Accounting, OR BUS 1416 Financial Accounting.

**BUS 2460 Federal Income Tax Procedures, 3 credits**

This course covers the basic principles of US Federal income tax procedures and a study of the law as it applies to taxation. Emphasis is placed on the preparation of individual returns. Topics include exemptions, deductions, credits, gains and losses, and other property transactions.

**BUS 2502 Business Law II, 3 credits**

This course surveys topics governed by the Uniform Commercial Code. Topics include the law of sales and commercial paper, employer and employee relations, and bankruptcy. Throughout the course, students survey current business law topics as they occur in the business world.

**BUS 2602 International Business, 3 credits**

An introduction to the challenges and problems faced by American firms in conducting business in world markets. The course will expose the student to the concepts and principles dealing with world trade, foreign environments, global operations, and the necessary global managerial skills required for success in such activities. Prerequisite: BUS 1310 Principles of Management or permission of the instructor.

**BUS 2620 Medical Administrative Procedures II, 3 credits**

In this course students continue to learn medical administrative front office skills. This course focuses on using

telephone techniques; scheduling appointments; managing the patient reception area; managing patient education; processing healthcare claims, billing, and collections; accounting for the medical office, and managing the medical office. Prerequisite: BUS 1620 Medical Administrative Procedures I

**BUS 2852 New York State Real Estate II, 3 credits**

Successful completion of this course qualifies students to take the New York State Real Estate Broker's examination. This course includes the study of appraisal, investments, construction, management, taxes, and assessments. Prerequisite: BUS 1852 New York State Real Estate I

**BUS 2906 Introduction to Financial Planning, 3 credits**

This course is an introduction to investments and the financial planning process. Topics include: the asset allocation model, types of investments, risk vs. reward, time value of money, the stock market, bond market, managed money, insurance products, domestic and international securities, trading securities and strategies.

**BUS 2913 Business Field Experience, 3 credits**

This course is designed to provide the student with a supervised fieldwork experience. Students experience a cooperative work experience opportunity with a transportation company, travel agency, hotel, convention bureau, or other tourism-related firms. The major purpose is to develop a professional, occupational competence, using employment as a source of learning. The student works in a specific area of interest for a minimum of 120 hours.

**CAR 1000 Residential Carpentry NCCER Core, 4 credits**

This National Center for Construction Education and Research (NCCER) core course provides a basic introduction to students entering the construction trade. Students study six modules: Basic Safety, Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Blueprints, and Basic Rigging. Students are required to successfully complete this course prior to entering either the Construction Technology Certificate or AOS programs.

**CAR 1100 Introduction to Carpentry NCCER Level 1 Modules, 4 credits**

This is an introductory course for students interested in carpentry. It is offered by The National Center for Construction Education and Research (NCCER). Students study the following modules: Orientation to the Trade, Wood Building Materials, Hand and Power Tools, Floor Systems, Wall and Ceiling Framing, Roof Framing, and Exterior Doors and Windows. This course is a prerequisite to Advanced Residential Carpentry. Students are required to successfully complete this course prior to entering either the Construction Technology Certificate or AOS programs. Prerequisite: CAR 1000 Residential Carpentry NCCER Core

**CAR 2001 Advanced Residential Carpentry I, 4 credits**

Students are taught skills associated with reading and using blueprints; layout, including distance measurement and differential leveling, use of site/plot drawings and methods of on-site communication; concrete and reinforcing materials, foundation and flatwork and concrete forms.

Prerequisites: CAR 1000 Residential Carpentry NCCER Core and CAR 1100 Introduction to Carpentry NCCER Level 1 Modules

**CAR 2002 Advanced Residential Carpentry II, 4 credits**

This course focuses on the skills and materials associated with roofing applications and advanced roofing systems, exterior finishes and installation, and thermal and moisture protection. Prerequisite: CAR 2001 Advanced Residential Carpentry I

**CAR 2003 Advanced Residential Carpentry III, 4 credits**

Students learn the skills associated with the construction of stairs and advanced stair systems for residential and light commercial use; installation and finishing of drywall and interior finishing skills including door, window, floor and ceiling trim. Prerequisite: CAR 2002 Advanced Residential Carpentry II

**CAR 2004 Advanced Residential Carpentry IV, 4 credits**

This course covers the principles, equipment and methods used to perform the site layout tasks that require angular measurements. These tasks include laying out building foundation lines and determining elevations by trigonometric leveling. The use of laser instruments, transits, electronic distance measurements and total stations is covered. Advanced floor systems, an introduction to light construction equipment, metal buildings and project management skills are also covered. Prerequisite: CAR 2003 Advanced Residential Carpentry III

**CAR 2005 Advanced Residential Carpentry V, 4 credits**

Students apply skills learned in previous residential carpentry classes in an actual workplace setting and obtain additional knowledge and proficiencies in selected competency areas determined by the employer, student and



faculty. A student learning contract and student competency profile is used to determine objectives and outcomes. Prerequisites: CAR 2001 Advanced Residential Carpentry I and CAR 2002 Advanced Residential Carpentry II

### **CAS 1000 Introduction to Casino Operations, 3 credits**

This course is designed as an introduction to those with no gaming experience. It concentrates on a familiarization of casino management, casino games and customer relations.

### **CAS 1200 Techniques of Casino Games, 3 credits**

This course is an introduction to the fundamental concepts, skills and techniques of casino games. Emphasis is placed on the knowledge of betting procedures, quick mental multiplication, chip handling, memorization of table layout, accuracy in clearing the table, troubleshooting, and customer relations. Special attention is given to game accounting procedures, accuracy and speed.

### **CAS 1300 Casino Surveillance and Security, 3 credits**

This course is designed to train students in the fundamentals of casino surveillance and security. It emphasizes security personnel response methodology. Students are trained on how to help guests feel safe, secure, and satisfied with the casino while performing surveillance and security duties. Students role play and engage in problem solving in a variety of simulated emergencies including weather emergencies, power outages, fires and equipment malfunctions.

### **CAS 2100 Gaming Industry, 3 credits**

This course introduces the student to the casino industry, as well as its processes, functions, institutions and activities. The historical background of the casino industry, regulation of gambling, food and beverage operation, the cage, auditing, and a utility analysis of gaming are also covered.

### **CAS 2200 Survey of Gaming Regulations, 3 credits**

Students learn the fundamentals of gaming regulations. Emphasis is placed on casino regulations, changing cash, customer relations and service, interaction with other departments and the knowledge and application of procedures, job functions and responsibilities.

### **CEL 2001 Advanced Residential Electrical I, 4 credits**

Students focus on the following topics: alternating-current systems and the application of Ohm's Law to AC circuits; grounding and bonding electrical systems; conduit bending; boxes and fittings; conductor terminations and splices; installation of electrical services; circuit breakers and fuses; and electrical residential lighting and fixtures. Prerequisites: Successful completion of content in NCCER CORE and Level 1 modules as documented through Mastery Tests, Performance Profiles and/or assessment of prior learning.

### **CEL 2002 Advanced Residential Electrical II, 4 credits**

Students learn the industry standards for electrical work, including branch circuits, rating and derating, and various types of residential and commercial electrical trades; conductor selection and calculations; overcurrent protection; wiring devices; AC and DC motors, including main parts, circuits, and connections; and motor calculations. Prerequisite: CEL 2001 Advanced Residential Electrical I

### **CEL 2003 Advanced Residential Electrical III, 4 credits**

Students learn load calculations feeder and services; lamps, ballasts, and components; practical applications of lighting; basic electronic theory, including semi-conductors, diodes, rectifiers, transistors, and solid-state digital electronics including counter and register circuits; and distribution equipment. Prerequisite: CEL 2002 Advanced Residential Electrical II

### **CEL 2004 Advanced Residential Electrical IV, 4 credits**

Students learn examines simple cord and motor controllers, conventional controllers, and electronic controllers. Other topics include the basic principles of refrigeration and air-conditioning and compressors; NEC requirements; and HVAC control wiring, troubleshooting, and solid-state circuitry. Prerequisite: CEL 2003 Advanced Residential Electrical III

### **CEL 2005 Advanced Residential Electrical V, 4 credits**

Students will apply skills learned in previous residential electrical classes in an actual workplace setting and obtain additional knowledge and proficiencies in selected competency areas, determined by the employer, student, and faculty. A student learning contract and student competency profile will be used to determine objectives and outcomes. Prerequisites: CEL 2001 Advanced Residential Electrical I and CEL 2002 Advanced Residential Electrical II

**CMP 1001 Introduction to Club Management, 3 credits**

Students are introduced to the basics of Club Management from the perspective of policies and procedures, operations, inventory control, merchandising, basic budgeting and accounting, group outings and tournaments, starting and rangersing, hiring and training of staff, as well as managing the grounds and facilities.

**CMP 1101 Advanced Club Management, 3 credits**

Students deal extensively with budgeting of the facility, marketing, trend analysis, short and long range planning, group outing pricing, inside and outside factors affecting operations, supervising and delegating, risk management and accident prevention, advanced merchandising strategies, and packaging of club offerings to outside clientele, and business planning. Prerequisite: CMP 1001 Introduction to Club Management

**CMP 1301 Club Service, 3 credits**

Students in this course learn effective customer relation skills including what constitutes good customer relations, how to attain customer satisfaction, and how to keep customers for life. Topics covered include understanding customer profiles, conflict management, teamwork, and leadership. This course relies heavily on real-life role-playing situations.

**COM 1500 Introduction to Broadcasting, 3 credits**

Through lecture, discussion, and laboratory experience, students study the problems and practices of radio and television broadcasting, including basic technical aspects, staff organization, equipment and programming. Crosslisted as HUM 1500.

**COM 2100 Mass Media, 3 credits**

Students are introduced to mass media-print sound, and visual. Mass media is presented as industries which shape and are shaped by, significant issues. Crosslisted as ENG 1100.

**COM 2125 Mass Media Criticism, 3 credits**

Students in this course develop a critical basis for judging the quality of mediated information. Emphasis is placed on judging both production values and content. The relationship between society and technology forms the background for understanding how media affects values, life choices and perceptions of both individuals and groups. Crosslisted as HUM 2125.

**COM 2200 Media Writing Techniques, 3 credits**

Students examine the techniques used in writing for radio and television. Emphasis is placed on the ability to apply skills in a variety of writing assignments, including commercials, newscasts, and drama. Crosslisted as ENG 2200.

**COM 2300 Audio Production, 3 credits**

Students examine audio design and production techniques, emphasizing audio aesthetics and design, editing, single and multi-track production, mixing, and remote production.

**COM 2400 Video Production, 3 credits**

Students examine design and production techniques for the video medium. Emphasis is placed on program production for commercial, industrial, and institutional use, along with new applications of video.

**COM 2600 Advanced Media Production, 3 credits**

Students increase their studio production skills. Emphasis is placed on expanded use of lighting, special effects, audio reinforcement, and on the use of electronic graphics.

**COM 2601 Media Internship, 3 credits**

Students participate in a supervised practical experience in the field of communications providing the opportunity to work in a professional setting. This course is for Communications and Media Arts students only.

**COM 2602 Media Internship, 3 credits**

Students participate in a supervised practical experience in the field of communications providing the opportunity to work in a professional setting. This course is for Communications and Media Arts students only.

**CPT 1120 Computer Hardware and Maintenance, 4 credits**

This course involves classroom lectures and hands-on exposure to advanced microcomputer software and hardware. Topics include: current hardware technology, microcomputer operating systems, fixed disk management, communications, and local area networks. Prerequisites: MAT 1000, College Math I or higher.

**CPT 1160 Networking I, 4 credits**

This course will introduce students to the organization and design of networks. It contains the background information students would need to take the first part of the CCNA certification, however, certification preparation is not included in this course. Topics include networking media, networking topologies, the OSI reference model, TCP/IP protocol suite, subnets, routers, switches, and basic networking concepts. Students will learn industry standards and terminology. Prerequisite: CPT 1208, Operating Systems and Networking.

### **CPT 1180 Operating Systems, 4 credits**

This course is an overview of microcomputer operating systems, which includes installation, configuration, maintenance, and efficiency. Installation and management of peripheral devices such as hard disk, USB flash drives, floppy drives, printers, and monitors will be covered. Customizing the operating system environments, troubleshooting, evaluating system performance, and system utilities of operating systems are also covered. Both client and server operating systems will be discussed including but not limited to Microsoft Windows (Server, XP, and Vista), Linux, and DOS. Students will learn industry standards and terminology. Prerequisite: CPT 1200, Computer Information Systems.

### **CPT 1200 Computer Information Systems, 3 credits**

Students study and participate in extensive hands-on experiences in the fundamental principles of computerized information systems and computer processing. These include studies of computer hardware, programming, communications, and commonly used computer applications. New trends and developments in the industry are discussed.

### **CPT 1203 HTML, 3 credits**

Students participate in an in-depth study of Hypertext Markup Language (HTML). Topics include the creation of an HTML document, controlling HTML text, adding graphics and multimedia, an introduction to forms, tables, frames, links and anchors, scripting for HTML and working with Dynamic HTML. Hands-on instruction and tutorials for the creation of sample pages and sites are emphasized.

### **CPT 1205 Web Graphics, 3 credits**

Students are introduced to image editing and illustration software, such as PhotoShop®, Illustrator® and ImageReady® as related to the creation of web pages and sites. Topics covered include creating images which are user friendly and aesthetically pleasing, using hardware for input, image optimization for web output, creating navigation aids, and creating templates. Students create web pages and sites for their portfolios.

### **CPT 1207 Computer Applications, 3 credits**

Students learn to use productivity software application packages in the Windows operating environment. The applications covered include word processing, spreadsheets, presentation and database software. Prerequisite: Windows Literate.

### **CPT 1208 Operating Systems and Networking, 3 credits**

Students study network terminology and protocols, network standards, safety issues, Open System Interconnection (OSI) model, Local Area Networks, (WANS), cabling and tools, networking devices, network topologies, Ethernet technologies, Internet Protocol (IP) addressing, sub-networks, subnet masks, and Transmission Control Protocol/Internet Protocol (TCP/IP) fundamentals. Network problem-solving tools and techniques are also emphasized. Prerequisite: CPT 1200 Computer Information Systems

### **CPT 1210 Computer Literacy, 3 credits**

This course is designed to give students an overview of computer technology, terminology, and the role of computers in society. The theoretical concepts that relate to computers and the Internet are discussed. This course provides students with research and critical thinking skills using current technology. Students use word processing, spreadsheet, database, and presentation software to present their theoretical findings.

### **CPT 1225 Microsoft Excel, 3 credits**

This course is a hands-on, in-depth study of the Microsoft Excel spreadsheet component of the Microsoft Office Suite. It covers the commands, features and skill sets of Excel from the basic through advanced levels. Topics include building spreadsheets, simple and complex formulas and functions, creating charts, and the creation of useful forms. It prepares the student to be an accomplished user with the option of testing for the Microsoft "Proficient" level of certification.

### **CPT 1301 Logic and Problem Solving for Computer Information Systems, 3 credits**

This course is designed to develop problem-solving skills in relation to designing computer programs. The student examines program development techniques and applies them by developing hierarchy charts, flowcharts and pseudocode in order to solve common programming problems. The course covers data processing terminology and

flowcharting symbols, structured design techniques, logical top-down, step-by-step solutions to typical business data processing problems, input/output, arithmetic and comparison, report formatting, sequential file processing and table handling. This course is highly recommended for all students who plan to take a programming language course.

### **CPT 1303 Introduction to Simulation and Game Development, 3 credits**

This course provides students with an introduction to simulation and game development. Topics include setting, storytelling, narrative, character design, interface design, game play, internal economy, core mechanics, game genres, artificial intelligence (AI), the psychology of game design and professionalism. Upon completion, students should be able to demonstrate knowledge of the major theoretical aspects of simulation and game design and development.

### **CPT 1305 Computer Applications for the Legal Office, 3 credits**

This course is a hands-on, in-depth study of specialized legal software applications used in today's law office. Topics include calendar monitoring, document management, time and billing, computer-assisted legal research, and managing the automated law office environment.

### **CPT 1315 Multimedia Graphics, 3 credits**

This course covers the use of vector-based graphics and multimedia authoring software such as Dreamweaver, Flash and SoundEdit 16. Topics covered include integrating audio and video streaming, creating animations and interactivity for web pages and sites, creating interactive movies, creating vector based sites and optimizing material for rapid downloading. Students create multimedia rich pages and sites to add to their portfolios. Prerequisite: CPT 1205 Web Graphics

### **CPT 1403 Simulation and Game Development Programming I, 3 credits**

This course introduces the fundamentals of the programming languages and tools employed in simulation and game development. Emphasis is placed on specific programming concepts and frameworks used to create simulations and games. Upon completion, students should be able to program simple object-oriented 2-D games and/or simulations.

Prerequisite(s): CPT 1303 Introduction to Simulation and Game Programming Development or permission of the instructor

### **CPT 1405 Programming in Microsoft Visual Basic, 4 credits**

This course is an introduction to Microsoft Visual Basic. The course has four main objectives a) to teach the fundamentals of Microsoft Visual Basic for Windows, b) to acquaint the student with the three-step approach to building Windows applications, c) to use practical problems to illustrate application-building techniques, and d) to take advantage of the many new capabilities of building applications in a graphical environment. Prerequisites: CPT 1301 Logic and Problem Solving for Computer Information Systems

### **CPT 1408 Website Design and Construction, 3 credits**

Students learn to create basic, effective and attractive web pages and sites using current software. The course is intended for those who need a general background in web production for businesses, organizations or as a supplement to their careers. To be successful students must be Windows literate with an understanding of word processing.

### **CPT 1411 Business on the Internet, 3 credits**

This course covers the basic principles of business as they relate to the Internet. Topics include funding, creating a business plan, setting up books, policies and procedures, payroll, controlling inventory marketing and sales, achieving top search engine placement, and using list exchanges, web rings, email and list serves. Students create a basic business plan as a final project.

### **CPT 2030 Networking II, 4 credits**

This course builds on the foundation developed in CPT 1160, Networking 1 and extends the students' capability to understand and manage data networks. It contains the background information students would need to take the second part of the CCNA certification; however, certification preparation is not included in this course. Topics include LAN and WAN design, VLANs, Frame Relay, ISDN, and network administration. Students will learn industry standards and terminology. Prerequisite: CPT 1160, Networking I.

### **CPT 2170 Unix/Linux, 3 credits**

This is a computer-based course that will introduce the student to the UNIX and LINUX operating system. Assignments will include installation, basic operation, file management, administration, and configuration of LINUX. Various editions of UNIX/LINUX will be discussed. Students may wish to use this course to prepare for the

CompTIA Linux+ certification. Prerequisites: Management Information Systems (not currently offered at SUNY Sullivan) or permission of the instructor. MAT 1000, College Math I or higher.

### **CPT 2207 Advanced Computer Applications, 3 credits**

Students learn to use advanced-level productivity software application packages in the Windows operating environment. The applications covered include word processing, spreadsheets, presentation and database software. Prerequisite: CPT 1207 Computer Applications

### **CPT 2211 Database Management, 4 credits**

This course prepares students to analyze data and solve real-life business problems using a current database management software system. Students learn to use critical thinking and analysis to find effective solutions to real-life business situations. Students build databases, analyze data for effective decision making, collect data with well-designed forms, and develop effective reports. Students learn how to automate database processes, enhance user interaction through programming, and integrate databases with a corporate Web site. Prerequisites: CPT 1200 Computer Information Systems, or permission of instructor.

### **CPT 2213 Computer Forensics, 3 credits**

This course introduces the student to the accepted methods of properly conducting a computer forensics investigation, beginning with a discussion of ethics while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Students should have a working knowledge of hardware and operating systems (OSs) to maximize their success on projects and exercises throughout the text. Specific topics covered include: computer forensics and investigations as a profession, understanding computer investigations, the investigator's office and laboratory, current computer forensics tools, processing crime and incident scenes, digital evidence controls, working with windows and DOS systems, Macintosh and Linux boot processes and disk structures, data acquisition, computer forensic analysis, recovering image files, network forensics, email investigations. Prerequisites: CPT 1120, Computer Hardware and Maintenance and CPT 1180, Operating Systems

### **CPT 2216 C++ and Object Oriented Programming, 4 credits**

This course covers Object Oriented Programming (OOP) design methodology in the C++ environment. The fundamentals of C++ are presented. These include the concept and use of objects, control constructs, functions, libraries, parameter passing, classes, arrays, pointers; dynamic data types, and inheritance. Students are expected to have completed previous programming coursework. Prerequisite: CPT 1405, Programming in MS Visual Basic

### **CPT 2219 Real World Computer Applications, 3 credits**

This course is an exploration of the advanced features of productivity software as applied to typical business activities. Students integrate the skills learned in the Computer Applications I and II to complete a career-oriented portfolio useful for job hunting or transfer applications. Prerequisites: CPT 1207 Computer Applications and CPT 2207 Advanced Computer Applications

### **CPT 2200 Network Forensics, 3 credits**

This course will introduce the student to the accepted methods of properly conducting a forensics investigation over a network. Students should have a working knowledge of networks, hardware, and operating systems (OSs) to maximize their success on projects and exercises throughout the text. Specific topics covered include: network forensics investigation overview, the Microsoft network structure, processing crime and incident scenes, digital evidence controls, data acquisition, forensic analysis, recovering image files, the registry structure, registry evidence, presenting the results. Prerequisites: CPT 2030 Networking II, CPT 2213 Computer Forensics.

### **CPT 2240 Network Perimeter Security, 3 credits**

This course introduces firewalls and the network security components that can work together to provide an in-depth defensive perimeter around a local area network. Accordingly, this course examines firewalls in context with the other elements needed for effective perimeter security as well as security within a network. These include packet filtering, authentication, proxy servers, encryption, bastion hosts, virtual private networks, log file maintenance, and intrusion detection systems. Different firewall configurations will also be examined. Prerequisite: CPT 2030, Networking II.

### **CPT 2260 Cyber Crime Investigations, 3 credits**

This course is designed to provide the student with foundational knowledge of common techniques used by most cyber crime investigators. Procedural approaches and documentation will be covered. These procedures identify the accepted approaches to protect a digital crime scene/incident, process the collected data/information, ensure and document the integrity of the entire process. The cyber crime investigative procedures will be scrutinized to identify potential problems. The student will be instructed in how the procedures and outcomes of those procedures

create supporting documentation for a legal case. Prerequisite: CPT 2200 Network Forensics.

### **CPT 2330 Information Security, 3 credits**

This course is designed to familiarize the student with the foundation utilized by most organizations in developing a management framework that will implement a secure, predictable and dependable system throughout the organization. In addition, it will help students preparing to take the Certified Information Systems Security Professional Exam (CISSP). This is a first course in the introduction and study of Information security. A broad view of the field is provided along with enough detail to facilitate an understanding of the topic as a whole. All pertinent terminology is covered, along with the field's history and an overview of how to implement and manage an information security plan. Readings and cases are provided to further enable a student to master the text material while bringing realistic security issues to the forefront. Readings from current periodicals in the information security will also be reviewed. Prerequisite: CPT 1160, Networking I.

### **CPT 2403 Simulation and Game Development Programming II, 3 credits**

The course covers advanced programming concepts used to create object-oriented 3-D simulations and games. Emphasis is placed on acquiring advanced programming skills for use in creating advanced object-oriented 3-D simulations and games. Upon completion, students should be able to program an advanced object-oriented 3-D simulation or game.

Prerequisit(s): CPT 1403 Simulation and Game Development Programming I or permission of the instructor

### **CPT 2607 Data Structures, 4 credits**

This course focuses on object-oriented software development from a hierarchical data organization and storage perspective. Students will engage in hands-on development of algorithms, class hierarchy, and linear data structure creation including lists, and stacks and queues. Prerequisite: CPT 2216 C++ and Object Oriented Programming

### **CPT 2608 SpTp: Information Storage Management, 3 credits**

This course is a study of the architectures, features, and benefits of intelligent storage systems; networked storage technologies such as FC-SAN, NAS, and IP-SAN; and long-term archiving solutions such as CAS Business Continuity and information management infrastructure. This course also focuses on the increasingly critical area of information security and the emerging field of storage virtualization technologies. Experience working with databases and permission of instructor is required.

### **CPT 2609 IT Certifications, 3 credits**

This course prepares students for one of the currently available IT certification options: Microsoft Office Specialist (MOS) certification, which emphasizes skills in using the 2007 or 2010 Microsoft Office System; CompTIA's Network+ which emphasizes the managing, maintaining, troubleshooting, installing and configuring of basic network infrastructures; or CompTIA's Security+ which emphasizes system security, network infrastructure, access control and organizational security. Students should elect to prepare for either one MOS exam OR one CompTIA exam.

### **CPT 2611 Systems Analysis, 4 credits**

This course presents a study of systems analysis, design, development, and implementation of computer information systems. The class covers all phases of the computer information system life cycle: analysis techniques, design techniques, resource acquisition, application development, system implementation, and on-going maintenance procedures. Student learning experiences are heightened by project examples and assignments. Working as a member of a small team, students create a near-complete, modest information system for a small enterprise. Oral and written communication skills are employed throughout the course. Prerequisites: CPT 1200 Computer Information Systems, CPT 1301 Logic and Problem Solving for Computer Information Systems, and CPT 2211 Database Management or permission of instructor.

### **CRJ 1107 Police Operations, 3 credits**

Students examine the organizational structure and operation of local, state and federal police departments. This course includes a discussion of the philosophy and laws guiding police policies and procedures and identifies major divisional units and operational components of most police departments. Prerequisite: CRJ 1115 Introduction to Criminal Justice

### **CRJ 1108 Introduction to Organizational Security, 3 credit hours**

This course offers an overview of protective services, presenting the historical, philosophical and legal bases for the security field. It focuses on the various facets of modern security operations in a variety of settings: hospital, campus, corporate, industrial, retail and resort. The role of security organizations, awareness of security issues and methods and techniques of loss prevention are covered. Case analyses of specific security scenarios, problems, and solutions are incorporated.

**CRJ 1113 Criminal Investigation, 3 credits**

Students study techniques and procedures utilized in criminal investigation. The course includes a wide range of activities associated with criminal investigation, such as interviewing, report writing, and collecting and preserving evidence. Prerequisite: CRJ 1115 Introduction to Criminal Justice

**CRJ 1114 SpTp: Examining Homicide, 3 credits**

This course provides a general foundation for the study of homicide. Students will learn to define definitions, data sources, and theories of homicide as well as specific types of homicides. The course will focus on solving homicides, the personnel and technology involved, and a realistic picture of how often homicides are easily solved.

**CRJ 1115 Introduction to Criminal Justice, 3 credits**

This course examines the three segments of the criminal justice system: law enforcement, courts, and corrections. Topics include the extent, measurement, and classification of crime; identification of key personnel and procedures within the criminal justice process; and differences between adult and juvenile justice handling.

**CRJ 1116 Cultural Diversity & Criminal Justice, 3 credits**

This is a practical information guidelines course for students seeking cross-cultural knowledge and sensitivity. The course content stresses that those who are charged with the responsibility of public protection and service will demonstrate greater professionalism through cultural awareness, both within the multicultural workforce and in the community in which they serve.

**CRJ 1117 Police-Community Relations, 3 credits**

This course provides students with an introduction to and analysis of theories, techniques, programs, and philosophies involving police image, public response, and community policing. Special attention is given to social problems through problem-solving policing techniques, crime prevention, and the police-community partnership needed for effective public safety.

**CRJ 1320 Criminal Law & Procedure, 3 credits**

Students examine basic principles of criminal liability and procedural protections provided for defendants by the US Constitution. It explores the purposes of criminal law in America and the methods by which the criminal law is implemented within our society. It includes elements of general criminal liability and defenses, as well as elements of specific major offenses. The application of criminal law to the criminal justice process from investigation through post-conviction remedies is covered. Distinctions between the philosophy and practice of substantive and procedural criminal law for juveniles and for adults are considered.

**CRJ 1324 SpTp: Constitutional Law for Corrections, 3 credits**

This course is a study of legal problems from conviction to release, pre-sentence investigation, sentencing, probation and parole, loss and restoration of civil rights, inmate constitutional rights and grievance procedures, legal assistance and alternatives to litigation.

**CRJ 2103 Introduction to Corrections, 3 credits**

Students examine institutional treatment of the inmate in the various correctional settings: jails, correctional facilities, juvenile detention facilities, work release programs, halfway houses, and narcotic addition control centers. Current administrative organization and practices in correctional institutions are studied. (*Formerly Inmate Treatment/Correctional Administration*) Prerequisite: CRJ 1115 Introduction to Criminal Justice

**CRJ 2104 Probation and Parole, 3 credits**

An introduction to the process of probation and parole with an emphasis on the legal procedures accompanying community-based corrections. The rehabilitative prospects of incarceration are considered, along with alternatives to incarceration. Prerequisite: CRJ 1115 Introduction to Criminal Justice or permission of instructor

**CRJ 2111 Juvenile Justice, 3 credits**

Students examine the history, philosophy and practice of juvenile justice in the United States. The course includes a discussion of theories of delinquency causation, prevention and control. Students survey practices and procedures used by police, courts and corrections to prevent and control youth crime and delinquency. The role of the school, the family, the community, and the culture in defining, causing, and controlling juvenile misconduct are discussed. Special emphasis is placed on a comparison of juvenile and adult handling at all levels of criminal justice intervention and treatment. Prerequisite: CRJ 1115 Introduction to Criminal Justice

**CRJ 2200 CRJ Field Work and Seminar, 5 credits**

This course is a supervised field experience for the student in a criminal justice setting. Each student spends 120 hours as a supervised intern in the setting and participates in a two hour weekly seminar on campus. Seminar sessions cover topics shared by all criminal justice agencies: legal, ethical, political, economic, and organizational issues affecting criminal justice administration. Students entering this course are expected to have completed the first three semesters of CRJ courses or their equivalent. **Approval of the CRJ Coordinator is required for registration. Students must provide their own transportation to the intern site.**

**CRJ 2608 Introduction to Criminology, 3 credits**

Students discuss the nature and extent of crime, past and present theories of crime causation, criminal behavior in American society and its relation to personal and cultural conditions.

Prerequisite: SOC 1600 Introduction to Sociology

**CUL1001 Hospitality Seminar, 3 credits**

The course serves as an introduction and overview of the hospitality industry and its many varied career opportunities. The course includes job classifications, job selection procedures and career ladder steps. Personal aptitudes and self-evaluation for success are stressed.

**CUL 1104 Introduction to Food and Baking, 3 credits**

Students are introduced to the fundamental concepts, skills and techniques of basic food preparation and baking. Students learn about ingredients, cooking methods, terminology, equipment, and procedures. The class includes lecture, demonstration and participation in basic food production (including the preparation of eggs, batters, vegetables, starches, thickening agents, stocks, soups, breads, rolls, pies and cakes).

**CUL 1121 Hospitality and Food Service Operations, 3 credits**

This course will introduce students to the hospitality and food service industry, its growth and development, past and present status, and future trends. The topics to be covered are culinary terminology, primary cooking and baking methods, basic knife skills, cooking techniques, menu development, techniques of table arrangements, and various types of dining room service. Practical work will include French, Russian, English, American, Banquet and Buffet preparation and procedures.

**CUL 1150 Culinary Sculptures, 2 credits**

This course provides an introduction to understanding the tools and techniques involved in the production of culinary sculptures. Various mediums (ice, tallow, salt dough, etc.) are used in the production of sculptures.

**CUL 1160 Cake Decorating, 3 credits**

Students in this course learn the skills required to prepare cakes in both traditional and contemporary styles. are taught. Instruction is provided in making decorative icing, sugar molds, lattice designs and flowers as well as in making orders, use of decorative writing, color blending and designs. Decorative techniques in the making of cakes for special occasions such as birthdays, weddings, and anniversaries are demonstrated. Students are provided with an introduction to rolled fondant, chocolate fondant, chocolate dough and gum paste flowers. Corequisite: CUL 1104 Introduction to Food and Baking

**CUL 1205 Bakery Management, 3 credits**

The retail and wholesale aspects of the baking industry are explored. Bake-off systems, scheduling, production control, distribution, sales and marketing, display techniques, layout and design as used in a bakery are practiced. Regulatory requirements are discussed. Corequisite: CUL 1104 Introduction to Food and Baking

**CUL 1206 Principles of Baking, 2 credits**

This course covers the fundamentals and theoretical aspects of baking. Topics include: nomenclature, ingredients, techniques, equipment and portion control; the history of baking; an introduction to the equipment used and composition of ingredients; production procedures, service, weights and measures; and basic recipes for bread, rolls, and cakes. Students do practical work on rolls, breads, pastries, pie dough, Danish, Choux paste, puff paste, doughs and prepared mixes. Prerequisite: CUL 1104 Introduction to Food and Baking

**CUL 1312 Hospitality Purchasing, 3 credits**

This course focuses on purchasing policies and procedures in procuring foods, beverage, equipment, supplies and services for the hospitality industry.

**CUL 1340 Beverage Service, 2 credits**

This course offers students the theory and practice skills needed to prepare and serve various hot and cold beverages in the hospitality industry. This course is also designed to familiarize the student with wines, beers, spirits, coffees, teas and other beverages from a manufacturing, legal service and sales viewpoint.



**CUL 1702 Applied Nutrition Lab, 1 credit**

Students who take this course examine the basic principles of nutrition, including the application to food preparation and menu planning. Attention is given to providing nutritionally balanced and attractive meals. Menu planning using sound nutritional guidelines is stressed. Selection of lower calorie, low fat, low salt food items and their application to special diets are introduced. Low fat preparation techniques are explored.

**CUL 1804 Advanced Baking Techniques, 3 credits**

This course provides an introduction to the quality aspect of baking as related to the hospitality industry. Included are: decorating with royal icing, chocolate, butter cream, coco painting, chiffon pies, chiffon cake mixes, foam cake mixing, meringues, quakenbush, tarts and torte of fruits, petit fours, breads, ice creams, cookies and soufflés. Bakery organization and sanitation is stressed. Prerequisite: CUL 1206 Principles of Baking

**CUL 1907 Sanitation and Safety, 2 credits**

Students examine the proper use of sanitation and safety methods in the hospitality industry. Emphasis is placed on the problems and procedures, techniques and practices in sanitation and safety. This course includes an examination of the sanitary handling of foods in purchasing and storage, preparation and serving.

**CUL 2104 Culinary Arts Theory & Development, 3 credits**

Students explore the fundamentals of basic hotel, restaurant and industrial catering through lecture, demonstration and participation in basic food production, including the preparation of eggs, batters, potatoes, vegetables, shellfish, fish, salads and dressings. Theory and practice of cooking methods such as frying, roasting, broiling, griddle work, poaching, and sautéing, with a basic understanding of use and care of kitchen equipment are practiced. Emphasis is placed on the preparation of stocks, broth, consommés, and various soups. Students prepare various basic and compound sauces, stews, seafood dishes, hors d'oeuvres and canapés. Lectures and demonstrations on primal meat cuts and basic butchering are conducted. Prerequisite: CUL 1104 Introduction to Food and Baking

**CUL 2114 Restaurant Operations, 3 credits**

This course is designed as an introduction to kitchens and dining rooms found in the hospitality industry. Students practice concepts and skills learned in CUL 2104 Culinary Arts Theory & Development in a restaurant setting and are introduced to dining room and beverage service. Preparation, production and service of complete menus are covered. The course also covers such areas as recipe costing, menu planning and terminology, personnel needs, dining room arrangement and various types of service. Quantity food production and dining room operations are stressed. The dining room, kitchen and bar function as a coordinated unit. Students work all stations in the kitchen, dining room, and beverage service areas on a rotating basis. Prerequisite: CUL 2104 Culinary Arts Theory and Development

**CUL 2121 Banquet and Catering Practices, 3 credits**

This course elaborates on the techniques of food preparation and service while relating these activities to the catering and banquet business. The course is designed for those students who have successfully completed the introductory food courses. The functions of the catering or banquet operation are explained and taught through the use of actual functions. Prerequisites: CUL 1312 Hospitality Purchasing, CUL 1340 Beverage Service, CUL 1907 Sanitation and Safety, CUL 2114 Restaurant Operations, and CUL 2504 Hospitality Cost Control

**CUL 2131 International Cuisines, 2 credits**

This course is designed to introduce students to cuisines of other countries. Emphasis is placed on student's production and presentation of complete menus and techniques as they apply to European and Asian Cuisines. Prerequisite: CUL 2104 Culinary Arts Theory and Development

**CUL 2134 American Cuisine, 2 credits**

This course is designed to introduce students to the development of American Cuisine through the study of traditional American dishes and multi-cultural influences. Students cook and bake a variety of dishes based on regional culture and products. Trends in modern American cooking are explored. The emphasis is on authenticity and product presentation. Prerequisite: CUL 2104 Culinary Arts Theory and Development

**CUL 2140 Garde Manger, 2 credits**

This course is designed as an introduction to cold foods produced in the kitchen. Garde Manger techniques such as appetizers, aspics, pates, chaud-froids, terrines, galantines, cold sauces, relishes, and garnishes are demonstrated and produced. Students learn the proper care and use of tools and correct preparations of products. Prerequisite: CUL 2104 Culinary Arts Theory and Development

**CUL 2160 Culinary Demonstration, 3 credits**

Students create live demonstrations before audiences using various types of food products and showmanship.

Students have the opportunity to organize, plan, layout, develop and cost out a presentation.

**CUL 2225 Bakery Production, 3 credits**

This course is designed for students as an introduction to quality and quantity baking for the hospitality industry. Students create sweet doughs, assorted breads, cakes, pies, petit fours and various types of glazed Danish as well as assorted French pastries. Bakery sanitation and organization are stressed. Full student participation is required as students are assigned to duties on a rotating basis. Prerequisite: CUL 1206 Principles of Baking

**CUL 2227 Pastry Production, 3 credits**

Students learn to produce classic and contemporary pastry items for dessert menus or retail bakeries. Included are tortes and tarts, meringue items, fillings, puddings and custards, strudels, choux past items, frangipan, glazes, shortbreads, and assorted french pastries. Bakery organization and sanitation are stressed. Students practice bakery duties and work assignments. Prerequisite: CUL 1206 Principles of Baking

**CUL 2241 The Art of Confection, 3 credits**

This course provides an introduction to candy making, almond paste modeling, coco painting on pastillage, blown and pulled sugar, fudge and candy, roasting nuts to make nougats, melting and tempering chocolate, and the preparation of culinary art display pieces in the areas of confections, pastry and baking. Food preparation for garde manger items is also included. Prerequisites: CUL 1206 Principles of Baking and CUL 2225 Bakery Production

**CUL 2252 Bread and Roll Production, 3 credits**

Students in this course learn the skill of making quick breads, yeast raised, sourdough and international breads. Scientific principles such as dough fermentation and formulation as well as various current operational processes in both wholesale and retail establishments are explored.

Prerequisite: CUL 1104 Introduction to Food and Baking

**CUL 2504 Hospitality Cost Control, 3 credits**

This course covers techniques used in the hospitality industry that show the relationship of food, beverage and labor costs to selling prices and profit. Cost control procedures for purchasing, receiving, storing, issuing, production and revenue controls are examined. Menu and portion costings, preparation of daily reports to management and the use of percentages in the hospitality industry are studied. The practical application of these systems for various types of feeding operations are studied and practiced. Preparation of yield test, pre-costing, forecasting and sale history, beverage and bar control, inventory control with analysis of operation ratios, and potential profits are included. Prerequisite: BUS 1101 Business Mathematics

**CUL 2913 Hospitality Field Experience, 3 credits**

A cooperative work experience opportunity with a transportation company, travel agency, hotel, convention bureau, or other tourism-related firms. Minimum: 120 hours

**DEN 1000 Basic English, 3 equivalent credits**

This course is designed for students who need work in the basic reading and writing skills. Students review writing skills such as grammar, mechanics, spelling, sentence structure, paragraph development and outlining, and reading skills such as comprehension and vocabulary. This course is required of students who do not demonstrate the minimum proficiency established for entrance into ENG 1001. This course may not be used to satisfy the English requirement at this College. Students must complete DEN 1000 with a grade of C or better to progress to ENG 1001 Composition I.

**DMA 0902 Basic Arithmetic and Introductory Algebra, 3 equivalent credits**

This course is designed for students who need to improve their arithmetic skills primarily involving fractions, decimals, and percents. Students concentrate on these topics as well as estimation, problem solving, and interpretation of statistical data and graphs. An introduction to elementary algebra is included. Satisfactory completion of this course (C or better) or the mathematics competency exam is required for all students for entrance into BUS 1101 or MAT 1000. This course does not apply toward the mathematics requirement for any degree at this institution.

**DOR 1000 Operation Rebound, 1 equivalent credit**

This is a personalized course designed to assist students who have been placed on academic probation at the completion of their first semester. This course combines an academic contract which mandates class attendance, tutoring, and weekly interactive sessions. Operation Rebound is only open to second semester students who meet specific academic criteria as defined in this catalog. Corequisite: DOR 1001

**DOR 1001 Operation Rebound Study Lab, 0 equivalent credit**

This course is designed to allow students structured group time with a tutor to complete assignments, while improving study skills. Corequisite: DOR 1000 Operation Rebound

**ECO 1401 Macroeconomics, 3 credits, GE 3**

Students study macroeconomics with the main emphasis on solving the problems of economic growth and stability. The course includes the study of such topics as monetary policy, fiscal policy, employment, inflation, international trade, and current economic problems.

**ECO 1402 Microeconomics, 3 credits, GE 3**

Students study microeconomics with the main emphasis on the economic problems of allocation, distribution, and efficiency in the American economy. The course includes a study of the market system, supply and demand, the price system, the firm, and comparative economic systems. Emphasis is placed on specific segments of the American economy such as consumers, business, labor and agriculture.

**ECO 2001 Environmental Economics, 3 credits**

This course examines the economy and its interaction with the environment. Students examine the use of economic tools in developing new environmental approaches and policies.

**EDU 1102 Creative Learning Activities, 3 credits**

This course introduces students to creative activities suitable for preschool children: art, music and movement, math, science, sensory, social studies, and dramatic play within the context of creativity. Instruction is provided in locating, planning, implementing and evaluating creative learning activities. Emphasis is placed on stimulating learning, creativity and imagination through the use of a variety of methods and materials. Lectures and demonstrations are combined with laboratory hands-on experiences.

**EDU 1106 Nutrition, Health and Safety, 3 credits**

This course is designed to provide an overview of the interrelation of health, safety, and nutrition for the young child. Students explore the development of eating habits in young children, as well as basic nutrients, their major sources and their effect on growth and development. Nutrition education and menu planning are stressed. The topics of common childhood diseases, health appraisals, universal precautions, poison control, child abuse, and classroom safety are also discussed. Students receive training in the American Red Cross programs of Infant/Child First Aid and CPR. Course completion may lead to certification in same.

**EDU 1207 Observation/Participation in Early Childhood Education, 3 credits**

This course serves as an introduction to the application of child development techniques through observation and participation experiences with young children in the on-campus laboratory school. Weekly seminars address the use of objective techniques for observing and recording behaviors as well as communication skills, guidance techniques, developmentally appropriate practices, and the role of the teacher in early childhood education. As a laboratory course, each hour of class is matched with an hour of observation or participation scheduled separately. Students must pass with a "C" or better to continue in the program. No student may participate in the Center without completing all required clearances for work with children.

**EDU 2200 Introduction to Education, 3 credits**

This course provides an overview of schools and schooling for students in grades Pre K-6. It is organized around the principle themes of school, teacher, and curriculum. Topics include preschool, primary and intermediate grade cultures, staff roles, special population needs, issues related to student diversity and multiculturalism, teaching skills, classroom management, and introduction to instructional strategies, state curricula, and current reforms. This course is a gateway course designed to allow students to determine if becoming an early childhood or elementary school educator is an appropriate career choice. Students are asked to view early childhood and elementary education through the lens of a professional teacher, perhaps for the first time. Prerequisites: PSY 1500 General Psychology and PSY 2508 Child Development and Guidance

**EDU 2201 Sociological and Philosophical Foundations of Education, 3 credits**

This course provides a comprehensive introduction to the historical, sociological, and philosophical foundations of education. Students are required to examine the social purposes of education in historical and contemporary contexts. Students engage in the study of education through the academic disciplines of sociology, history, and philosophy; examine the significance of social differences (class, culture, race/ethnicity, gender, sexual orientation, religion) for education; develop and express a personal philosophy of education; and examine the relationship of schooling to democratic practices and principles. This course includes 30 hours of field work. Prerequisite: PSY 1500 General Psychology

**EDU 2202 Early Child/Nursery Ed Practicum I, 5 credits**

Practicum experience provides the student with supervised experience in the education, guidance and care of young children. Students have the opportunity to observe appropriate curriculum, then plan and carry out age-appropriate activities. All activities are under the careful supervision of trained staff members in the on-campus Child Development Center. Students receive both written and verbal feedback on their activities and skills. Entry is limited to Early Childhood Education majors. Students must earn a "C" or better to continue in this program. Prerequisites: EDU 1102 Creative Learning Activities and EDU 1207 Observation/Participation in Early Childhood Education

### **EDU 2203 Teaching Exceptional Children, 3 credits**

This course defines categories of exceptional children, adolescents, and adults likely to be encountered in the field of human services and education. The effects of the special needs in the behavior of the individual, the family, and the larger society will be considered. Current approaches of mainstreaming, intervention, and remediation are studied, compared, and when possible, demonstrated or observed. Legal aspects and value issues involving persons with special needs will be explored. Resources available to work effectively with persons from minority cultures, homes where English is not spoken, persons with handicapping conditions, and those who are gifted and talented will be identified. Prerequisite: PSY 1500

### **EDU 2204 Children's Literature, 3 credits, GE 7**

This course is concerned with literature as an art form and the ways that literature supports children's language. Students study the various types of literature for children, and gain familiarity with different authors, of both fiction and nonfiction, American and cross-cultural children's books. The creative usage of these forms of literature are applied for both individual and group teaching of young children (preschool, primary and early elementary school-age groups). Prerequisite: ENG 1001, Composition I.

### **EDU 2206 Early Child/Nursery Ed Field Exp, 5 credits**

Supervised Field Experience is an educational partnership with the community, whereby a college student receives career-related, on-the-job training and experience under the supervision of the College and the employer. The student receives credit and a grade for their work. The objective is to provide work experience that gives meaning and direction to the student's total education experience as well as an opportunity to apply the theories and practices presented in the program. Students must pass with a "C" or better to graduate from this program. Prerequisite: EDU 2202 Early Child/Nursery Ed Practicum I

### **EDU 2300 Infants and Toddlers, 3 credits**

The course is designed to examine the growth and development of infants and toddlers in family or group settings. Care techniques related to dressing, diapering, feeding and sleeping as well as the modification of the environment for optimal development and safety is studied. Observation of infants and toddlers as well as lectures, text, guest lecturers and discussion offer a varied treatment of the topic. Prerequisites: PSY 1500 General Psychology, and PSY 2508 Child Development and Guidance

### **EDU 2502 Early Childhood Admin & Supervision, 3 credits**

This professional course in early childhood education provides an overview of administration and operation of child care centers, site location and development, regulatory agencies and license requirements, policy formation and development, and planning space and equipment. Topics in supervision include staff selection and management, boards and advisory committees, funding sources and legal responsibilities. Prerequisite: EDU 2202 Early Childhood/Nursery Ed Practicum I

### **EDU 2510 Home, School and Community, 3 credits**

This course begins by addressing issues of communication, problem-solving, active listening, and perspective-taking. Parenting styles, skills, and training programs are outlined. The impact of the community, its resources and its referral systems is discussed. Throughout the course, awareness of familial diversity and multicultural issues are stressed. Prerequisites: PSY 1500 General Psychology, and PSY 2508 Child Development and Guidance

### **EMG 1500 Principles of Emergency Management, 2 credits**

This course is intended to provide information that will enable persons just entering the profession or expanding their roles to have the ability to work with emergency management issues. It will provide an overview of the characteristics, functions, and resources of an integrated system and of how various emergency management services work together in an integration of resources and capabilities. Emphasis will be placed on how this system is applied to all hazards for all government levels, across the four phases, and all functions of emergency management.

### **EMG 1520 Pub Safety Critical Incident Mgmt, 1 credit**

This course provides students with information relevant to public safety forces (fire, police, and emergency medical

services) roles and responsibilities when responding to an emergency. Additionally, the course provides information dealing with support service agencies and the concerns and roles of private business and local government in supporting public safety forces in emergency situations. It also provides information to encourage cooperation of all groups and agencies at the scene of an emergency, with a key component focusing on the goals and critical tasks of each public safety agency operating at a given scene.

**EMG 1600 Developing Volunteer Resources, 1 credit**

This course allows students to learn the necessary skills to be able to make appropriate volunteer assignments, structure programs to maintain or increase the skill levels of volunteers, and motivate them to both maintain readiness and operate effectively during emergency situations.

**EMG 1620 Resources & Donations Management, 2 credits**

This course is designed to provide Resource Management Coordinators with the knowledge and skills they need to perform resource management functions within the overall framework of the emergency operations center (EON). This performance-based course is intended to introduce local officials (i.e., representatives of local governments and leads of local voluntary organizations) to the concept of donations management and their roles and responsibilities in the donations management process.

**EMG 1700 Public Information Officer Basic Course, 3 credits**

This course provides students with the skills needed to perform public information duties as they relate to emergency management. It focuses on the definition of the job of the public information officer. The course assists participants with building the skills needed for this position, such as oral and written communications, understanding and working with the media, and the basic tools and techniques PIOs need to do the job.

**EMG 1780 Emergency Response Planning, 3 credits**

Planning is an essential function of an effective emergency program and serves as a tool for emergency professionals in improving disaster management and public safety policies. The Emergency Response Planning course provides emergency management and public safety personnel with the knowledge, skills and ability to develop or enhance their Comprehensive Emergency Management plans. The course will highlight the importance of building an integrated system for emergency planning that uses multi-agency teams to address mitigation, preparedness, response, and recovery. Prerequisite: Principles of Emergency Management

**EMG 1800 Emergency Management Leadership, 2 credits**

The Emergency Management Leadership course is designed to provide students with the skills necessary to lead and influence others in the demanding setting of emergency management by increasing their range of skills in a variety of interpersonal areas: conflict management, use of power group dynamics, leadership, and influence. Students are taught to clearly identify problems and their root causes to be able to determine the appropriate type of decision-making style. Using a suggested process of problem solving, participants will be able to apply creative solutions to both emergency and non-emergency situations in an emergency management situation.

**EMG 1820 Basic Incident Command System, 1 credit**

The Basic Incident Command System course is designed to increase participants' knowledge and understanding of the Incident Command System. Utilizing lectures and small group activities, participants will acquire the ability to organize and manage an incident through implementing the ICS. The material covered during the course includes an introduction to the principles and features of ICS, organizational overview, incident facilities, incident resources, and common responsibilities of key ICS positions.

**EMG 1840 Emergency Response to Terrorism, 1 credit**

The Emergency Response to Terrorism course provides the knowledge and skills needed by public safety forces that respond to terrorist acts. The course provides public safety and related support personnel the information to understand terrorism and its root causes and motivations. The course also provides methods to enable students to recognize circumstances indicating a potential terrorist attack and to protect themselves from a variety of potential dangers.

**EMG 2520 Disaster Response & Recovery Operations, 2 credits**

The purpose of this course is to introduce students to the basic concepts and operations applicable in a disaster environment (particularly for major disasters) and enhance understanding of the proper roles and responsibilities of various local and state emergency management officials, why they matter, and how these roles and responsibilities relate to those carried out by the Federal government. To foster multi-level partnership, the course emphasizes the problem-solving aspects of disaster operation as well as associated coordination requirements. Prerequisite: EMG 1500 Principles of Emergency Management

**EMG 2560 Mitigation for Emergency Managers, 1.5 credits**

This course addresses the important roles of the emergency program manager or other local government representative in mitigation. It provides the emergency manager direction on how to implement into a locality recognized and accepted national mitigation strategies. The course provides students information helpful in the coordination of public safety agencies, local businesses, and professional organizations. Also provided in the course is information on funding mitigation efforts through public and private sources. Prerequisite: EMG 1500 Principles of Emergency Management

**EMG 2620 Intermediate Incident Command System, 1.5 credit**

The Intermediate Incident Command System course is designed to increase the participants' knowledge and understanding of the Incident Command System. Utilizing lectures and small group activities, participants will acquire the ability to organize and manage staffing. The material covered during the course includes organization and staffing, organizing incidents and events, incident resource management, air operations, and incident and event planning. Prerequisite: EMG 1820 Basic Incident Command System

**EMG 2700 Emergency Response Planning for Schools, 1 credit**

This course will provide participants with the basic information and tools needed to develop effective plans for the wide array of potential emergencies that schools may face. Participants completing the course will be able to explain the importance of effective planning to others and lead individuals in their schools and community through the process of developing an effective multi-hazard program. Prerequisite: EMG 1780 Emergency Response Planning

**EMG 2780 Emergency Operations Center Management, 1.5 credits**

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

**EMG 2800 Emergency Exercise Program Management, 3 credits**

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

**EMG 2820 Advanced Incident Command System, 1.5 credits**

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

**EMG 2840 Terrorism Response Planning, 2 credits**

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

**ENG 0990 SpTp: First Year Writing Studio, 3 credits**

First Year Writing Studio is designed to help students produce college-level writing by partnering them with a specific section of Composition I. Students learn critical thinking, reading, study, writing, revision, and time-management skills. Students also work with instructors, who act as mentors helping to guide them successfully through their first semester of College. Students must be placed into First Year Writing Studio and enroll in an affiliated section of Composition I. Students who fail the affiliated Composition I section must retake the College's Writing Placement Exam to determine placement for subsequent semesters. Co-requisite: ENG 1001, Composition I.

**ENG 1001 Composition I, 3 credits, GE 10 (in conjunction with ENG 1301 Fundamentals of Speech)**

This is a writing-intensive course in which students draft and revise college-level essays. Students study the conventions of academic prose, examine various methods of organization and development, and learn research skills.

**ENG 1040 Critical Reading I, 3 credits**

Students are introduced to the critical approach of reading, emphasizing strategies to improve reading comprehension and vocabulary. Students examine both the structure of the written word—rhythm, context,

connotation, tone, and other areas which affect meaning—and the skills necessary to progress in college level study. Extra hours in the writing lab are required. Students are assigned to take this course based on assessment criteria.

**ENG 1100 Mass Media, 3 credits**

Students are introduced to mass media—print, sound and visual. Mass media is presented as industries which shape, and are shaped by, significant issues. Cross-listed as COM 2100

**ENG 1301 Fundamentals of Speech, 3 credits, GE 10 (in conjunction with ENG 1001 Composition I)**

This course provides public speaking training and practice.

**ENG 2001 Introduction to Literature, 3 credits, GE 7**

This course offers a variety of readings in fiction, poetry and drama. Prerequisite: ENG 1001 Composition I

**ENG 2004 Creative Writing I, 3 credits, GE 8**

This course provides directed practice in the creative process of writing. Prerequisite: ENG 1001 Composition I

**ENG 2005 Composition II, 3 credits**

This course emphasizes analytical skills in both writing and reading. Students write analytical and argumentative essays and a research paper. Prerequisite: ENG 1001 Composition I

**ENG 2007 South African Literature, 3 credits**

Students in this course examine the 19<sup>th</sup> and 20<sup>th</sup> century literature of South Africa from a variety of voices: Zulu, Afrikaans, and Anglo-Africans among others. At the same time, the assigned short fiction, poetry, plays, and films, highlight the events that mark the country's history: colonialism, post-colonialism, apartheid, and beyond. Prerequisite: ENG 1001 Composition I

**ENG 2008 Creative Nonfiction, 3 credits, GE 7, GE 8**

Students will write and revise a variety of creative nonfiction essays, paying particular attention to the relationships between form and content, audience and purpose. Students also will workshop papers and discuss the work of published authors. Note: For the purpose of transfer, this course is not a substitute for Composition II. Prerequisite: ENG 1001 Composition I.

**ENG 2009 SpTp: Performance Poetry, 3 credits, GE 8**

Through in-class writing assignments, performances of their own and other poets' works, theater exercises, critiquing poetry performance videos, and discussions of student work, students produce and perform poetry of increasing quality. Pre-requisite: ENG 1001 Composition I.

**ENG 2030 The Comic Vision, 3 credits**

Students study the nature of comedy in poetry, fiction and drama. Prerequisite: ENG 1001 Composition I

**ENG 2032 SpTp: Shakespeare's Romantic Comedies, 3 credits**

Students examine and analyze Shakespeare's romantic comedies, placing the plays within the context of English Renaissance culture, aesthetics, and the genre of comedy.

**ENG 2100 Masterpieces of Literature, 3 credits, GE 7**

Selected great works of literature are examined in English through a variety of approaches. Prerequisite: ENG 1001 Composition I

**ENG 2107 SpTp: The Graphic Novel, 3 credits, GE 7**

Students will analyze the graphic novel in the context of literary studies, especially the way that narrative fiction using sequential art functions in popular culture both in a contemporary and historical context. Pre-requisite: ENG 1001 Composition I.

**ENG 2117 American Literature I, 3 credits, GE 7**

Students study the development of American thought through the study of representative American authors from colonial times through the romantic period. Prerequisite: ENG 1001 Composition I

**ENG 2118 American Literature II, 3 credits, GE 7**

Students study representative American authors from the romantic period until the present. Prerequisite: ENG 1001 Composition I

**ENG 2122 The Modern Novel, 3 credits, GE 7**

This course acquaints the student with the historical growth and aesthetic directions of contemporary fiction and develops the student's critical and interpretive faculties.

Prerequisite: ENG 1001 Composition I

**ENG 2123 20<sup>th</sup> Century Literature, 3 credits, GE 7**

Students focus on some of the significant works of the twentieth century. The novels, plays and poetry of several American, British and European authors are read and discussed.

Prerequisite: ENG 1001 Composition I

**ENG 2130 Modern Poetry, 3 credits, GE 7**

Students examine major poets of the modern period in both England and America.

Prerequisite: ENG 1001 Composition I

**ENG 2132 Introduction to Poetry, 3 credits, GE 7**

This course is designed to acquaint the student with the essentials necessary for a more thorough understanding and appreciation of poetry. Some topics of study will be denotation, connotation, figurative language, imagery, and tone. Prerequisite: English 1001 Composition I

**ENG 2142 Modern Drama, 3 credits, GE 7**

Students examine contemporary playwrights, beginning with Ibsen. Prerequisite: ENG 1001 Composition I

**ENG 2146 Shakespeare, 3 credits, GE 7**

Students examine and analyze representative examples of Shakespearean tragedies, comedies and historical plays. Prerequisite: ENG 1001 Composition I

**ENG 2150 The Short Story, 3 credits, GE 7**

Students examine the short story as a tradition and as a mode of contemporary fiction. Prerequisite: ENG 1001 Composition I

**ENG 2176 English Literature I, 3 credits, GE 7**

This course provides an introduction to significant works of English literature from the Middle Ages (before 1485) to the Restoration and early eighteenth century (early 1700s), with particular attention paid to literary trends and traditions, forms, and history. Prerequisite: ENG 1001 Composition I

**ENG 2177 English Literature II, 3 credits, GE 7**

This course provides an introduction to significant works of English literature from the Neoclassical and Romantic Periods (mid-to-late 1700s) to the Modern Period (early 1900s), with particular attention paid to literary trends and traditions, forms, and history. Prerequisite: ENG 1001 Composition I

**ENG 2200 Media Writing Techniques, 3 credits**

Students examine the techniques used in writing for radio and television. Emphasis is placed on the ability to apply skills in a variety of writing assignments, including commercials, newscasts, and drama. Crosslisted as COM 2200.

**ENG 2285 Introduction to Film, 3 credits, GE 7**

This course introduces students to aesthetic, formal, rhetorical, and social conventions of film. Students examine the multiple ways that cinema produces meaning and consider what distinguishes film from the other arts.

Prerequisite: ENG 1001 Composition I

**ENG 2286 Literature to Film Adaptation, 3 credits, GE 7**

This course offers a comparative look at the aesthetic, formal, rhetorical, and social conventions of literature and film. Students examine the complex relationship that has evolved between word and image by looking at the multiple ways literature and film have modified one another since film's invention. Prerequisite: ENG 1001 Composition I

**ENG 2288 SpTp: American Popular Culture, 3 credits, GE 7**

In this course students study the wide variety of literary manifestations of American popular culture as reflections and symptoms of the concerns of modern American society. Prerequisite: ENG 1001 Composition I. Crosslisted as HUM 2288.

**ENG 2301 Advanced Speech, 3 credits**



This course is designed for students who have demonstrated the speaking ability to successfully prepare, interpret and deliver a wide range of advanced material utilizing a variety of techniques. Prerequisite: ENG 1301 Fundamentals of Speech

**ENG 2516 SpTp: Cane & Able: Culture and Disability, 3 credits, GE 7**

Historically, people with disabilities have been killed, isolated, and exempted from citizenship by the allegedly able-bodied. To better understand disability's pervasive role in our knowledge, values, and perceptions of others, students take a multi-media and interdisciplinary approach to examining disability in its multiple forms—the visible and invisible, physical and cognitive, psychological and social. Prerequisites: PSY 1500 General Psychology; ENG 1001 Composition I. Crosslisted as PSY 2516.

**ENG 2701 Journalism I, 3 credits, GE 7**

This course is an introduction to basic concepts and procedures in journalism. Students are exposed to an overview of the history of journalism and the ethical practice of it. Through ongoing analysis of professional and student news and by examining topics of interest to the campus community, students work as a team to write and edit articles for the digital student news site. Prerequisites: ENG 1001, Composition I.

**ENG 2702 Journalism II, 3 credits**

This course is a continuation of Journalism I. Students enhance their journalistic skills and take leadership roles in the production of the digital student news site. Prerequisites: ENG 2701, Journalism I

**ENG 2926 African-American Literature, 3 credits, GE 7**

This course focuses on some of the most important works of African-American literature from colonial times to present. The novels, plays, and poetry of African-Americans are read and discussed.

**ENG 2933 Women in Literature, 3 credits, GE 7**

This course introduces students to representations of women in literature. It will consider issues of gender in relation to sexuality and culture and encourage students to consider their own perceptions of women in literature within their cultural, historical, and political relationships. Prerequisite: ENG 1001 Composition I.

**ENG 2960 Creative Writing II, 3 credits**

This is an intensive workshop-based class for students who have completed ENG 2004: Introduction to Creative Writing. Students will have the opportunity to workshop their own poetry and fiction. We will also analyze published poems and stories in order to better understand how great writers construct their work.

**FIR 1010 Introduction to Fire Technology, 3 credits**

This course is an essential component within the Fire Protection Technology core group. The student is introduced to the field of fire protection technology through a review of tragic fires of yesterday to provide a historical perspective on the development of fire safety practices in place today. Students are introduced to the chemistry and behavior of fire in order to develop an understanding of how technology is applied to detect, control and suppress fire today.

**FIR 1020 Introduction to Fire and Emergency Services Administration, 3 credits**

The premise of the course is to provide an introductory understanding of the administrative, management and leadership skills that are required in today's fire and emergency services. To accomplish this goal, the history and past practices of the Fire Service will be examined. An overview of the administration, financial management, human resources, customer service, training, educational requirements, and health and safety issues of the Fire and Emergency service will be explored.

**FIR 1030 Principles of Building Construction, 3 credits**

This course is part of the Fire Protection Technology core group. It is designed to introduce the student to methods and techniques of building construction and how building construction impacts both fire behavior and the life safety of building occupants. Students are also introduced to the causes of building failures (structural collapse) and the role of interior finish in fire spread and toxic gas production.

**FIR 1040 Fire Safety and Building Codes, 3 credits**

This course examines the importance of building codes promoting the life safety of building occupants. The student is introduced to the nature of human physiological and psychological responses to fire and its by products. Topics include: combustion pharmacology, adaptive and non-adaptive behavior, life safety assessment in buildings, concepts of egress design, the history and origins of NFPA 101 Life Safety Code (a model code), contrasting performance codes and specification codes, fire modeling, and the "defend in place" concept. Historic multiple death fires are also examined for the lessons they offer. Prerequisites: FIR 1030 Principles of Building

Construction.

**FIR 1110 - Fire Hazard Properties of Materials, 3 credits**

This course will introduce the student to various chemical and physical properties of solid, liquid, and gaseous materials that contribute to their potential for fire and explosion. Reactivity and health hazards will also be examined. The student will review basic combustion chemistry and chemical terminology. The student will be introduced to identification systems for hazardous materials, transportation practices, storage practices, and fire control strategies for a wide range of flammable and combustible substances.

**FIR 2010 - Fire Service Hydraulic Theory and Application, 3 credits**

This course of study is designed to provide the student with a thorough understanding of the scientific laws of hydraulics and a working knowledge of pumps at all levels befitting today's professional fire fighter. Students will examine theories of hydrostatics and hydrokinetics, velocity and discharge, and water distribution systems; including mains, hydrants, standpipe and sprinkler systems, and fire hose. Design, testing and use of fire pumps, fire appliances, fire fighting foams and foam systems are also discussed. For the student to be successful in the study of hydraulics, a basic comprehension of math and chemistry is required. Prerequisites: FIR 1010 Introduction to Fire Technology.

**FIR 2020 - Strategic and Tactical Consideration on the Fireground , 3 credits**

The purpose of this course is to address the uncontrolled environment of the fire service professional. The many uncertain factors that influence the fireground are learned through experience however; pre-incident factors such as training, planning and the experience of the fire officer professional have a tremendous influence on the outcome of the fire scene. The student learns about the influence of the building construction, incident site management and their role in a successful outcome of a fireground incident. Prerequisites: FIR 1010 Introduction to Fire Technology.

**FIR 2030 - Fire Protection and Detection Systems, 3 credits**

A study of the various types of fire detection and extinguishing systems. Portable fire extinguishers, sprinkler systems and special agent systems are discussed. The operation of municipal and private alarm systems, automatic fire detection systems and guard services are also examined.

**FIR 2070 - Legal Aspects of the Fire and Emergency Services, 3 credits**

The focus of this course is the exploration of the many legal issues associated with fire and emergency services. Issues confronting today's fire and emergency services include legal and civil liability, Occupational Safety and Health Administration (OSHA) compliance, workers compensation, physical abilities testing, negligence, discrimination and sexual harassment. These are but a few of the pivotal issues confronting today's fire and emergency services. Prerequisites: FIR 1010 Introduction to Fire Technology.

**FIR 2110 - Investigation and Detection of Fire Incidents, 3 credits**

This course examines the causes of incendiary and accidental fires. In the study of intentional fires and explosions the scientific method is the analytic process now used that leads to accurate and defensible conclusions in fire investigation. The course will focus on the application of this process and create a sound basis for the student to use when evaluating fire scenes, preparing reports, gather evidence and offer testimony in an arson investigation case. Topics discussed include: investigation techniques, interrogation, reports, court procedures, testimony, legal opinions and processing of criminal evidence. State and local statutes related to the crime of arson are examined.

**FIR 2730 - Fire and Emergency Service Field Experience / Internship, 3 credits**

A fire science technology internship will allow students to develop new skills in this demanding field of study. The opportunity of learning outside of the traditional classroom is an important component to a student's overall education. The students will enhance their understanding and expand their knowledge of the complexities of today's fire science and emergency services first responder and the many other support areas that are needed in this field. This course enables the student to experience and evaluate many areas of fire science and emergency services, providing an opportunity to expand their understanding of the goals and philosophy of these specific agencies through a hands-on work experience. Prerequisites: FIR 1010 Introduction to Fire Technology, FIR 1020 Introduction to Fire and Emergency Services Administration, FIR 1030 Principles of Building Construction.

**FLA 1410 Japanese Language I, 3 credits, GE 9**

This is an introductory course to provide students with a fundamental knowledge of Japanese grammar, form, structure and the sociolinguistic contexts in which the language is used. Also, considerable time will be spent studying Japanese cultural values, and how an understanding of human relationships in Japan can greatly enhance the individual student's mastery of Japanese language skills.

**FLA 1445 Spanish Language and Culture I, 3 credits, GE 9**

This course provides students with exposure to Spanish culture through the study of language, utilizing popular media and a culture-oriented text. The course covers language structure essential for basic communication in Spanish.

**FLA 1455 French Language and Culture I, 3 credits, GE 9**

This course provides an exposure to French culture through the study of language, utilizing popular media and a culture-oriented text. The course covers the language structure essential for basic communication in French.

**FLA 1458 SpTp: German Language and Culture I, 3 credits, GE 9**

This course will cover language structure essential for basic communication in German. The course provides students with exposure to German culture through the study of language, utilizing popular media and a culture-oriented text.

**FLA 1809 American Sign Language I, 3 credits, GE 9**

This course introduces students to the language and culture of persons in the Deaf community. Students demonstrate a basic competence in the structural elements of American Sign Language, including non-verbal communication techniques, grammar principles, basic vocabulary, and conversational skills. Students examine the role of American Sign Language within the context of the culture of the Deaf community.

**FLA 1921 Latin I, 3 credits, GE 9**

This course introduces students to the basics of ancient Latin. Students learn the grammar and vocabulary necessary to read Roman literature.

**FLA 1922 Latin II, 3 credits, GE 9**

Continuing where Latin I left off, this course introduces students to the basics of ancient Latin. Students learn the grammar and vocabulary necessary to read Roman literature. Prerequisite: FLA 1921 Latin I

**FLA 2410 Japanese Language II, 3 credits, GE 9**

This course is a continuation of FLA 1410 with greater emphasis on elementary oral and aural skills. Prerequisite: FLA 1410 Japanese Language and Culture I

**FLA 2445 Spanish Language and Culture II, 3 credits, GE 9**

This course is a continuation of FLA 1445 with greater emphasis on elementary oral and aural skills. Prerequisite: FLA 1445 Spanish Language and Culture I

**FLA 2446 Spanish Language and Culture III, 3 credits, GE 9**

This course is a continuation of FLA 2445 together with an introduction to Spanish literature and more detailed language study. This is an intermediate level course. Prerequisite: FLA 2445 Spanish Language and Culture II

**FLA 2447 Spanish Language and Culture IV, 3 credits, GE 9**

This course is a continuation of FLA 2446. This is an intermediate level course. Prerequisite: FLA 2446 Spanish Language and Culture III

**FLA 2455 French Language and Culture II, 3 credits, GE 9**

This course is a continuation of FLA 1455 with greater emphasis on oral and aural skills. This is an elementary level course. Prerequisite: FLA 1455 French Language and Culture I

**FLA 2456 French Language and Culture III, 3 credits, GE 9**

This course is a continuation of FLA 2455 together with an introduction to French literature and more detailed language study. This is an intermediate level course. Prerequisite: FLA 2455 French Language and Culture II

**FLA 2457 French Language and Culture IV, 3 credits, GE 9**

This course is a continuation of FLA 2456. This is an intermediate level course. Prerequisite: FLA 2456 French Language and Culture III

**FLA 2458 SpTp: German Language and Culture II, 3 credits**

This course is designed to develop listening, reading, speaking, and writing skills in German. This course also gives the student a solid understanding of culture in the German speaking realms. Linguistic structures for everyday conversation will be introduced as well as a high priority of the class is to assist students in obtaining a high level of oral proficiency. Prerequisite: FLA 1458 German Language and Culture I or equivalent knowledge of German language and culture.

**FLA 2809 American Sign Language II, 3 credits, GE 9**

This course is an expansion of American Sign Language I with emphasis on increasing receptive and expressive conversational skills through vocabulary growth, use of idioms and creativity. Students further investigate the Deaf community as it defines its own culture and how it relates to that of the Hearing world. Prerequisite: FLA 1809 or equivalent based upon the assessment of the instructor.

**GEO 1700 World Geography, 3 credits, GE 3, GE 6**

The purpose of this course is to provide an introduction to the geographic analysis of various regions of the world. Emphasis is placed upon each region's major natural environmental features (terrain, climate, natural vegetation, and natural resources) and how these features relate to and influence man's occupation and culture of the region.

**GIS 1102 Intro Geographic Information Tech, 3 credits**

This course provides introductory experience in various aspects of Geographic Information Technologies (GIT). Basic theories and applications of GIT are discussed and students gain hands-on training for collecting, editing, manipulating, processing, and integrating spatial or geographic data from diverse sources. Students use a variety of software in completing assignments and projects.

**GMP 1103 Fundamentals of the Golf Swing, 2 credits**

This course is designed to give students the basic skills needed to improve their own game, the laws, principles and preferences in the golf swing, full swing basics, short game basics, physical conditioning, and the mental side of the game. Crosslisted as PED 1103.

**GMP 1303 Golf Strategies & Development, 3 credits**

This course gives the student a basic knowledge and understanding of grip, posture, ball position, in-swing positions, the short game, bunker play, uphill, downhill and side hill lies, tournament play, and utilizing videotape and computer analysis.

**GMP 1502 Golf Course Operations & Management, 3 credits**

This course covers the fundamentals of golf course operations and management, strategies for tournament play, club house management, club fitting, club repair basics, and running a golf academy or junior camp.

**GMP 1504 Turfgrass Management, 3 credits**

This course gives the student a basic background in agronomy issues, disease issues, maintaining a good relationship with the golf course superintendent, common fertilizer and pesticide usage, risk management and safety issues, growing grasses, and answers to common turfgrass issues.

**GMP 1505 Principles of Golf Management, 3 credits**

This course provides students with an introduction to managing and operating golf facilities. It outlines and defines various golf management roles (owner, director of golf, head professional, general manager) and their essential responsibilities including: setting course rules, policies and pricing, instruction and clinics, tournament/outing scheduling and administration, merchandising, staffing, and working with outside golf agencies (sales representatives, golf associations, community, etc.). Students gain an understanding of the broad expertise required to successfully work in and manage a golf facility.

**GRB 1001 Sustainability Seminar, 1 credit**

This course is designed for first time, full time students who are pursuing careers related to green technologies. The course will provide an overview of key environmental challenges and issues related to sustainability, and key components of a green-collar economy.

**GRB 1100 Introduction to Green Buildings, 3 credits**

In this course, students study the principles, methods, and equipment associated with sustainable building systems and design. Topics include ecological design, energy efficiency, passive and renewable energy, water conservation and treatment, sustainable site selection, green building materials, indoor and outdoor environmental quality, and building assessment tools.

**GRB 1200 Intro to Renewable Energy Systems, 3 credits**

In this course, students study the principles, methods, and equipment associated with renewable energy systems. Topics include solar, wind, biomass and biofuels, fuel cells, hydropower, oceanic energy, geothermal, and energy storage. Nonrenewable energy sources, climate change, and the economics and politics of energy are also discussed.

**GRB 1300 Energy Management, 3 credits**

In this course, students learn how to calculate, measure, and manage the energy consumption of buildings. Students learn to navigate the growing list of energy efficiency strategies and technologies. Topics include energy auditing, accounting, monitoring, targeting, and reporting; energy management opportunities; and project and financial management.

**GRB 1400 Green Building Materials, 3 credits**

In this course, students learn how to take longevity, cost, performance, and environmental factors into account when making decisions about various building materials and products. This course covers both the selection and specification processes for green building materials. Environmentally preferable purchasing guidelines related to cleaning, maintenance, and other materials and supplies are also covered.

**GRB 1501 SpTp: Straw Bale Construction, 1 credit**

This course offers students hands-on experience in straw bale construction and earthen plasters. Students will work together to build a small straw bale structure in its entirety. Topics include basic techniques for straw bale construction, handling and cutting of bales, construction of bale walls, and preparation and application of plasters. Additional topics may include straw bale design, site selection and preparation, framing, and finishing work.

**GRB 1502 SpTp: Straw Bale Construction II, 1 credit**

This course offers hands-on experience in straw bale construction. The focus will be on the preparation and application of gypsum, lime, and earth plasters. Other finishing work will also be included in this course

**GRB 2100 Building Automation & Controls, 3 credits**

In this course, students learn the basic principles of building automation and controls for energy management. Topics include control devices, signals, logic, and applications for various systems, such as electrical, lighting, HVAC, plumbing, fire protection, security, access control, voice-data-video, and elevator systems.

**GRB 2200 Solar & Wind Systems, 3 credits**

In this course, students learn the basic principles of photovoltaic and wind generated power, with an emphasis on how to maintain and manage these technologies, as well as the buildings with which they are associated. The key components and principles, site issues, and economic considerations of solar and wind systems are covered.

**GRB 2300 Commercial Electrical, 3 credits**

In this course, students learn about the essential components of the electrical systems of commercial buildings. Topics include reading commercial building plans and specifications, computing electrical loads, branch circuits and components, and electronic service equipment. Electrical considerations specific to renewable energy systems are also covered.

**GRB 2400 Care of Green Spaces, 3 credits**

In this course, students learn to make decisions about the design and maintenance of the green spaces incorporated in and around green buildings. Topics include site protection and restoration, materials and plant selection, sustainable water strategies, noise and light abatement, and maintenance of green spaces.

**GRB 2500 Troubleshooting Green Building Systems, 3 credits**

In this course, students apply their knowledge of sustainable building systems, energy management, renewable energy, green building materials, and other green building principles to analyze and solve specific problems related to building maintenance and management. Building assessment tools related to sustainable design, construction, operations, and maintenance are utilized.

**GRB 2600 Green HVAC, 3 credits**

In this course, students learn the basic principles of heating, ventilation, and air conditioning (HVAC) systems in commercial buildings, with an emphasis on energy efficiency and renewable energy. Topics include heat loss calculations, fuels and combustion, waste heat recovery, and maintenance considerations for these systems.

**HIS 1016 World War II, 3 credits, GE 4, GE 6**

This course examines the world at war, 1939-45. Particular attention is given to the causes of the war, the principle battles fought in Europe and in Asia, and the resulting aftermath. Documentary films are incorporated, where appropriate.

**HIS 1023 The Vietnam Experience, 3 credits, GE 6**

Students examine the Vietnam War and its profound effect on the people and society of both Vietnam and the United States. Students learn the background on events leading up to the war and explore its lasting effects on post-war society.

**HIS 1204 Western Civilization Before 843, 3 credits, GE 5**

This course is an introductory study of the political, economic, social, and cultural development of Western society and its institutions. The period covered will extend from the origin of civilization in the ancient Near East and the Mediterranean world to the rise of Islam and the beginnings of Carolingian Europe.

**HIS 1205 Western Civilization from 843 to 1648, 3 credits, GE 5**

This course is an introductory study of the social, political and cultural development of western civilization from the Treaty of Verdun that divided the Carolingian Empire in 843, through the end of the Thirty Years' War in 1648.

**HIS 1206 Western Civilization Since 1648, 3 credits, GE 5**

This course is an introductory study of the political, economic, social and cultural development of Western Civilization and its institutions. It covers the material, from the Enlightenment to the present. Particular attention is given to the major revolutions, the rise of modern nation states, and the causes and effects of twentieth century conflicts.

**HIS 1207 SpTp: Cultural History of Italy, 3 credits, GE 5**

Students in this course analyze the historical, political, and cultural development of Italy. This involves consideration of the area's rich regional diversity, including the autonomous South Tyrol in the Alps, the Republic of Italy, the island of Sicily, and the Vatican.

**HIS 1223 History of Africa, 3 credits, GE 6**

This course examines the history of the continent of Africa from the emergence of early humans to the present. Topics include: Pre-history, Nations and Empires of the Classical Age, Encounters with Europe, the Colonial Period, Independence, and the New Nations Coming of Age on a Global Stage. Emphasis is placed on sub-Saharan Africa.

**HIS 1224 The History of the African-American, 3 credits, GE 4**

Students study the role played by the African-American in the history of the United States from the introduction of slavery to the present time. Emphasis is placed on the influence of slavery, political, social and economic developments, as well as on the growth of the African-American protest groups in the twentieth century.

**HIS 1225 SpTp: History of Slavery, 3 credits, GE 6**

In this course students analyze important dates, facts, persons, and places related to the history of slavery. Slavery is discussed as a phenomenon of political, economic, social, and cultural import, utilizing detailed archaeological and historical accounts. Though the course is not limited to one region or people, there is an emphasis on the institution of slavery as it was practiced in the Atlantic World, largely between Africa and the Americas.

**HIS 1226 History of Women in America, 3 credits, GE 4**

This course examines the chronology of American history from colonial times through the 1980s with an emphasis on women's perspectives and experiences. The course also explores general experiences of women in America including their political, social, and familial relationships.

**HIS 1227 U.S. History Until 1860, 3 credits, GE 4**

This course is a study of the development of the United States from the pre-Columbian era to 1860. Students will analyze the European arrival in the Americas, expansion of colonial settlements, the American Revolution, the creation of the U.S. Constitution, Jacksonian democracy, westward expansion, and slavery.

**HIS 1228 U.S. History 1860 to 1940, 3 credits, GE 4**

This course provides a survey of the development of the United States from the Civil War period to 1940. Students will analyze the Civil War, post-Civil War agricultural and industrial revolutions, urbanization, immigration, the emergence of the United States as a world power, World War I, and the Great Depression.

**HIS 1229 U.S. History Since 1940, 3 credits, GE 4**

This course surveys and examines selected problems and opportunities facing the United States in the 20<sup>th</sup> century and early 21<sup>st</sup> century. Students will analyze significant social, economic, and political changes in contemporary American life since 1940.

**HIS 1252 Modern History of Latin America, 3 credits**

This course is designed to broaden student's knowledge of the modern history of Latin America. The class covers the major Latin American countries from the colonial period to the present day. Central themes include European-New World interaction, racial identity, military takeovers, and US involvement in the region. The class also looks at

current events concerning Latin America, including NAFTA, the increasing trend toward democratic politics, and the large-scale immigration of Latin Americans into the United States.

**HIS 1261 History of the Holocaust, 3 credits, GE 5**

This course is designed to broaden students' knowledge of the Holocaust. The class examines the formation and growth of the Nazi movement, the mass deportations, the concentration camps, and the experience during and after the war of the survivors of those camps.

**HIS 1270 Development of Modern Middle East, 3 credits, GE 6**

This course explores the development of the modern Middle East by examining, first, the religious, cultural, and historical background that has shaped the modern era and second by looking at the present political, economic, and social composition of the region. Particular attention is paid to the influential ideologies of the region, the diverse political and ethnic conflicts, the differing leadership styles of political figures, the interests and roles of the superpowers, and most of all, to the way the complex interaction of all of the above creates the modern Middle East.

**HIS 1287 Introduction to East Asia, 3 credits, GE 6**

This course provides a survey of the major political, social, and economic features of East Asia, with emphasis given to China, Japan, and Korea. Students examine the ideas and ideals that shaped modern East Asia, from Confucianism to Communism, as well as explore the current trends and future directions of this vast region.

**HIS 1290 History of Sullivan County, 3 credits**

Students learn the history of Sullivan County from its glacial formation through the Indian and early settlement period to the present. Some of the special subjects to be covered include: rafting, the tanning industry, the Delaware & Hudson (D&H) Canal, railroads, resorts, and current trends in Sullivan County.

**HIS 1907 History of World Religions, 3 credits, GE 6**

This course explores the development of the world's religious and wisdom traditions within the cultural and historical contexts from which they have emerged. It addresses their origins, institutions and ideas as well as examines how their values and world views have influenced contemporary life in various world cultures.

**HIS 2100 SpTp: The Cold War, 3 credits, GE 5, GE 6**

In this course students analyze the history of the Cold War from its beginnings at the end of World War II to the fall of Communism in Europe in 1989. This includes an in depth consideration of how our present world has been shaped by the post World War II international organizations, the rivalries and policies of the great powers in the context of emerging third world nations, and the seminal crises and events of the Cold War to include among others: the Korean War, the Suez Crises, the Vietnam War, the Cuban Missile Crisis, the Arms Race, the Space Race and Détante. PRE-REQUISITE: A Western Civilization course (HIS 1204, HIS 1205, HIS 1206), or a US History Course HIS 1227, HIS 1228, HIS 1229), or permission of the instructor

**HON 1010 Honors Forum I: Freshman Experience, 1 credit**

This class serves as an orientation to collegiate life and the Honors Program. Students work with Honors instructors and second-year Honors mentors to develop skills for academic success. This course is "pass/fail."

**HON 1020 Honors Forum II: Academic Research, 1 credit**

Students study forms of academic research in various disciplines. Each student chooses a research topic and develops an extensive annotated bibliography and research essay. This course is "pass/fail."

**HON 1901 Legacy of Western Society I, 3 credits, GE 5**

This course offers a broad survey of seminal works and ideas from Greek civilization up through the Middle Ages. Students focus on connections between these works and modern experience.

**HON 1902 Legacy of Western Society II, 3 credits, GE 5**

This course is a continuation of HON 1901 and surveys works from the Middle Ages up through contemporary times. Students focus on exploring ways these works have shaped modern consciousness.

**HON 2010 Honors Forum III: Service Learning, 1 credit**

Students mentor incoming freshman Honors students and participate in the development and completion of a service learning project. This course is "pass/fail."

**HON 2020 Honors Forum IV: Leadership, 1 credit**

Students select a topic of significance in contemporary society and develop a presentation on that topic that they

deliver in a public forum. This course serves as a discussion opportunity for students and as a forum for special projects and activities. This course is "pass/fail."

**HUM 1110 20<sup>th</sup>-Century Art, 3 credits, GE 7, GE 8**

Students study European and domestic art, architecture, decorative arts, photography, advertising art, and graphic design. The "Arts and Crafts Movement" through "Deconstruction" are required. Representative art projects are required.

**HUM 1200 Music Appreciation, 3 credits, GE 7, GE 8**

This is a general course to develop discriminating understanding and enjoyment of music through the study of its various elements, forms and styles.

**HUM 1204 Introduction to Jazz, 3 credits, GE 7, GE 8**

Students study jazz as an American art form, tracing its African and European beginnings to the present time, with emphasis on the contributions made to Jazz by Black Americans.

**HUM 1214 History of American Popular Music, 3 credits, GE 7**

Students analyze the development of popular music in America in the context of its role in popular culture and cultural studies. Musical styles from the early 20th century to the present may be covered.

**HUM 1300 Introduction to Philosophy, 3 credits, GE 7**

This course provides an introduction to the concepts and views of ancient and modern philosophies, and the basic problems of philosophy.

**HUM 1304 Ethics, 3 credits, GE 7**

This course is a study of various historical and contemporary value systems with emphasis on alternative criteria for making decisions in the contemporary conflict of moral values. It is designed to help students develop their own value system and basis for ethical decision.

**HUM 1307 SpTp: Food Ethics, 3 credits, GE 7**

Increasingly, food is becoming the central battlefield in the war between those committed to consumerism and economic growth at any cost and those advocating a more modest, organic, and localized lifestyle. Students explore the ethical implications of fast food, factory farming, globalization of the food supply, genetically-engineered food, food subsidies, regulation of slaughterhouses, community gardens, among other topics. In light of the impact of current food practices on animals, on people, on soil, and on water, students will consider whether our current system is environmentally sustainable and morally justifiable. Students also consider what actions that knowledge obliges us to take, if any.

Class activities will combine lecture (including guest lecturers), discussion, videos, and a field trip to the Woodstock Farm Animal Sanctuary. In addition, students will participate in the final harvest in SCCC's community garden.

**HUM 1310 Philosophical Foundations of Social and Behavioral Thinking, 3 credits, GE 7**

This course provides an examination of the philosophical thinking from which various contemporary theories of the "individual" and "society" arise.

**HUM 1320 Introduction to General Semantics, 3 credits, GE 7**

This course introduces the student to the study of words as language and symbol: how words persuade and control, transmit information, foster social cohesion and provide artistic expression.

**HUM 1500 Introduction to Broadcasting, 3 credits**

Through lecture, discussion and laboratory experience, students study the problems and practices of radio and television broadcasting, including basic technical aspects, staff organization, equipment and programming. Crosslisted as COM 1500.

**HUM 1702 Acting I, 3 credits, GE 8**

Students analyze method acting as a movement within the history of the modern theatre. Students demonstrate the techniques of method acting, especially those of Constantin Stanislavski, and apply these theories to the craft of acting. This application uses acting as a vehicle for learning self expression, focus, discipline, and confidence when performing for an audience. Students learn to overcome the fear of being in front of people by focusing on purpose rather than on one's self. These objectives are demonstrated by the acting student through pantomime, voice, improvisation, monologues and scene study.



**HUM 2125 Mass Media Criticism, 3 credits**

Students in this course develop a critical basis for judging the quality of mediated information. Emphasis is placed on judging both production values and content. The relationship between society and technology forms the background for understanding how media affects values, life choices, and perceptions of both individuals and groups. Crosslisted as COM 2125.

**HUM 2285 Introduction to Film, 3 credits, GE 7**

This course introduces students to aesthetic, formal, rhetorical, and social conventions of film. Students examine the multiple ways that cinema produces meaning and consider what distinguishes film from the other arts. Prerequisite: ENG 1001 Composition I

**HUM 2288 SpTp: American Popular Culture, 3 credits, GE 7**

In this course students study the wide variety of literary manifestations of American popular culture as reflections and symptoms of the concerns of modern American society. Prerequisite: ENG 1001 Composition I. Crosslisted as ENG 2288.

**HUM 2702 Acting II, 3 credits**

Acting II builds on the theories introduced in Acting I by enhancing knowledge of character development through techniques by one or more of the following acting influences: Constantin Stanislavski, Michael Chekhov, Uta Hagen and/or The Actor's Studio. Students analyze the use of acting techniques and theories developed by the aforementioned acting teachers and the development of modern acting in America. Students demonstrate an understanding of these techniques and theories through script analysis, audition practice, and performance production. Prerequisite: HUM 1702 Acting I

**IAS 1001 Freshman Seminar, 1 credit**

This course is designed for first time, full time students. It is designed to assist the student in making a successful transition to college life by focusing on the behaviors and study skills that lead to taking responsibility for one's own academic success. A computer component provides an introduction to word processing and e-mail. Orientation to services and activities on campus enhance the students' ability to access support services and participate in the social and cultural events that are part of the college experience.

**IAS 1004 Freshman Enhancement Seminar, 3 credits**

Freshman Enhancement Seminar is designed to assist students whose placement testing indicates a need for enhanced support and attention to achieve success in college. The course provides expanded workshops and coaching in study skills, test taking strategies, time management, interpersonal skills, information management, and wellness. Students in this course focus on developing and exhibiting the positive behaviors that contribute to personal and career success in college and in life. The course is required of all first semester students who test into two developmental courses. It satisfies the college requirement for Freshman Seminar.

Corequisites: DEN 1000 Basic English and DMA 0902 Basic Arithmetic

**IAS 2001 SpTp: Educational Leadership Seminar, 1 credit**

This is an elective leadership course in which students gain critical knowledge pertaining to effective leadership actions, analyze processes, and learn about student development theory and practice. To enroll in this course, students must receive a recommendation from their Freshman Seminar instructor and apply to the Coordinator for First Year Experience. Prerequisite: IAS 1001 Freshman Seminar

**MAT 0990 SpTp: Basic Arithmetic and Algebra - 3 credits**

This course is designed for students who need to improve their arithmetic skills primarily involving fractions, decimals, and percents. Students review these topics as well as estimation, problem solving, and interpretation of statistical data and graphs. Students concentrate on working with real numbers, solving linear equations and inequalities, graphing linear equations, working with polynomials and rational expressions, solving quadratic equations by factoring and the square root property, and applying algebraic techniques to solving situation problems. This course is open only to students with scores of 60 – 68% on the Math Competency Test (15 – 17), **or** 60 – 64 on the Elementary Algebra Accuplacer Exam, **or** 65 – 69 on the Arithmetic Accuplacer Exam. This course is not open to students who have earned credit for any other DMA or MAT course.

**MAT 1000 Basic Algebra, 3 credits**

This is a course in working with real numbers, solving linear equations and inequalities, graphing linear equations, working with polynomials and rational expressions, solving quadratic equations by factoring and the square root property, and applying algebraic techniques to solving situation problems. Students who take DMA 0902 must earn a C or better to register for MAT 1000 and/or to satisfy math competency. This course is not open to students who have passed MAT 0990, except with permission of the Math Program Facilitator.

**MAT 1001 College Mathematics I, 3 credits, GE 1**

This course is designed to familiarize students with some of the mathematics currently in use by the biological, physical and social sciences as well as business. Topics include a review and extension of elementary algebra, modeling, matrix algebra and graphing of linear equations and inequalities. This course is not open to students with credit for a higher level SCCC MAT course. This course forms a sequence with MAT 1003 or MAT 2501. Prerequisite: MAT 1000 Basic Algebra, or one year of NYS high school Regents level mathematics.

**MAT 1003 College Mathematics II, 3 credits**

Topics include logarithms, nonlinear models, statistics, probability and basic trigonometry. This course forms a sequence with MAT 1001. Prerequisite: MAT 1001 College Mathematics I

**MAT 1105 Elementary Math Logic & Set Theory, 3 credits, GE 1**

This is a course in discrete mathematics intended to teach the student basic skills in logic, set theory and proofs. These skills are necessary for students advancing in mathematics, GIS and science. Prerequisite: MAT 1001 College Mathematics I or MAT 1205 Intermediate Algebra and Trigonometry

**MAT 1205 Intermediate Algebra and Trigonometry, 4 credits, GE 1**

This course is designed for students who wish to pursue the further study of higher mathematics. Topics include functions and notations, polynomials, radicals, quadratic functions, exponential and logarithmic functions, trigonometry of right triangles, and Laws of Sine and Cosine. Prerequisite: MAT 1000 Basic Algebra, or one year of NYS high school Regents level mathematics

**MAT 1206 Precalculus, 4 credits, GE 1**

This course is intended to form a bridge between the static concepts of algebra and geometry and the dynamic concepts of the calculus. Topics include basic algebraic, trigonometric, exponential, and logarithmic functions; functional inverses; graphs; complex numbers; systems of equations; introductory matrix algebra; the binomial theorem; and proof by mathematical induction.

Prerequisite: MAT 1003 College Mathematics II, or MAT 1205 Intermediate Algebra and Trigonometry, or three years of NYS Regents level mathematics

**MAT 1210 Math for Elementary School Teachers, 3 credits, GE 1**

This course is designed for students intending to be elementary school teachers. The goal is to give the students theoretical understanding of the kinds of mathematics taught in the elementary grades. Content topics include basic operations with rational and real numbers, geometry, problem-solving, measurements, calculators, and computers. Prerequisite: MAT 1001 College Mathematics I with a grade of C or higher, or two years of NYS Regents level mathematics with an average of C or higher.

**MAT 1301 Analytical Geometry & Calculus I, 4 credits, GE 1**

Topics include geometry of the line, differentiation of algebraic and trigonometric functions, differentials, and indefinite and definite integrals. This course forms a sequence with MAT 1206, MAT 2301, or MAT 2501. Prerequisite: MAT 1206 Precalculus or four years of NYS high school Regents level mathematics.

**MAT 2203 Linear Algebra, 3 credits**

Linear algebra includes the study of geometrical vectors, matrices and simultaneous linear equations, vector spaces, linear transformations, determinants, and inner product spaces with particular emphasis on applications to the social, management and physical sciences. Prerequisite: MAT 1301 Analytical Geometry & Calculus I

**MAT 2301 Analytical Geometry & Calculus II, 4 credits, GE 1**

Topics include conic sections and their equations, differentiation and integration of logarithmic, exponential and hyperbolic functions, polar coordinates, infinite series, and techniques of integration. This course forms a sequence with MAT 1301. Prerequisite: MAT 1301 Analytical Geometry & Calculus I

**MAT 2302 Analytical Geometry & Calculus III, 4 credits, GE 1**

Topics include vectors, solid analytical geometry, partial derivatives, and multiple integrals. Prerequisite: MAT 2301 Analytical Geometry & Calculus II

**MAT 2401 Differential Equations, 4 credits**

Students learn about equations of the first order, higher order, and systems of linear first order, with applications. This course also includes initial value and boundary value problems and Laplace Transforms. Prerequisite: MAT 2302 Analytical Geometry & Calculus III

**MAT 2501 Elementary Statistics, 3 credits, GE 1**

Topics include probability, frequency distribution, mean and standard deviation, binomial distribution, testing hypothesis, samples from a finite population, regression and correlation. This course forms a sequence with MAT 1001, or MAT 1301. Prerequisite: MAT 1000 Basic Algebra or one year of NYS high school Regents level mathematics with a grade of "C" or better, or MAT 1001 College Mathematics I or two years of NYS high school Regents level mathematics

**MED 1110 Medical Terminology I, 3 credits**

In this course students learn the medical vocabulary used in the health care professions. This course focuses on the root words, prefixes, and suffixes commonly used in medical terminology. Other topics include the vocabulary associated with health and disease and the following anatomical systems: skeletal, muscular, cardiovascular, lymphatic, respiratory and digestive systems.

**MED 1501 Health Care Law and Ethics, 3 credits**

This is an introductory course in the legal and ethical aspects of healthcare, standard ethical and legal principles, and their application to various issues that arise in the healthcare context, such as duty to treat, confidentiality and privacy, withholding and withdrawing treatment, euthanasia, and informed and uninformed consent.

**MED 2104 Basic Pharmacology, 3 credits**

In this course students learn about drugs and their origin, nature, properties, and effects on living organisms used in health care and their classifications, characteristics, purposes, side effects, cautions, and interactions. Students also learn administrative procedures related to the dissemination of drugs. Prerequisite: SCI 2124 Human Anatomy & Physiology I

**MED 2105 Basic Phlebotomy and EKG for Medical Assistants, 3 credits**

This course provides an introduction to the basic concepts of phlebotomy and electrocardiography by outlining the role of the Medical Assistant in the physician's office. Students will acquire a comprehensive knowledge of the theory, principles and practice of phlebotomy, including selection and use of instrumentation, asepsis and safety issues, laboratory information and systems, legal issues, diagnostic tests and proper labeling, documentation and transport of specimens. Students will also be introduced to the concepts of electrocardiography, including an understanding of cardiac electrophysiology and electrode placement and lead systems; both rhythm strip and 12-lead EKG interpretation will be emphasized.

Students will work with phlebotomy practice arms and traditional, as well as PC-based interpretative EKG equipment in a classroom setting only. Prerequisite: SCI 2124 Human Anatomy & Physiology I

**MED 2120 Medical Terminology II, 3 credits**

This course is a continuation of the study of the medical vocabulary used in the health care professions. This course focuses on the vocabulary associated with the following anatomical systems: urinary, nervous, integumentary, endocrine, respiratory, and reproductive systems; the eyes and ears; diagnostic procedures; and pharmacology. Prerequisite: MED 1110 Medical Terminology I

**MED 2210 Medical Assisting I, 4 credits**

Students learn the basic administrative procedures of medical assisting in the physician's office. Topics include the use and management of medical office procedures, records, and equipment; related patient care; and professional ethics. Prerequisite: MED 2120 Medical Terminology II or consent of instructor.

**MED 2211 Medical Assisting I Lab, 2 lab hours**

Students practice the application of basic administrative procedures for assisting in the physician's office. Skills include the use and management of medical office procedures, records, and equipment. Corequisite: MED 2210 Medical Assisting I

**MED 2220 Medical Assisting II, 4 credits**

This course introduces the clinical skills required for assisting in a medical office. Students will learn to identify and assist in use of surgical instruments and procedures including lab tests, asepsis, specimen collection, physical exams, and emergency procedures. Prerequisite: MED 2120 Medical Terminology II

**MED 2221 Medical Assisting II Lab, 2 lab hours**

Lab activities will include application of clinical skills required for assisting in a medical office. These skills include identification and use of surgical instruments and procedures such as lab tests, asepsis, specimen collection, physical exams, and emergency procedures. Corequisite: MED 2220 Medical Assisting II

**MED 2250 Medical Assistant Externship, 3 credits**

This course provides the student with first-hand experience in the medical setting, and requires application of the skills learned in the Medical Assistant program. Students will complete 135 hours of unpaid time performing administrative and clinical duties in a physician's office, clinic, or hospital. Supervision and evaluation will be conducted by the office staff, and monitored by the instructor. Prerequisites: MED 2210 Medical Assisting I, MED 1501 Health Care Law and Ethics, and SCI 2124 Human Anatomy & Physiology I.

### **MHA 1502 Introduction to Creative Arts Therapy, 3 credits**

This course is an overview of how to use the creative arts as therapeutic tools to supplement verbal counseling with persons with developmental and other disabilities. This course explores the use of music, art, movement, and drama as therapeutic vehicles through a lecture and experiential format.

### **MHA 1510 Introduction to Human Services, 3 credits**

The student is exposed to the parameters and historical framework of human services, discussion of the roles of client and worker, social problems of concern within the field, and problem-solving methods, including the professionalization of the human service worker with special emphasis on exploration and values. Students must earn a grade of "C" or better to progress to MHA 1930, Human Skills Exploration.

### **MHA 1512 Psychodrama and Drama Therapy, 3 credits**

Students learn how therapists use drama and theater to achieve therapeutic goals. Students explore how clients tell their stories, discover inner conflicts and issues, set goals, and learn how to solve problems, express feelings, and role play. Students use such methods as puppet play, masks, sand play and storytelling.

### **MHA 1513 Introduction to Expressive Arts Therapy, 3 credits**

Students are exposed to the therapeutic uses and techniques of expressive arts such as dance, drama, psychodrama, music and visual arts. Students learn about the history and theory of expressive arts with an eye to their uses in therapy, along with the scientific basis for the use of expressive arts as therapy.

### **MHA 1514 Basic Report Writing, 1 credit**

This course is designed to increase the professional report-writing skills of students in Human Services and Direct Support. Students will develop familiarity with and skill in completing forms, records, and documents typically employed in these professions.

### **MHA 1515 Report Writing in Direct Support, 3 credits**

This course is designed to increase the writing ability of human service and direct support professionals, and focuses on various forms, reports and documents typically faced by direct support professionals. Students learn techniques for transferring observed behavior and other information into written communication to be shared with other professionals.

### **MHA 1930 Human Services Skills Exploration, 3 credits**

Students explore human experiences through values theory and communications theory in order to learn initial social-work skills required to provide direct services. The specific content of the course includes evaluations from an experiential stance applied to social, developmental, perceptual and clinical phenomena. Prerequisite: MHA 1510 with a grade of "C" or better.

### **MHA 2110 Professional Ethics in Human Services, 3 credits**

Students focus on ethics in the field of human services. Students explore the historical evolution of ethics as ethics relate to current values, ideas and standards of the profession. Issues addressed include legal issues, confidentiality, assessment of personal values and their potential impact, professional responsibilities, and competencies. Codes of ethics for various human service professionals are examined and discussed, with an emphasis on codes relative to the MR/DD population.

### **MHA 2502 Introduction to Counseling, 3 credits**

This course provides an introduction to clinical interviewing and counseling. Students practice the essential dimensions of interviewing and are exposed to theoretical, practical and ethical issues of counseling. This course includes the development of observational skills and the exploration of determinants that influence the interview and increase the characteristics of empathy, genuineness, and non-possessive warmth. The twelve core functions of a counselor are addressed. The course also focuses on substance abuse. Prerequisite: PSY 1500 General Psychology

### **MHA 2511 Introduction to Developmental Disabilities, 3 credits**

This course examines the etiology, prevention, intervention, and treatment for the major disabilities of learning and development. Disabilities are examined within the framework of current educational, psychological, and social

service practices. Research related effectiveness of service practices and specific rehabilitation practices will be discussed. Prerequisite: PSY 1500 General Psychology

### **MHA 2512 Human Behavior in Social Environments, 3 credits**

Students examine human development as a basis for social work practice. Human problems are viewed within their environmental context: individuals, families, organizations, and communities, as well as larger social and historical forces which are interactively transformative. Assessments of human problems and intervention strategies are examined in view of this reciprocal impact across environmental systems. Theories related to biological, psychological, spiritual, and cultural processes across the lifespan are studied as expressed through ethnicity, class, cohort, gender, race, sexual orientation, religion, and other differences. Particular attention is given to factors that contribute to persons being at risk. Prerequisite: PSY 1500 General Psychology

### **MHA 2906 Practicum in Direct Support, 5 credits**

This course covers an integrated application of the person-centered approach for support staff working with persons who have developmental and other disabilities. Practice and lectures cover working with clients, family members, and institutions in planning contributions to support the abilities and potential of clients. Course requirements include three contact hours of lecture per week and the completion of 50 hours in supervised practicum experience within the semester. Prerequisites: MHA 1510 Introduction to Human Services and MHA 2511 Introduction to Developmental Disabilities.

### **MUS 1101 Guitar Class I, 2 credits**

This course is designed for students with little or no previous background and permits students to gain the skills necessary for future study of the guitar. The course emphasizes reading music, chords, technique, and performance skills. Students explore a variety of musical styles and cover various aspects of performing on their instrument. To register for this course, a student must have access to a guitar.

### **MUS 1102 Guitar Class II, 2 credits**

This course is designed for students to augment their technical and artistic skills so they can become more proficient musicians. The course emphasizes more advanced reading music, chord technique, and performance skills. We also consider arpeggios, improvisation, modes, ensemble skills, and guitar solos. Students explore a variety of musical styles and cover aspects of performing. To register for this course, a student must have access to a guitar. Prerequisite: MUS 1101 Guitar Class I or permission of instructor.

### **MUS 1103 SpTp: Jazz Ensemble, 2 credits**

This course teaches students to develop ensemble skills. This ensemble emphasizes improvisation, the role of each instrument, and the development of musical interaction. Prerequisite: NYSSMA Level 4 (New York State Music Association) Recommendation from high school band director. Must have one of the following instruments: saxophone, trumpet, trombone, keyboard, electric or acoustic bass, drums or guitar.

### **MUS 1201 SpTp: Vocal Music, 2 credits**

This course is an introductory, non auditioned class covering basic singing technique, music reading, and part independence in a variety of musical styles. The course stresses rehearsal and performance skills and techniques of singing to help students develop musical and vocal skills.

### **NUR 1001 Fundamentals of Nursing, 8 credits**

This course provides the student with content basic to nursing practice. The nursing process is presented as the foundation for nursing practice. The first part of the course emphasizes the assessment phase of the nursing process using the functional health pattern format. The later part of the course focuses on the remaining steps of the nursing process and established protocols directed primarily toward the aged in the chronic care setting. Concepts of growth and development as it relates to the nursing process are presented with emphasis on the older adult. The role of the associate degree nurse, as a provider of care and as a member within the discipline of nursing, are also introduced. Basic nursing skills are taught in the campus laboratory. Clinical laboratory experience is provided in long-term health care agencies. Corequisites: PSY 1500 General Psychology and SCI 2124 Human Anatomy & Physiology I

### **NUR 1010 Commonalities in Nursing Care, 8 credits**

This provides the student with content needed to assess the individual's and family's ability to adapt to the stressors of surgery, childbearing and parenting. The nursing process provides the framework for nursing care of the client and family. The concepts of the teaching/learning process are presented to provide the student with a more comprehensive view of the nursing process and the ability to better promote adaptation by the individual and family. The role of the associate degree nurse as a provider of care is discussed as client-centered and is reflected through a collaborative approach involving the client, the family, significant others, and members of the health care

team. Teaching needs of these groups are addressed. Students must have earned a grade of "C" or better in NUR 1001. Prerequisites: NUR 1001 Fundamentals of Nursing, PSY 1500 General Psychology, and SCI 2124 Human Anatomy & Physiology I. Corequisites: PSY 2510 Developmental Psychology, and SCI 2126 Human Anatomy & Physiology II

#### **NUR 1015 Clinical Calculations, 1 credit**

This course introduces the calculation methods used for safe administration of oral medications in the healthcare setting using dimensional analysis, a review of basic math skills, and abbreviations and terms used for drug preparations and administration. Corequisite: NUR 1001 Fundamentals of Nursing

#### **NUR 2020 Health Problems Throughout the Life Cycle I, 8 credits**

This course provides the student with content needed to assess the individual for health illness alterations throughout the life cycle. The concept of nurse as teacher is further developed. The nursing process provides the framework for practice and the ability to promote client's adaptation within a therapeutic environment. The role of the associate degree nurse, as a provider of care and member within the discipline of nursing, is further developed. Students must have earned a grade of "C" or better in NUR 1010. Prerequisites: NUR 1010 Commonalities in Nursing Care, PSY 2510 Developmental Psychology, and SCI 2126 Human Anatomy & Physiology II; Corequisites: SOC 1600 Introduction to Sociology, and SCI 1122 Microbiology

#### **NUR 2022 Health Problems I Seminar, 1 credit**

This course assists the student with understanding concepts related to Health Problems. Case students and computer assisted instructional activities are used to enhance the students understanding of the unit and course objectives of NUR.

#### **NUR 2030 Health Problems Throughout the Life Cycle II, 8 credits**

This course provides the student with content needed to assess the individual for health illness alterations throughout the life cycle. The nursing process provides the framework for identifying stressors and promotion of adaptation within the therapeutic environment. The three interrelated roles of the associate degree nurse as provider of care, manager of care and teacher manager within the discipline of nursing are further developed. Emphasis is placed on the role of manager, utilizing the nursing process to establish priorities of care for a group of clients. Students must have earned a grade of "C" or better in NUR 2020. **NOTE:** A grade of "C" or better in NUR 2030 is required to graduate with an AAS degree in nursing and for certification to take the National Council Licensure Examination (NCLEX) for Registered Professional Nurse (RN). Prerequisites: NUR 2020 Health Problems I Seminar, SOC 1600 Introduction to Sociology, and SCI 1122 Microbiology; Corequisite: NUR 2100 Nursing Issues and Trends

#### **NUR 2032 Health Problems II Seminar, 1 credit**

This course assists the student with understanding concepts related to Health Problems II. Case students and computer assisted instructional activities are used to enhance the students understanding of the unit and course objectives of NUR.

#### **NUR 2035 Advanced Clinical Calculations, 1 credit**

This course prepares students to safely perform the preparation and administration of medications in complex and diverse clinical situations. Students learn administration of nonparenteral medications and advanced IV administration. In addition to gaining broader knowledge of dimensional analysis and medication administration, students review examples that include pharmacology and math. To assist them in learning pharmacology, students will also research medications used in clinical calculations. Prerequisites: NUR 1001 Fundamentals of Nursing, and NUR 1015 Clinical Calculations; Corequisite: NUR 1010 Commonalities in Nursing Care

#### **NUR 2045 Clinical Calculation & Pharmacology, 1 credit**

This course is designed to supplement the knowledge of medication administration gained in NUR 1015 & NUR 2035. The student will learn to administer more complex medications, specifically intravenous medications that are titrated to maintain blood pressure, heart rate and other specific parameters. Pharmacology as well as math will be covered in this course. The students will research all medications used in any clinical calculation questions they are asked to perform. The medications learned will follow the units covered in NUR 2020. Corequisite: NUR 2020 Health Problems Throughout the Life Cycle I. Prerequisites: NUR 2035 Advanced Clinical Calculations, or permission of instructor

#### **NUR 2100 Nursing Issues and Trends, 2 credits**

The role of the technical nurse in beginning staff positions is discussed along with the historical, cultural and socioeconomic forces which influence nursing practice. Employment opportunities, transition from student to graduate nurse, and legal, ethical and contemporary health care issues are explored. Prerequisite: NUR 2020

Health Problems I Seminar; Corequisite: NUR 2030 Health Problems Throughout the Life Cycle II

**PED 1006 SpTp: Pilates, 1 credit**

Students learn the basic terms and movements of Pilates through studio and classroom experiences. Pilates strengthens muscles, improves posture and balance, provides flexibility, and focuses on training the mind and body to work together toward the goal of overall health/fitness.

**PED 1010 Bowling, 1 credit**

This is an introductory course involving basic skills, scoring, bowling etiquette and actual lane experience.

**PED 1022 Golf, 1 credit**

This is an introductory course. Students are introduced to basic skills, club selection, rules, etiquette, and scoring. Once the student learns these basic skills, the bulk of the material is presented on the golf course under actual playing conditions.

**PED 1052 Tai Chi Chuan I, 1 credit**

T'ai Chi Ch'uan is an ancient (800 year old) Chinese system of exercise for health, relaxation, and self-defense. Students are introduced to all of the aspects of this Art. This balanced system, with dual aspects of mental and physical components, is based on principles of physics and human physiology. The system is composed of 37 postures which are connected together by smooth transitions. This results in a series of fluid, rounded movements which are then referred to as the Form. T'ai Chi training is also known as an "internal system" because of its beneficial effects upon the Central and Autonomic Nervous Systems and the Skeletal and Muscular Systems.

**PED 1103 Fundamentals of the Golf Swing, 2 credits**

This course is designed to give students the basic skills needed to improve their own game, the laws, principles and preferences in the golf swing, full swing basics, short game basics, physical conditioning, and the mental side of the game. Crosslisted as GMP 1103.

**PED 1105 Aerobic Dance, 1 credit**

This is an introductory course combining dance and aerobic fitness. The techniques taught are those necessary to combine dancing and exercise for fun, while garnering increased fitness, flexibility, and coordination.

**PED 1115 Fitness I, 1 credit**

This is an introductory exercise course involving concepts of physical fitness, principles of muscular and aerobic conditioning, a cursory knowledge of anatomy, and of factors which affect performance, such as stress, tension and relaxation.

**PED 1126 Hiking, 1 credit**

This is a course concerning basic techniques of hiking, map and compass reading. Further cursory knowledge concerning the geography of the area and indigenous plants and animals are presented.

**PED 1150 Beginning Weight Training, 1 credit**

This is an introductory course to physical fitness designed to give students practice in planning and executing a program of exercise to fit their individual capacity and needs. Emphasis is placed on weight lifting, use of weight machines, and cardiovascular activities.

**PED 1204 Badminton, 1 credit**

This is an introductory course involving skills, skill analysis, strategies, rules, and etiquette involved in the sport of badminton. Singles and doubles games are played with a focus on strategy.

**PED 1240 Tennis I, 1 credit**

A course designed to introduce to novices the basic skills, rules, playing strategy, and etiquette involved in the sport of tennis. Singles and doubles are played.

**PED 1253 Racquetball, 1 credit**

This is an introductory course developing basic skills, rules, playing strategy and etiquette involved in the game of racquetball. Emphasis is on doubles.

**PED 1306 Basketball, 1 credit**

This course concerns the basic concepts and skills of the sport as delineated by the National Junior College Athletic Association: Men's Division.

**PED 1334 Softball, 1 credit**

This is course concerning the skills necessary to the game of softball and the rules and strategy.

**PED 1342 Volleyball, 1 credit**

This course is designed to provide the novice player with basic information concerning the skills and game rules and strategies.

**PED 1350 Soccer, 1 credit**

Women's soccer is an introductory course involving basic soccer concepts, strategies, and women's rules (NAGWS). The soccer skills of dribbling, ball control, heading, shooting, tackling, and passing are introduced and practiced. Principles of attack and defense are examined and drilled.

**PED 1435 Basic Swimming, 1 credit**

A course designed for non-swimmers, beginners, and intermediates: water safety and swimming skills combine for aquatic ability and enjoyment.

**PED 1500 SpTp: Alternative Sports, 1 credit**

This is a survey course in which students will be introduced to a variety of alternative team sports. Students will develop cursory knowledge in rules of the game, skills of the game, history of the sport and all other pertinent criteria. Sports will be selected by the instructor and may include Frisbee, Frisbee Golf, Floor Hockey or others not currently offered as Phys Ed courses.

**PED 1502 Walking, 1 credit**

This is an introductory exercise course involving the concept of walking and the importance of it in an individual's daily routine. A typical week consists of a ten minute discussion on a relevant walking topic such as cardiovascular health, frequency, intensity, and type of walking, followed by application of the knowledge. Venues include wooded and open trails around campus and an indoor track.

**PED 1601 Physical Fitness & Wellness, 2 credits**

This is a course based on learning and practicing personal responsibility for one's own physical fitness and wellness. Students are guided and motivated to make positive behavior decisions related to cardiovascular exercise, weight control, and stress management. Emphasis is on reducing or eliminating high risk lifestyle behaviors such as smoking, stress, obesity, negative nutrition, and alcohol and drug abuse. Crosslisted as REL 1601.

**PED 1610 Selected Lifetime Sports, 2 credits**

This is a survey course in which students are introduced to a variety of individual sports selected based on their applicability within a lifelong fitness regimen. Activities in this course include bowling, tennis, golf, and racquetball.

**PED 1812 Project Adventure, 1 credit**

This is an introductory physical education course which involves innovative warm-up and conditioning exercises, exotic games, group cooperation, personal and group initiative problems and basic skills. Spotting and trusting activities are used throughout "Project Adventure." Outcomes are: an increase in the participant's sense of personal confidence, increased joy in one's physical self in being with others, increased familiarity and identification with the natural world.

**PED 1830 SpTp: Performing Dance, 2 credits, GE 8**

Students in this course are exposed to dance, the most fundamental of the arts, and to its relationship to therapy. Dance involves direct expression through the body and can be used as an intimate and powerful medium for therapy. Based on the assumption that body and mind are interrelated, students explore the psychotherapeutic use of movement as a process that furthers the emotional, cognitive, and physical integration of the individual.

**PED 2042 Hatha Yoga, 1 credit**

This course is the study of the philosophy and practice of yoga with the development of flexibility, strength, and balance through the postures (asanas) and deep breathing. Included are relaxation techniques and the application of yoga to other physical disciplines for managing stress and enhancing overall body/mind health and well-being. This is a physically challenging course and may not be suitable for students with certain limitations, such as heart conditions, shunts, severely impaired knees, hips, or shoulders. There is no requirement for previous yoga experience; however, there will be a physical screening to participate.

**PED 2115, Fitness II, 1 credit**

Students learn to analyze anatomy and the factors that affect performance, i.e. stress, tension and relaxation, to diagnose fitness levels and design personal fitness programs. In addition, students learn to organize dietary



programs promoting weight control, disease prevention, and overall wellness.

**PHO 1405 Photography I, 3 credits, GE 8**

This course provides a "hands-on" approach to the use of light, film, and paper to make photographs. The processes of developing negatives, printing, and enlarging in black and white are explored through the 35mm format.

**PHO 1406 Digital Photo I, 3 credits**

Students practice a "hands-on" approach to the use of light, digital media and equipment to make photographs. The software environment and workflow are explored and utilized to produce end products as prints, web, and print publication. Prerequisite: none.

**PHO 2406 Digital Photo II, 3 credits**

Students study advanced digital photography with an emphasis on craftsmanship, creativity, and visual communication. The use of special effects, controlled lighting, and theory are included for a better understanding of photographic problem-solving. The course also includes advanced shooting and processing techniques. Web assets and resources are explored and utilized. Prerequisite: PHO 1406 Digital Photo I

**PLA 1104 Legal Research, 3 credits**

Students are introduced to the various sources of law and are guided through legal research using primary and secondary sources of law: statutes, case reports, digests, encyclopedias and citators. Students practice accessing, analyzing and citing legal sources. Students must have earned a grade of "C" or better in POL 1350 American Law. Prerequisite: POL 1350 Introduction to American Law

**PLA 2201 Civil Litigation, 3 credits**

This course deals with the various stages of civil litigation, from commencement of an action to appeal. Students learn how to prepare documents used in civil litigation, to maintain litigation files, and to otherwise assist lawyers in the trial and appeal of civil cases.

Prerequisites: ENG 1001 Composition I and CRJ 1320 Criminal Law & Procedure

**PLA 2301 Domestic Relations, 3 credits**

This course is designed to acquaint the student with the legal procedures and processes in the sections of the law addressing marriage and divorce, separation and support, children, property and equitable distribution, family court, domestic violence, and other areas of increasing legal concern.

**PLA 2310 Legal Writing, 4 credits**

Legal writing is a 4-hour, writing-intensive course in which students learn the basic elements of legal prose. They gain further experience in legal research which is then applied to preparing basic legal documents in a variety of substantive areas of the law: letters, pleadings, motions, case briefs, trial and appellate briefs, and internal and external memoranda of law. Students must have earned a grade of "B" or higher in ENG 1001, and a grade of "C" or better in POL 1350. Prerequisites: ENG 1001 Composition I, ENG 2005 Composition II, PLA 1104 Legal Research, and POL 1350 Introduction to American Law

**PLA 2901 Paralegal Fieldwork & Seminar, 5 credits**

This course is a supervised field experience for the student in a law-related agency. Students spend 120 hours for the semester as a supervised paralegal intern in a legal setting and participate in a two-hour weekly seminar on campus. Seminar session topics are shared by all paralegal interns: legal rules, ethical guidelines, law office skills, professional development, and organizational and communication skills necessary for successful paralegal employment. Students must have earned a grade of "C" or better in PLA 1104 and in PLA 2310. Prerequisites: PLA 1104 Legal Research, and PLA 2310 Legal Writing

**POL 1301 Introduction to Political Science, 3 credits, GE 3**

This course is devoted to a study of political ideals, practices and institutions. It includes analysis of major political issues and principles, democratic and totalitarian ideologies and processes, and political behavior. Implications for American government and politics are considered throughout the course.

**POL 1322 Constitutional Law, 3 credits, GE 3**

This course is an examination of the historical development of the relationship of the states to the Bill of Rights. Also examined are the due process clause of the Fourteenth Amendment and the scope and limits on criminal justice agencies.

**POL 1341 American Government, 3 credits, GE 3**

Students develop an understanding of how the American political system works. The primary focus is on the structures, functions, and manipulations of the national government.

**POL 1350 Introduction to American Law, 3 credits**

This course provides a survey of the American legal system. Students examine the structure of the system and the roles of participants, including legislators, judges, attorneys, and paralegals. Students are introduced to the sources of law and such substantive areas of law as contracts, torts, crimes, and property.

**PSY 1500 General Psychology, 3 credits, GE 3**

This course serves as a general introduction to the scientific study of psychology. General principles of human behavior and mental processes, as revealed through various psychological scientific methods of inquiry, are explored. This basic introduction to psychological research allows students to critically evaluate the topics found within the broad discipline of psychology. Topics in this introductory survey include biological foundations of behavior, sensation and perception, learning, motivation, cognition, human development, abnormal behavior, personality theory, and social and health issues as studied by psychologists.

**PSY 1504 Sport Psychology, 3 credits, GE 3**

This course is an introduction to the field of sport and exercise with an emphasis on basic research methods and theories in the parent discipline of psychology upon which sport specific theories are based. Students learn about implications of theory for recreational athletes, elite athletes, team dynamics, fans, and coaches. Topics of inquiry include the scientific method, motivation, arousal, competition, team dynamics, leadership, communication, imagery, goal setting, self-confidence, concentration, intervention, exercise and well-being, and psychological growth and development.

**PSY 1506 SpTp: The Great Psychologists: Freud, 3 credits**

*The Great Psychologists* is a history of psychology course that introduces students to the lives, times, and ideas of individuals who have made significant and long-standing contributions to the field of psychology. Using both original writings and evaluative texts, students critically explore the works of a selected individual (e.g., William James, Sigmund Freud, Carl Rogers, among others) who has influenced the field of psychology. This course addresses the psychologist's ideas, and the social, economic, political, and institutional contexts in which this individual lived to examine how and why his or her ideas have had a lasting impact on psychology.

**PSY 2407 Learning, 3 credits**

Students learn principles of operant and classical conditioning and applications of these principles in order to help students change behavior in themselves and others. In addition, cognitive-behavioral approaches to emotional and behavioral change in both normal and abnormal behaviors are addressed. Prerequisite: PSY 1500 General Psychology.

**PSY 2501 Social Psychology, 3 credits**

Social Psychology is the scientific study of how we influence and are influenced by our social environment, which consists of individuals, groups, organizations, and culture. Students acquire an understanding of classic and contemporary work in this field, and explore such topics as aggression, attitude formation and change, social thinking, interpersonal conflict and cooperation, prejudice, friendships and romantic relationships, leadership, social influence, altruism, and conformity. Course topics may also include applications of social psychology to the legal system, health-related behavior, and environmental sustainability. Pre-requisite: PSY 1500 General Psychology

**PSY 2502 Child Psychology, 3 credits**

This course includes study of the mental, emotional and social development of the child through adolescence. The course stresses new modes of understanding and communication between adult and child, and explores gender differences in children's social interactions and approach to the world. Prerequisite: PSY 1500 General Psychology

**PSY 2503 Adolescent Psychology, 3 credits**

Adolescent Psychology focuses on theories concerning the social, cognitive, and biological development of adolescents. This course follows the development of youth from pre-adolescence to late adolescence through young adulthood. The influence of heredity, family, culture, school, and peers will be considered as contexts within which adolescents develop. Prerequisite: PSY 1500 General Psychology

**PSY 2504 Personality Psychology, 3 credits**

This course provides an examination of major perspectives in personality psychology, including psychodynamic, phenomenological, biological and trait, behavioral, social-cognitive, and interpersonal-sociocultural. Each perspective includes a review of the structure, processes, and development of personality, the methods of inquiry and evidence used in that perspective, and a critical analysis of that perspective. Pre-requisite: PSY 1500 General

Psychology.

**PSY 2506 Abnormal Psychology, 3 credits**

This course emphasizes the scientific inquiry into abnormal psychology while stressing both the depth of human suffering and the social costs associated with this subject. Abnormal psychological conditions are explored through a combination of biological, surface-level and depth-level theoretical perspectives on important facets of the field of abnormal psychology. Issues of assessment, labeling, and how to intervene into the problems associated with abnormal psychological conditions are explored from the same biological, surface and depth perspectives on abnormal functioning and ways of living. Prerequisite: PSY 1500 General Psychology

**PSY 2508 Child Development and Guidance, 3 credits**

This course presents the foundations of guidance, including history of the approach and theoretical considerations that empower the paradigm shift from conventional discipline to guidance. Using a stage approach, students examine the social-emotional and intellectual development of the child from birth through elementary school age. Emphasis is placed on the importance of having a three-way partnership between teachers, children, and family members in the guidance process. Students examine the dynamics of building an encouraging classroom in which all children are accepted as worthwhile, contributing members and learn intervention methods which empower the teacher to respond to conflicts in ways that teach rather than punish. Prerequisite: PSY 1500 General Psychology.

**PSY 2510 Developmental Psychology, 3 credits**

This course explores the scientific inquiry into normal human development, including mental processes and behaviors from conception through the end of life. A life span developmental psychologist's perspective guides this exploration of issues including the physical, cognitive, emotional, behavioral, and social aspects of human development. Prerequisite: PSY 1500 General Psychology

**PSY 2511 Psychology of Adjustment, 3 credits**

This course focuses on healthy, desirable and effective human behaviors. Students are introduced to the study of adjustment through discussion of science, a description of the area of adjustment, and introduction to critical evaluation and a summary of major psychobiological theories. This course further covers individual behaviors, including topics on self-control, stress and emotional reactions; self-image, self-deception, and life-span development. Lastly, the class explores adjustment in areas of marriage, sex, interpersonal relationships, and society as a whole. Prerequisite: PSY 1500 General Psychology

**PSY 2512 Forensic Psychology, 3 credits**

This course considers the application of psychology to law and the legal system. It focuses on uses of psychology in civil commitment proceedings and various aspects of the criminal justice system. Applications of psychology to law enforcement, to the courts and to corrections are discussed. Subjects covered include topics such as determining criminal responsibility, employment testing, jury selection and decision making, witness credibility and competency, crime-related issues, family law issues, explaining criminal behavior, and correctional psychology. Prerequisite: PSY 1500 General Psychology

**PSY 2513 SpTp: Gender Psychology, 3 credits**

This course explores current issues and research findings concerning the psychology of gender. Students will learn about competing theoretical models of gender differences and review empirical findings that support or fail to support common beliefs about gender. Special issues pertinent to gender, such as parenting, work, sexual orientation, violence, and culture are also explored. Pre-requisite: PSY 1500 General Psychology.

**PSY 2514 SpTp: Physiological Psychology, 3 credits**

Studies in physiological psychology explore the intersection of mind and matter in human experience, leading alternatively to reductionist interpretations of mind as matter and suggestions of mind as quantum consciousness. This course is grounded in a study of the biological (especially neurological) concomitants of behavior but also pursues philosophical questions related to transduction, the transformation of physical energy into self-awareness, thoughts, feelings, and behaviors. Prerequisite: PSY 1500 General Psychology

**PSY 2516 SpTp: Cane & Able: Culture and Disability), 3 credits, GE 7**

Historically, people with disabilities have been killed, isolated, and exempted from citizenship by the allegedly able-bodied. To better understand disability's pervasive role in our knowledge, values, and perceptions of others, students take a multi-media and interdisciplinary approach to examining disability in its multiple forms—the visible and invisible, physical and cognitive, psychological and social. Prerequisites: PSY 1500 General Psychology; ENG 1001 Composition I. Crosslisted as ENG 2516.

**PSY 2521 SpTp: Death & Dying: Psych Perspective, 3 credits**

This course represents an interdisciplinary approach to the study of death and dying encompassing perspectives from anthropology, mythology, religion, medicine, law, sociology, ethics, philosophy, and psychology. Topics include definitions of death, cross-cultural and anthropological beliefs about death, euthanasia, suicide, reincarnation, medical and moral obligations surrounding death, and the impact of media on the American culture of death-denial and death-avoidance. Prerequisite: PSY 1500 General Psychology

**PSY 2522 SpTp: Ecopsychology, 3 credits**

Ecopsychology integrates principles from psychology and ecology to study relationships between mental health and the environment. This course explores the study of ecopsychology from multiple perspectives of psychological and environmental theory. Prerequisite: PSY 1500 General Psychology

**PSY 2707 Introduction to Research Methods, 3 credits**

Students learn the basic concepts and procedures used to conduct and evaluate research in the social sciences. Emphasis is placed on traditional research methods, use of quantitative data analysis, applying sound experimental design in order to produce interpretable results, and evaluating scientific claims. Pre-requisites: PSY 1500 General Psychology and MAT 2501 Elementary Statistics.

**REL 1003 PE, Sport, Recreation & Leisure, 3 credits**

This course is designed to introduce the field of physical education, sport, recreation, and leisure studies. Lectures, seminars, and observations focus on philosophical, historical, and current issues and practices. This course also provides laboratory experiences during which students explore career options in the field.

**REL 1014 Summer Camp Leadership, 2 credits**

This course prepares students in the field of summer camp counseling by presenting the philosophy, objectives, and problems in the field. Students have opportunities to acquire skills and leadership essential in camp life.

**REL 1016 Motor Learning, 3 credits**

This survey course highlights selected motor learning theorists, basic principles surrounding sensory and motor systems, motor control, and other conditions influencing motor skill acquisition in physical education and athletics.

**REL 1501 Standard First Aid, 2 credits**

This course consists of the American Red Cross programs in Standard First Aid and Community CPR (Cardiopulmonary Resuscitation). Topics covered include: respiratory emergencies, emergency action principles, diagnostic and vital signs, bleeding control, shock, poisoning, burns, fractures, and the related skills and techniques to administer first aid care in many common accidents and sudden illness situations. This course may lead to American Red Cross certification in Standard First Aid and Community CPR.

**REL 1505 Philosophy of Sport, 3 credits**

This course covers the basic philosophy, principles, and organization of athletics as integral parts of physical education and general education; state, local and national regulations and policies related to athletics; legal considerations; function and organization of leagues and athletic associations in New York State; personal standards for the responsibilities of the coach as an educational leader; public relations; general safety procedures, general principles of school budgets, records, purchasing and use of facilities. This course is required of all non-physical education certified teachers who coach athletic teams at any level in New York State schools.

**REL 1507 Health Sciences Applied to Coaching, 3 credits**

This course covers selected principles of biology, anatomy, physiology, kinesiology, psychology, and sociology related to coaching, human growth and development, training and conditioning of athletes.

**REL 1509 Theory and Techniques of Coaching, 3 credits**

The introductory classroom phase of this course covers the basic concepts common to all sports. A history of interschool athletics in New York State, objectives, rules, regulations and policies; teaching methods, performance skills; technical information (offense, defense, strategy, etc.); organization and management of practices; special training and conditioning of athletes in the specific sport; care and fitting of equipment; special safety precautions; and officiating methods are included. This course may include an internship in the specific sport under the supervision of a master coach or director of physical education as a substantial portion of the course hours.

**REL 1601 Physical Fitness & Wellness, 2 credits**

This course is based on learning and practicing personal responsibility for one's own physical fitness and wellness. Students are guided and motivated to make positive behavior decisions related to cardiovascular exercise, weight control, and stress management. Emphasis is on reducing or eliminating high risk lifestyle behaviors such as smoking, stress, obesity, negative nutrition, and alcohol and drug abuse. Crosslisted as PED 1601.

**REL 2005 Management of Event Operations, 3 credits**

In this course, the student is introduced to the principles of management with regard to event and tournament operations. Public, private and commercial organizations are studied. Students focus on all aspects of successful event and tournament planning and organization, implementation, and control. Students demonstrate facility planning and management, marketing, personnel management, financial management and legal aspects of a successful event or tournament. Course objectives are met through lecture, demonstration, guest lecturers and experiential learning models. Prerequisite: REL 1003 PE, Sport, Recreation & Leisure

**REL 2104 Therapeutic Recreation, 3 credits**

This is an introductory course in which students study philosophical, theoretical and historical foundations of programs where special problems and needs exist. The role of physical education, sport and recreation as a treatment, rehabilitation, and therapeutic modality is studied in settings such as hospitals, nursing homes, special schools, correctional facilities, and other institutional and community programs. Students who earned SCCC credit for REL 2103 should not take this course. Prerequisite: REL 1003 PE, Sport, Recreation & Leisure

**REL 2202 Sport & Event Practicum, 1 credit**

This course provides an introduction to game and event administration. This course requires a minimum of 50 hours of on-site sport administration assisting in the planning, organizing and implementation of Sullivan County Community College intercollegiate athletics or other pre-approved events.

**RES 2200 Fundamentals of Respiratory Care I, 3 credits**

This is a general introductory course in respiratory care including laboratory applications of aerosols, medical gases, ultrasonic nebulizers, IPPB devices, chest physiotherapy, resuscitation, and Oxygen administration. Prerequisites: SCI 2124/5, A&P I and Lab; and SCI 1305/6, Physics for Health Sciences and Lab. Corequisites: RES 2204, Cardiopulmonary Physiology, and RES 2202, Cardiopulmonary Pharmacology.

**RES 2202 Cardiopulmonary Pharmacology, 2 credits**

This course is designed to familiarize the student with medications commonly used in Cardiopulmonary Care. It includes patient assessment of need, indications, contraindications, actions, side effects and hazards for each medication discussed. The student will also identify age appropriate dosing and routes of administration for each drug. The course includes an introduction to the pharmacological aspect of Advanced Cardiac Life Support according to the Guidelines of the American Heart Association. Prerequisites: SCI 2124/5, A&P I and Lab. Corequisites: RES 2204, Cardiopulmonary Physiology.

**RES 2204 Cardiopulmonary Physiology, 3 credits**

This course emphasizes the cardiopulmonary system and acid-base balance applied to and correlated with patient pathology. Prerequisites: SCI 2124/5, A&P I and Lab. Corequisites: RES 2202, Cardiopulmonary Pharmacology.

**RES 2400 Fundamentals of Respiratory Care II, 3 credits**

This course is concerned with the practical application of basic respiratory care procedures. Lectures will supplement time spent in the laboratory and time spent with patients. Major areas of concentration include: oxygen therapy, humidity and aerosol therapy, IPPB, chest physiotherapy, prophylactic deep breathing maneuvers, and cardiopulmonary resuscitation. A letter grade of "C" or better is required for graduation. Prerequisite: RES 2200, Fundamentals of Respiratory Care I. Corequisite: RES 2404, Mechanical Ventilation.

**RES 2402 Medical Ethics and Administration, 2 credits**

To expose the student to principles of ethical theory and administrative standards as they apply to health care and the management of the Respiratory Care Department. Prerequisite: RES 2200, Fundamentals of Respiratory Care I.

**RES 2404 Mechanical Ventilation, 4 credits**

This course is designed to familiarize the respiratory care student with all forms of advanced life support systems. Main topics include: Classification and operation of a variety of mechanical ventilators, clinical maintenance and troubleshooting of mechanical ventilators, and clinical management of patients receiving advanced life support to include ventilator commitment and weaning procedures. A letter grade of "C" or better is required for graduation. Open only to matriculated Respiratory Care students. Prerequisites: RES 2200, Fundamentals of Respiratory Care I, and RES 2202, Cardiopulmonary Pharmacology. Corequisite RES 2400 Fundamentals of Respiratory Care II.

**RES 2600 Clinical Rotation I, 12 credits**

Clinical courses are taught on a rotational basis. The first rotation includes the following four modules: Clinical

Therapeutics for Respiratory Care, Introduction to Critical Care, Neonatal & Pediatric Respiratory Care, and Clinical Management of Cardiovascular Diseases. The sequence of courses will vary for each student. Prerequisites: RES 2400, Fundamentals of Respiratory Care II, RES 2404, Mechanical Ventilation, and permission of instructor. Corequisite: RES 2602, Diseases of Cardiopulmonary System.

**RES 2602 Diseases of Cardiopulmonary System, 3 credits**

This course deals with a number of specific Pulmonary Diseases such as Asthma, Pulmonary Emphysema, Adult Respiratory Distress Syndrome, congenital Anomalies and others. The short-term and long-term treatment of the condition is covered. Special emphasis is given to the role of the Respiratory Care Practitioner in the management of these conditions. Prerequisite: RES 2204, Cardiopulmonary Physiology. Corequisite: RES 2600, Clinical Rotation I.

**RES 2800 Clinical Rotation II, 12 credits**

Clinical courses are taught on a rotational basis. The second rotation includes the following four modules: Pulmonary & Diagnostic Medicine, Pulmonary Rehabilitation & Home Care, Advanced Critical Care, and Clinical Independent Study. The sequence of courses will vary for each student. Prerequisites: RES 2600, Clinical Rotation I, and permission of instructor. Corequisite: RES 2802, Current Concepts of Respiratory Care.

**RES 2802 Current Concepts of Respiratory Care, 3 credits**

This course is designed to keep the potential Respiratory Care practitioner informed of current trends in Respiratory Care. Close attention will be paid to the latest developments in the therapeutic modalities of diseases affecting the respiratory and cardiovascular systems. Open only to matriculated Respiratory Care students. Prerequisites: RES 2400, Fundamentals of Respiratory Care II, and RES 2404, Mechanical Ventilation. Corequisite: RES 2800, Clinical Rotation II.

**SCI 1005 Environmental Geology, 4 credits, GE 2**

This course provides an introduction to environmental issues from a geological perspective. Water, mineral, soil and energy resources and conservation, waste disposal, land reclamation, land-use planning, and geological hazards are covered. Scientific principles necessary for the understanding of the geological aspects of environmental problems are emphasized. Corequisite: SCI 1006 Environmental Geology Lab

**SCI 1006 Environmental Geology Lab, 2 lab hours, GE 2**

Lab activities include exercises on natural hazards, natural resources and land use planning using topographic and geologic maps and rock and mineral samples. Corequisite: SCI 1005 Environmental Geology

**SCI 1018 Introduction to Physical Geology, 4 credits, GE 2**

Students in this introductory course in physical geology investigate earth's materials, changes in the surface and the interior of earth, and the forces and processes that cause these changes. Topics covered include the theory of plate tectonics, volcanoes, earthquakes, weathering and erosion, glaciers, streams, wind and deserts, waves and coastlines, the sea floor, mountain formation, rock formation, and earth history. Corequisite: SCI 1019 Physical Geology Laboratory

**SCI 1019 Physical Geology Laboratory, 2 lab hours, GE 2**

Laboratory activities include the identification of rocks, minerals, and fossils, use of topographic and geologic maps, use of computers to obtain data on global geologic activity, work with models to investigate earth's processes, and field trips to local areas of geologic interest. Corequisite: SCI 1018 Introduction to Physical Geology

**SCI 1020 Introduction to Meteorology, 4 credits, GE 2**

This course provides students with a basic understanding of weather and climate and the forces that create them. Topics include the dynamics of the atmosphere, macro and micro causes of weather, macro and micro causes of climate and climatic classification. This course is designed to meet the needs of both majors and non-majors. Corequisite: SCI 1021 Introduction to Meteorology Laboratory

**SCI 1021 Introduction to Meteorology Laboratory, 2 lab hours, GE 2**

Lab activities include collecting and interpreting data from both the internet and on-campus sites and working models to simulate weather phenomena. Corequisite: SCI 1020 Introduction to Meteorology

**SCI 1022 Introduction to Meteorology and Lab, 4 credits (on-line) , GE 2**

This course provides students with a basic understanding of weather and climate and the forces that create them. Topics include the dynamics of the atmosphere, macro and micro causes of weather, macro and micro causes of climate and climatic classification. This course is designed to meet the needs of both majors and non-majors. Lab activities include collecting and interpreting data from the internet and working models to simulate weather

phenomena.

### **SCI 1024 Nutrition, 3 credits**

This is a comprehensive course covering nutrition, diet and menu planning using sound nutritional guidelines. Food chemistry including protein, carbohydrates, lipids, vitamins, minerals, and water are presented with respect to their function within the body. The connection between food choices, specific nutrients and associated disease states are explored, as well as the changing nutritional needs of children and the elderly. The microbiology of food poisoning and food allergies are also covered.

### **SCI 1025-1L Nutrition Laboratory, 1 credit**

Laboratory exercises compliment the topics studied in class. Students cover the practical applications of menu planning for healthy adults and those with medical conditions that require diet modification. Basic food chemistry is covered, including: storage, food processing, preservatives, chemical components, contaminants, and the physical properties of food.

### **SCI 1028 Introduction to Astronomy, 4 credits, GE 2**

This course introduces the student to the tools, history, methods and objects of astronomy. Topics covered include the study of the origin of modern astronomy; telescopes, spectroscopes, space probes, and other astronomical tools; structures, characteristics and cycles of the sun, moon, and other solar system members; properties, structure, formation, and death of stars; galaxies, constellations; and an introduction to cosmology. Corequisite: SCI 1029 Introduction to Astronomy Laboratory

### **SCI 1029 Introduction to Astronomy Laboratory, 2 lab hours, GE 2**

Laboratory activities include work with astronomical models, telescopes and spectroscopes; use of computers for simulations and to obtain current astronomical data; use of photographs, maps, models and first-hand observations to study the moon, the sun and sunspots, seasons, planets, constellations, and galaxies; and several outdoor observing sessions. Corequisite: SCI 1028 Introduction to Astronomy

### **SCI 1030 Astronomy and Laboratory, 4 credits, GE 2**

This online course introduces the student to the tools, history, methods and objects of astronomy. Topics covered include the study of the origin of modern astronomy; telescopes, spectroscopes, space probes, and other astronomical tools; structures, characteristics and cycles of the sun, moon, and other solar system members; properties, structure, formation, and death of stars; galaxies, constellations; and an introduction to cosmology. Laboratory activities include work with astronomical models, telescopes and spectroscopes; use of computers for simulations and to obtain current astronomical data; use of photographs, maps, models and first-hand observations to study the moon, the sun and sunspots, seasons, planets, constellations, and galaxies; and several outdoor observing sessions.

### **SCI 1040 SpTp: Biology and Contemporary Issues, 4 credits, GE 2**

Modern developments in the field of life science have initiated controversy regarding topics in biology. Students in this course examine a number of issues of interest to the general public, the medical field, and the political arena. Topics are studied from an historical perspective, a biological perspective, and a modern societal perspective. Topics include genetic engineering, genetically modified foods, cloning, *in vitro* fertilization, stem cell use, and diseases such as Lyme, SARS, and Avian Flu. Laboratories include the examination of the scientific method, laboratory procedures, and experimental design.

### **SCI 1041 SpTp: Skills for Success in Biology, 1 credit**

The content of this course correlates with the content of SCI 1124/1125 and provides students with extra opportunities to master the topics presented in SCI 1124/1125. This course also teaches students essential skills for success in science classes such as graphing, research techniques, experimental design, lab report writing, note-taking, textbook mastery, studying, and test-taking. This course is open to all students taking Principles of Biology I. It is highly recommended for students who are taking Principles of Biology I who have not passed SCI 1050/1051 Introduction to Biology I and Lab with a C or higher or who have not received an 80% or higher on the Regents Biology/ Living Environment exam. This course is designed to provide students with the skills they need to succeed in the both lecture and lab.

### **SCI 1042 SpTp: Chemistry of Everyday Life, 4 credits, GE 2**

In this course students learn the principles of chemistry as they apply to everyday life. It is intended for students who have never taken a chemistry course and who do not intend to major in any scientific field, but who would like to learn what chemistry is and how it affects the world we live in. Focus will be upon finding answers to common chemical phenomena such as what causes an egg to crack if boiled too rapidly; why does iodine and barium enhance CAT scans; why does carbonated drinks go flat as they warm; what puts the blue in blue-jeans; why is

vinegar recommended for cleaning coffee makers and steam irons; what does pH stand for; why are general anesthetics administered as gases; what causes the fizz when an antacid is dissolved in water; what causes an instant ice-pack to cool; why do light sticks glow; and many others. Corequisite: SCI 1043 SpTp: Chemistry of Everyday Life Lab.

**SCI 1043 SpTp: Chemistry of Everyday Life Lab, 0 credits, GE 2**

Laboratory: This is a laboratory course for students who do not intend to major in science, but who want to understand chemistry in action. The lab experiments use a variety of everyday substances (as well as a few non-common substances) and introduce some of the methods chemists might use to test the properties of these substances. Each lab experiment will provide students with direct hands-on experience in the application of the scientific and chemical principles learned in lecture, observation, hypothesis, measurement and evaluation of physical and chemical properties and changes, chemical bonding, chemical reactions, etc. Corequisite: SCI 1042 SpTp: Chemistry of Everyday Life

**SCI 1050 Introduction to Biology I, 4 credits, GE 2**

This course provides an understanding of basic biological processes and principles for non-science majors. Topics covered include: the scientific method, the chemical and cellular basis of life, mitosis and meiosis, Mendelian genetics, DNA structure and function, and evolution. Corequisite: SCI 1051 Introduction to Biology I Lab

**SCI 1051 Introduction to Biology I Lab, 2 lab hours, GE 2**

Students in this course engage in basic laboratory work in which lecture topics are illustrated. Corequisite: SCI 1050 Introduction to Biology I

**SCI 1111 General Botany, 4 credits, GE 2**

This course provides an introduction to the study of the anatomy, physiology, ecology and evolution of plants with emphasis on comparative morphological relationships of major plant groups. This course is designed for science-oriented students. Corequisite: SCI 1112 General Botany Laboratory

**SCI 1112 General Botany Laboratory, 2 lab hours, GE 2**

Laboratory work includes the study of plant structure and function, experimental and herbarium techniques. Corequisite: SCI 1111 General Botany

**SCI 1113 General Zoology, 4 credits, GE 2**

The course serves as an introduction to the study of the comparative anatomy and physiology, evolution, ecological relationship, and behavioral patterns of representative invertebrates and vertebrates. This course is designed for science-oriented students. Corequisite: SCI 1114 General Zoology Lab

**SCI 1114 General Zoology Lab, 2 lab hours, GE 2**

Laboratory work includes comparative studies on representative major groups and makes extensive use of living material. Corequisite: SCI 1113 General Zoology

**SCI 1117 Introduction to Marine Biology, 4 credits, GE 2**

This course provides an introduction to the study of marine organisms and their adaptations to various habitats including intertidal, pelagic, deep sea, and coral reefs. The history of human exploitation of marine organisms and habitats is reviewed. Corequisite: SCI 1118 Introduction to Marine Biology Lab

**SCI 1118 Introduction to Marine Biology Lab, 2 lab hours, GE 2**

Selected exercises and experiments illustrate the principles of marine biology and the anatomy of representative marine organisms. A field trip to study coastal environments is scheduled. Corequisite: SCI 1117 Introduction to Marine Biology

**SCI 1122 Microbiology, 4 credits, GE 2**

This course provides a study of the structure and activities of micro-organisms and their importance in health, sanitation and industry. Corequisite: SCI 1123 Microbiology Laboratory Prerequisite: SCI 1050 Introduction to Biology I and SCI 1051 Introduction to Biology I Lab OR SCI 1124 Principles of Biology I and SCI 1125 Principles of Biology I Lab OR Permission of Instructor.

**SCI 1123 Microbiology Laboratory, 3 lab hours, GE 2**

The laboratory includes practice in cultivation, identification, sterilization, disinfection, aseptic techniques. Diagnostic tests are required. Corequisite: SCI 1122 Microbiology

**SCI 1124 Principles of Biology I, 4 credits, GE 2**



This course provides an intensive study of the fundamental principles of biology, emphasizing structure, function, processes and interaction. Topics include: chemical relationships, cell biology, reproduction, respiration, molecular and classical genetics, and evolution. This course is designed both for students who intend to specialize in science and for those who want to obtain a thorough knowledge of biology as part of their general education. It is intended for students who successfully completed high school Regents Biology. This course is not open to students taking Developmental English or Math. With SCI 2152/2153 Principles of Biology II, this course provides a solid foundation for upper division courses in biology. Prerequisites: Math Competency must be satisfied; High School Biology/Living Environment with a grade of 70% or higher OR SCI 1050/1051 Introduction to Biology with a C or better; or permission of instructor. Corequisite: SCI 1125 Principles of Biology I Lab.

**SCI 1125 Principles of Biology I Lab, 2 lab hours, GE 2**

Laboratory exercises are designed to exemplify aspects of lecture topics. These include examination of cells, tissue types, mitotic and meiotic stages, measurement of photosynthesis and respiration, and other topics. Corequisite: SCI 1124 Principles of Biology I

**SCI 1141 Genetics, 4 credits**

Topics covered in this course include the structure, replication and function of the genetic material, regulation of gene expression, genetic control of cellular function and differentiation, genetic re-combination, human, and population genetics. This course requires mathematics competency. Corequisite: SCI 1142 Genetics Laboratory

**SCI 1142 Genetics Laboratory, 2 lab hours**

Laboratory experience involves the analysis of genetic systems using a variety of organisms such as *Drosophila melanogaster*, *Neurospora* and *Escherichia coli*. This course requires mathematics competency. Corequisite: SCI 1141 Genetics

**SCI 1145 Biology of Birds and Lab, 4 credits, GE 2**

This course covers the biology of birds with emphasis on identification, morphology, the annual cycle, classification, populations, and migration. Making extensive use of videos, students experience the visual, auditory, and environmental aspects of birds found around the world. The laboratory focuses on bird identification using song, visual clues, behavioral, and habitat differences.

**SCI 1202 General Chemistry I, 4 credits, GE 2**

Topics covered include elements, compounds, molecules, chemical reactions and stoichiometry, redox reactions, thermochemistry, quantum theory, atomic electron configurations and periodicity, chemical bonding and molecular structure including orbital hybridization and molecular orbitals. Students should have successfully completed high school Regents Chemistry. Prerequisite: High school Regents Chemistry; Corequisites: MAT 1205 Intermediate Algebra and Trigonometry or equivalent, and SCI 1203 General Chemistry I Laboratory

**SCI 1203 General Chemistry I Laboratory, 3 lab hours, GE 2**

Experiments emphasize topics covered in the lecture and include basic laboratory techniques, identification of substances by physical properties, separation of components of a mixture, chemical reactions, chemical formulas, percent yield, chemicals in everyday life, gravimetric analysis, paper chromatography, molecular geometrics, and activity series. Corequisite: SCI 1202 General Chemistry I

**SCI 1204 Chemistry for Health Sciences, 4 credits**

In this course students utilize an inquiry approach to the learning of chemical principles with examples and case studies taken from the health sciences. Material covered is divided into three parts: general chemistry, organic chemistry and biochemistry with emphasis on the relevance of each to the health professions. Topics covered include bonding, reactions, gas laws, solutions and pH. Naming of organic compounds, functional groups and reactions provide a foundation for the study of biochemistry. Corequisite: SCI 1205 Chemistry for Health Sciences

**SCI 1205 Chemistry for Health Sciences Laboratory, 2 lab hours**

Experiments will illustrate basic concepts relevant to the allied health science fields including nursing, respiratory therapy, radiological technology, etc. Hands-on activities will be assigned and lab reports will be required to complete the assignments. Corequisite: SCI 1204 Chemistry for Health Sciences

**SCI 1300 Noncalculus Physics I, 4 credits, GE 2**

This course is a study of the fundamental principles and analytical methods of physics. Topics include vector algebra, mechanics, Newton's laws of motion, kinematics, energy and momentum. Students should have successfully completed three years of high school Regents math, MAT 1205 or permission of the instructor. Prerequisite: MAT 1205 Intermediate Algebra and Trigonometry; Corequisite: SCI 1301 Noncalculus Physics I Lab

**SCI 1301 Noncalculus Physics I Lab, 2 lab hours, GE 2**

This laboratory work parallels topics covered in SCI 1300. Corequisite: SCI 1300 Noncalculus Physics I

**SCI 1302 Calculus Physics I, 4 credits, GE 2**

Topics include vector algebra, one and two dimensional kinematics, Newton's Laws, work, kinetic and potential energy, conservation of energy, momentum and impulse, and gravitation. Corequisites: MAT 1301 Analytical Geometry & Calculus, and SCI 1303 Calculus Physics I Lab

**SCI 1303 Calculus Physics I Lab, 3 lab hours, GE 2**

Laboratory work parallels topics covered in SCI 1302. Corequisite: SCI 1302 Calculus Physics I

**SCI 1305 Physics for Health Sciences, 4 credits**

The health technologies student becomes familiar with physical concepts in static and dynamic fluids, ideal gases, energy, and thermodynamics through a problem-solving approach. The student's understanding is reinforced by weekly experiments in which he or she gains laboratory skills and experience in the analysis of data. Corequisite: SCI 1306 Physics for Health Sciences Lab.

**SCI 1306 Physics for Health Sciences Lab, 2 lab hours**

This laboratory work parallels topics covered in SCI 1305. Corequisite: SCI 1305 Physics for Health Sciences.

**SCI 1515 Environmental Science, 4 credits, GE 2**

This course provides an examination of the interactions of organisms with each other and the environment and the role they play in regulating and maintaining environmental conditions. The central focus is on the role played by man as a force in causing, correcting, and preventing environmental damage. Corequisite: SCI 1516 Environmental Science Lab

**SCI 1516 Environmental Science Lab, 2 lab hours, GE 2**

Laboratory exercises include observation and collection trips to polluted and nonpolluted ecosystems, examination of field collections, field trips to landfills, water and wastewater treatment facilities. Corequisite: SCI 1515 Environmental Science

**SCI 1640 Introduction to Forensic Science, 4 credits, GE 2**

This course introduces students to the scientific fields, principles, instrumentation, and methods found in a modern full-service forensic laboratory. Both the lecture and laboratory emphasize various applications of scientific methods and expertise to the examination and analysis of physical evidence used to assist the courts in making legal decisions. The contributions of forensic pathology, toxicology, biology, chemistry and engineering are covered and relevant laboratory tests are demonstrated or conducted. Legal and ethical issues in forensic science are included, as well as a site visit to a crime laboratory. Prerequisites: Any college chemistry course or SCI 1050 Introduction to Biology I, and SCI 1051 Introduction to Biology I Lab, or SCI 1124, Principles of Biology and SCI 1125, Principle of Biology Lab; Corequisite: SCI 1641 Forensic Science Lab

**SCI 1641 Forensic Science Lab, 2 lab hours, GE 2**

Laboratory sessions in forensic science include observation, hypothesis development and testing, measurement and data collection, experimentation, and evaluation and analysis of evidence collected from crime scenes, from suspects, and from victims. Labs include examination, qualitative and quantitative analysis of physical evidence such as documents, inks, and papers; illicit drugs and poisons; blood and other bodily fluids; hair and fibers; tire and toolmarks; evidence collected in postmortem examinations; and microanalysis of trace evidence. Students learn accident reconstruction techniques, handwriting analysis and procedures for pre-sentence investigations. Corequisite: SCI 1640 Introduction to Forensic Science

**SCI 1701 Science and Civilization: Present and Future, 3 credits, GE 3**

Students study the state of the world and its future direction as determined by the driving forces of science, technology and overall human activity and their relationships to world ecology. Students discuss the interactions among science policy, technology, politics and economics. They also study the potential for sustainable human civilization. Crosslisted as SOC 1701.

**SCI 1703 Contemporary Health, 3 credits**

This course covers issues which affect health. Topics include wellness, substance use and abuse, environmental pollution, cardiovascular and reproductive diseases, genetic defects, stress management, planning diet and fitness programs, and adapting to death and dying. Students will receive information to enable them to make informed decisions concerning their personal, physical and emotional states of health.

**SCI 1814 Technical Physics I, 4 credits**

This course is designed for technology students at an introductory level covering measurements, equilibrium of a rigid body, kinematics, work and energy and other selected topics. Pre-requisite: a working knowledge of algebra and trigonometry, MAT 1205 or permission of instructor. Corequisite: SCI 1815 Technical Physics I Lab

**SCI 1815 Technical Physics I Lab, 2 lab hours**

Laboratory work to exemplify topics in SCI 1814. Corequisite: SCI 1814 Technical Physics I

**SCI 1824 Fundamentals of Chemistry I, 4 credits, GE 2**

Fundamentals of general and inorganic chemistry are covered to provide students with the knowledge necessary to understand the chemical basis of environmental problems. Subjects include matter and energy, atomic structure, nuclear chemistry, chemical formulas, equations and stoichiometry, acids and bases, oxidation and reduction, earth chemistry. Corequisite: SCI 1825 Fundamentals of Chemistry I Lab

**SCI 1825 Fundamentals of Chemistry I Lab, 2 lab hours, GE 2**

The laboratory experiments provide students with hands-on experience in the application of the chemical principles learned in lecture: measurements; physical and chemical properties and changes; chemical bonding; chemical reactions, etc. Corequisite: SCI 1824 Fundamentals of Chemistry I

**SCI 2030 Introduction to Oceanography, 3 credits**

This course provides an introduction to the physical, chemical, and biological aspects of the marine environment. Topics include early explorations, geological and astronomical background, water dynamics, heat budget and thermal processes, mineral and biological resources, pollution, habitat destruction and the importance to sustainable development. This course does not include a laboratory component. Prerequisite: SCI 1202 General Chemistry I or SCI 1824 Fundamentals of Chemistry I

**SCI 2050 Introduction to Biology II, 4 credits**

This course is a continuation of SCI 1050. Topics include human anatomy and physiology with units on the cardiovascular system, the respiratory system, the digestive system, the immune system, the nervous system, the excretory system, and the reproductive system. Topics also include ecology with units on communities and ecosystems, and population ecology. This course is intended for non-science majors. Corequisite: SCI 2051 Introduction to Biology II Lab; Prerequisites: SCI 1050 Introduction to Biology I and 1051 Introduction to Biology I Lab.

**SCI 2051 Introduction to Biology II Lab, 2 lab hours**

This course builds upon skills acquired in SCI 1051 Introduction to Biology I Lab. The lab consists of more advanced laboratory work. Experimental technique is stressed. Corequisite: SCI 2050 Introduction to Biology II; Prerequisites: SCI 1050 Introduction to Biology I, and SCI 1051 Introduction to Biology I Lab

**SCI 2110 Field Biology, 3 credits**

This field-oriented course covers the study of the flora and fauna of local aquatic and terrestrial habitats. Classroom topics include introductory ecological principles, taxonomy and conservation. Laboratory work includes techniques of observation, collection, preservation, field identification, and environmental analysis. Corequisite: SCI 2111 Field Biology Lab Prerequisites: SCI 1111 General Botany or SCI 1113 General Zoology or SCI 1124 Principles of Biology I or SCI 1515 Environmental Science or permission of instructor.

**SCI 2111 Field Biology Lab, 2 lab hours**

Laboratory work includes techniques of observation, collection, preservation, field identification, and environmental analysis. Corequisite: SCI 2110 Field Biology

**SCI 2112 Evolutionary Biology, 4 credits**

This course is a study of the fundamental principles of evolution. Students learn about the history of evolutionary thought, evidence for evolution, natural selection, variation, population genetics, genetic drift, sexual selection, speciation, phylogeny, co-evolution, extinction, and the history of life on earth. The course includes one discussion hour. Prerequisites: SCI 1124/SCI 1125 Principles of Biology I and Lab with "C" or better or permission of instructor **AND** MAT 1001 College Mathematics or MAT 1205 Intermediate Algebra and Trigonometry or permission of instructor

**SCI 2120 Human Performance – A & P I, 4 credits**

Primarily for Physical Education majors. This course does not satisfy requirements for Nursing AAS or Liberal Arts and Sciences AS degree programs. This is the first course of a one-year, lecture-laboratory sequence. Lecture topics include homeostasis, chemistry, cells, tissues, the integumentary system, the skeletal system, the muscular

system, the nervous system, and the special senses. Particular emphasis is placed on the role these systems play in human athletic performance. Prerequisites: SCI 1050 Introduction to Biology I OR SCI 1124; Corequisite: SCI 2121 Human Performance – A & P I Lab

**SCI 2121 Human Performance – A & P I Lab, 2 lab hours**

Laboratory work includes body organization, structure and function of the human skeletal, muscular, and nervous systems, general sensation and the special senses. A dissection of a representative mammal will augment the study of these systems. Corequisite: SCI 2120 Human Performance – A & P I

**SCI 2122 Human Performance – A & P II, 4 credits**

Primarily for Physical Education majors. This course does not satisfy requirements for Nursing AAS or Liberal Arts and Sciences AS programs. This is the second course of a one-year, lecture-laboratory sequence. Lecture topics include the endocrine system, the respiratory system, the digestive system, the cardiovascular system, the urinary system, fluid and electrolyte balance, and metabolism. Particular emphasis is placed on the role these systems play in human athletic performance. Prerequisite: SCI 2120 Human Performance – A & P I; Corequisite: SCI 2123 Human Performance – A & P II Lab

**SCI 2123 Human Performance – A & P II Lab, 2 lab hours**

Laboratory work includes the study of the structure and function of the human endocrine, cardiovascular, digestive, and respiratory systems. Experiments include cardiovascular physiology, and respiratory physiology. A dissection of a representative mammal will augment the study of these systems. Corequisite: SCI 2122 Human Performance – A & P II

**SCI 2124 Human Anatomy & Physiology I, 4 credits**

This course is the first part of a two-semester course in the study of the structures of the human body and their functions. In this course students investigate the major systems, organs, cavities, regions, and surface landmarks of the human body. Students examine the anatomy and physiology of the cells, tissues, and membranes of the human body as well as the following body systems in detail: integumentary, skeletal, muscular, nervous, and endocrine. Prerequisites: SCI 1124/1125 with a C or better, OR Advanced Placement Biology with an exam score of 4 or 5, OR permission of the instructor; Corequisite: SCI 2125 Human Anatomy & Physiology I Lab SCI 2125. (Corrected 12/6/2010.)

**SCI 2125 Human Anatomy & Physiology I Lab, 2 lab hours**

The laboratory portion of this course introduces all of the body systems, their component organs, and their major functions. Students examine chemical principles, cells and their component parts, and the tissues of the body and investigate the anatomy and physiology of the following systems in detail: the integumentary, skeletal, muscular, nervous, and endocrine systems. Lab activities include dissection of animal specimens, preparation and observation of microscope slides, and the study of diagrams, models, and specimens of the human body and its parts. Corequisite: SCI 2124 Human Anatomy & Physiology I

**SCI 2126 Human Anatomy & Physiology II, 4 credits**

This course is the second part of a two-semester course in the study of the structures of the human body and their functions. Students examine specific and non-specific defense mechanisms; fluid, electrolyte, and acid-base balance; and human development and inheritance as well as the anatomy and physiology of the following body systems in detail: cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Corequisite: SCI 2127 Human Anatomy & Physiology II Lab, Prerequisites: SCI 2124 Human Anatomy & Physiology I, and SCI 2125 Human Anatomy & Physiology I Lab or permission of the instructor.

**SCI 2127 Human Anatomy & Physiology II Lab, 2 lab hours**

In the laboratory portion of this course students examine the anatomy and physiology of the following systems: cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Lab activities include dissection of animal specimens, preparation and observation of microscope slides, and the study of diagrams, models, and specimens of the human body and its parts. Corequisite: SCI 2126 Human Anatomy & Physiology II

**SCI 2128 Human Biology, 4 credits**

This course provides a one-semester introduction to human anatomy and physiology geared to meet the needs of Medical Assistant students. This course does not satisfy requirements for Nursing AAS or Liberal Arts and Sciences AS degree programs. It is also appropriate as a science elective for non-science majors who meet the prerequisites. Students study the organization of the human body, homeostasis, cells and tissues, and anatomical terminology. They also examine the basic structure and functions of all eleven organ systems. Prerequisites: SCI 1050 Introduction to Biology I and SCI 1051 Introduction to Biology I Lab or SCI 1124 Principles of Biology I and SCI 1125 Principles of Biology I Lab, Medical Assistant

students must take SCI 1124/1125; Corequisite: SCI 2\*\*\* Human Biology Lab

### **SCI 2129 Human Biology, 2 lab hours**

In the laboratory portion of this course students examine and identify representative models and specimens of cells, tissues, organs, and organ systems. Select laboratory exercises demonstrate important aspects of organ system functioning. Corequisite: SCI 2\*\*\* Human Biology

### **SCI 2152 Principles of Biology II, 4 credits**

This course provides a continuation of Principles of Biology I. Topics include evolution, the nature of plant and animal systems, ecological principles, and behavioral ecology. Prerequisites: SCI 1124 Principles of Biology I, and SCI 1125 Principles of Biology I Lab; Corequisite: SCI 2153 Principles of Biology II Lab

### **SCI 2153 Principles of Biology II Lab, 2 lab hours**

This course provides a continuation of Principles of Biology I Laboratory. Students apply the scientific method to understand, perform, and design experiments. Laboratory exercises exemplify aspects of lecture topics. Laboratory topics include evolution, an examination of plant and animal structures and processes, population ecology, and animal behavior. Corequisite: SCI 2152 Principles of Biology II

### **SCI 2202 General Chemistry II, 4 credits**

Covered topics include gases, intermolecular forces in liquids and solids, solutions, chemical kinetics and mechanisms, chemical equilibria, acids and bases, precipitation reactions (solubility product), chemical thermodynamics, and electrochemistry. Prerequisite: SCI 1202 General Chemistry I; Corequisite: SCI 2203 General Chemistry II Lab

### **SCI 2203 General Chemistry II Lab, 3 lab hours**

Experiments include both hands-on exercises: molecular bonding and structure, gas laws-molar mass, chemical kinetics, chemical equilibrium, acid-base titration, electrochemistry, qualitative analysis: anions and cations; and video/computer experiments: thermometric titrations, magnetochemistry, kinetics using spectrophotometry, chemical equilibrium-esterification, electrochemical cells. Corequisite: SCI 2202 General Chemistry II

### **SCI 2208 Organic Chemistry I, 4 credits**

Students study carbon compounds and chemical bonds, hybridization, molecular structure, saturated and unsaturated hydrocarbons, functional groups, acids and bases, conformations of cyclohexane, stereochemistry and chirality, nucleophilic substitution and elimination reactions of alkyl halides, and radical reactions. Prerequisites: SCI 1202 General Chemistry I, and SCI 2202 General Chemistry II. Corequisite: SCI 2209 Organic Chemistry I Lab

### **SCI 2209 Organic Chemistry I Lab, 3 lab hours**

Experiments are designed to develop skills and teach the techniques and equipment used by the organic chemist: crystallization, extraction, distillation; the basic instrumental methods of chromatography, infrared, nuclear magnetic resonance and mass spectroscopies are taught with computer simulations. Additionally, students are introduced to qualitative organic analysis. Corequisite: SCI 2208 Organic Chemistry I

### **SCI 2210 Organic Chemistry II, 4 credits**

This course entails the study of the properties, syntheses and addition reactions of alkenes and alkynes, addition polymers from alkenes, alcohols and ethers, carbonyl compounds - oxidation/ reduction and organometallic compounds, conjugated unsaturated systems, concept of aromaticity and electrophilic aromatic substitution. Prerequisite: SCI 2208 Organic Chemistry I; Corequisite: SCI 2211 Organic Chemistry II Laboratory

### **SCI 2211 Organic Chemistry II Laboratory, 3 lab hours**

Students concentrate on isolation of natural products (eugenol from cloves) and chemical synthesis: cis-1, 2-cyclohexanediol, a multistep synthesis of sulfanilamide, sodium borohydride reduction of acetophenone to 1-phenylethanol, preparation of a Grignard reagent (phenylmagnesium bromide), Grignard synthesis of iodobenzene, Diels-Alder synthesis of 4-cyclohexene-1, 2-dicarboxylic acid anhydride. Corequisite: SCI 2210 Organic Chemistry II

### **SCI 2300 Noncalculus Physics II, 4 credits**

This course provides a continuation of SCI 1300. Topics covered include heat, temperature, thermodynamics, wave motion, static and current electricity, Gauss's Law, and magnetism.

Prerequisite: SCI 1300 Noncalculus Physics I; Corequisite: SCI 2301 Noncalculus Physics II Lab

### **SCI 2301 Noncalculus Physics II Lab, 3 lab hours**

Laboratory work parallels topics covered in SCI 2300. Corequisite: SCI 2300 Noncalculus Physics II

**SCI 2302 Calculus Physics II, 4 credits**

Topics include temperature and heat, thermodynamics, wave motion, static and current electricity and magnetism. Prerequisite: SCI 1302 Calculus Physics I; Corequisites: MAT 2301 Analytical Geometry & Calculus I, and SCI 2303 Calculus Physics II Lab

**SCI 2303 Calculus Physics II Lab, 3 lab hours**

Laboratory work parallels topics covered in SCI 2302. Corequisite: SCI 2302

**SCI 2826 Fundamentals of Chemistry II, 4 credits**

This course assumes the fundamentals covered in SCI 1824 and adds the fundamentals of organic chemistry. Subjects include organic chemistry, polymers/plastics, energy, air and water pollution, biochemistry, recombinant DNA technology, food chemistry, fitness and health, drugs/chemotherapy, poisons/chemical toxicology. Prerequisite: SCI 1824 Fundamentals of Chemistry I; Corequisite: SCI 2827 Fundamentals of Chemistry II Lab

**SCI 2827 Fundamentals of Chemistry II Lab, 2 lab hours**

The hands-on experience provided in SCI 1825 continues with experiments in general, organic, and biochemistry. General: kinetics, equilibrium; organic: alcohols and phenols, carboxylic acids, amines, aldehydes and ketones, synthesis of nylon; biochemistry: biochemical catalysts, enzymes, biochemical analysis of foods: milk, peanuts, etc. Corequisite: SCI 2826 Fundamentals of Chemistry II

**SCI 2922 Introduction to Ecology, 4 credits**

This course is an introduction to the fundamentals of ecology. Students acquire a working knowledge of the systems that govern interactions within and among living organisms and the environment. Topics include the ecology of individuals, populations, communities, and ecosystems. In addition, there is a focus on terrestrial and aquatic biomes and an introduction to aspects of applied ecology. Laboratory and fieldwork emphasize methods of acquiring, analyzing, and interpreting ecological data.

**SOC 1361 Alternative Dispute Resolution, 4 credits**

This course examines alternatives to traditional civil and/or criminal litigation of legal issues in America. Topics such as administrative law, arbitration, mediation, and restorative justice are included. Justice models from other societies as well as those of indigenous peoples are discussed and compared. A 30-hour laboratory provides training in mediation skills. This training may lead to credentialing and further opportunities to provide mediation services locally in schools, courts, businesses and community. Prerequisite: POL 1350 Introduction to American Law or CRJ 1115 Introduction to Criminal Justice.

**SOC 1400 From Radicalization to Terrorism, 3 credits, GE 3**

Students examine the process of radicalization and its phases as it pertains to terrorism in the West, especially in the United States and the United Kingdom. Through studying specific case studies, as well as religious, sociological, and political motivators, students explore how radicalization in the West can produce both global and homegrown terrorism.

**SOC 1600 Introduction to Sociology, 3 credits, GE 3**

Students learn how the human individual is shaped by his group affiliations. This course introduces the methods and concepts used in investigating these group influences. An important part of the course is to show how these sociological concepts and methods can throw light on the students' social experience and on the rapidly changing world around them.

**SOC 1602 Sociology of the Family, 3 credits, GE 3**

The family is considered as one of the areas of the social life which plays an important role in individual development. Topics include the various forms of the family in other cultures, the functions of the family in our society, and the role of the family in the inculcation of values.

**SOC 1701 Science and Civilization, 3 credits, GE 3**

Students study the state of the world and its future direction as determined by the driving forces of science, technology and overall human activity and their relationships to world ecology. Students discuss the interactions among science policy, technology, politics and economics. They also study the potential for sustainable human civilization. Crosslisted as SCI 1701

**SOC 1725 Survey of World Cultures, 3 credits, GE 6**

We often ask ourselves: What is Culture? Is it Geography? Politics? Art? The Environment? Or is it the way we interact with our family, our friends, our neighbors within our city, state, and country, and outside our borders in

foreign lands? As you have probably guessed, it's all of the above, and more. During this course we will map cultural identities by looking at different measurements...including population, new and old technologies, economic development, and how people construct living spaces in cities, towns, and countryside. Although we will move quickly, practically flying through our text, I think you will find each module interesting, filled with unique facts that will leave you saying to yourself, "Wow, I didn't know that."

### **SOC 2601 Social Problems, 3 credits, GE 3**

This course is designed to provide a systematic analysis of a select number of social problems in the United States. Deviant behavior and social disorganization are objectively investigated in terms of social system structure and dynamics. Topics to be covered include mental disorders, crime, drug addiction, automation, poverty and war. Prerequisite: SOC 1600 Introduction to Sociology

### **SOC 2602 SpTp: Foundation of Sociological Theory, 3 credits**

The course covers the reading, understanding, and application of the principal founders of sociology: Karl Marx, Max Weber, and Emile Durkheim. The course also covers some major theorists of the next two generations including Joseph Schumpeter, Daniel Bell, and Herbert Marcuse. The course concentrates on the historical development and application of these different conceptual models, allowing the student to develop sound critical and analytic thinking from these 19<sup>th</sup> and 20<sup>th</sup> century sociologists. Prerequisites: SOC 1600 Introduction to Sociology, and SOC 2610 New World Order or Disorder

### **SOC 2603 SpTp: Reflections of Women in Society, 3 credits**

This course examines the unique change in the role of women in North American culture during the last century. A study of history will reveal that since the 1920's women have never played the role in society that they now hold. Using the media of film and TV the evolution of society's view of women will be explored. Both from the standpoint of roles reflecting media and media reflecting and foreshadowing role changes. Pre-requisite: SOC 1500 Introduction to Sociology

### **SOC 2609 Race, Class, and Gender, 3 credits**

Students address the complex interconnections between race, social class, gender, and sexuality, and the ways in which these identities/locations/markers are constructed and positioned within social structures to create social, political, and economic inequality. The emphasis is on investigating, via critical thinking, how the different systems of inequality interact with each other. An examination of methodologies and theoretical frameworks from several disciplines informs conceptual analyses of the interconnections and intersections of race, social class, gender, and sexuality. Students also explore avenues for social change within social institutions. Pre-requisite: SOC 1600 Introduction to Sociology

### **SOC 2610 The New World: Order or Disorder, 3 credits, GE 3, GE 6**

Students discuss the evolution of the idea of internationalism from the dreams of the 19th century English empire builders through the Wilsonian League of Nations, to the ultimate establishment of the United Nations into the post-Cold War era of today. The readings explain the economic, technological, demographic and general ideological forces which created the current international system, as well as the forces which may disrupt this "New World Order." Students discuss the existing and newly-emerging international, political and economic structures designed to control and administer the increasing international functions required in the post-Cold War era. Prerequisite: SOC 1600 Introduction to Sociology

### **SUR 1501 AutoCAD, 4 credits**

Students are introduced to the care and use of traditional drafting equipment and techniques on sketching, orthographic projections, dimensioning, pictorial views, auxiliary views, sections, and working drawings. Emphasis is placed on computer drafting and its associated concepts. Topics include, but not limited to basic commands for drawing, editing, layers, placing text and dimensioning.

### **SUR 2301 Elementary Surveying, 4 credits**

This course addresses the fundamentals of plane surveying with emphasis on the use and care of theodolites, levels, measuring tapes, leveling, and stadia rods. Field practice in differential leveling, measuring horizontal and vertical angles, measurements of distances with taping techniques and notekeeping are included as are instruction on typical surveying problems, including taping corrections, angular adjustments, traverse balances, and computation of coordinates, and areas. Hand-held, programmable calculators are used, and programming practical solutions are included. Students should have completed high school math course 3 or 2 or technical math 1.

### **SUR 2305 Land Surveying, 4 credits**

This course addresses the history and development of the practice of land surveying. Emphasis is on research and interpretation of legal records with their application to the rules of evidence in determining legal boundaries. Local

and state codes of practice and ethics are used. Researching records in the Real Property Tax and the County Clerk's offices are included. A practical field boundary survey on an actual parcel is performed utilizing electronic, total stations and field data collection devices. Microcomputers and related software is used for data reduction. Prerequisites: SUR 1501 AutoCad, and SUR 2301Elementary Surveying

**SUR 2306 Land Planning, 4 credits**

Students study and evaluate land parcels for use in subdivisions and site plans. Students review design priorities including soil investigation, topographic surveys, highway geometry, and design and construction layout. Municipal and governmental regulations are explored including zoning, subdivision and site plan regulations, state and federal wetlands, soil maps, etc. Prerequisite: SUR 2305 Land Surveying

**SUR 2307 Advanced Surveying, 4 credits**

This course covers geodetic surveying, control surveys, base line surveys, ALTA standards and procedures, triangulation, solar observations of both the Sun and Polaris, and state plane coordinate calculation. Off-campus field projects include photogrammetry and GPS. Prerequisite: SUR 2305 Land Surveying

**SUR 2309 Legal Aspects of Land Surveying, 4 credits**

This course includes interpretation and writing of legal boundary and strip descriptions, sequential and simultaneous conveyances, riparian rights, reversionary rights, liability problems, the Rectangular Survey System of the United States, proportionate measurements, and the surveyor in court. Field trips are scheduled to the county law library in order to research cases related to surveying.

Prerequisite: SUR 2305 Land Surveying

**SUR 2400 AutoCAD for Surveying, 4 credits**

This course covers the use of computer-aided design and drafting as related to the development of survey drawings. Microcomputers utilizing AutoCAD or similar software are utilized to produce maps on a graphics plotting device. Prerequisites: SUR 1501 AutoCad, and SUR 2305 Land Surveying

**THE 1700 Introduction to Theatre, 3 credits, GE 8**

This is a survey course designed to acquaint the student with the evolution and development of the theatre, and with playwrights, technicians, and actors responsible for its growth and change.

**THE 1713 Play Production Practicum I, 3 credits**

This is a course designed to allow students the opportunity to participate in the production of a play.

**THE 1714 SpTp: Introduction to Producer, 3 credits**

Students are introduced to all the major aspects of professional theater production from choosing the show to opening night. Survey topics include play selection, budgeting and box office, promotion, staffing and casting, visual and sound design, stage management, and stage direction. The course is taught through lecture and authentic learning experiences during the summer production cycle at the Forestburgh Playhouse, Forestburgh, NY. The Forestburgh Playhouse is the oldest continuously operating professional summer theater in New York State. Students must have completed the junior year of high school to enroll.

**THE 1751 Stagecraft, 3 credits**

In this course, students gain experience in basic technical theater production. In practical exercises and projects, students explore aspects of production including scenery construction, lighting, light and sound board operation, scene painting, and costumes and props. Students practice and apply these skills in the College production.

**THE 2720 Design Elements for Theatre, 3 credits**

This course provides students an introduction to design for the theater. Using design theory, history, and practical application, students gain the knowledge and skills necessary to execute 2-dimensional drawings and 3-dimensional models. Students learn to complete practical projects in set, lighting, costume, and sound design, in support of a College production. Prerequisite: THE 1700 Introduction to Theatre

**THE 2723 Play Production Practicum II, 3 credits**

This is a course designed to allow students the opportunity to participate in the production of a play. Prerequisite: THE 1713 Play Production Practicum I

**WTT 1010 Wind Turbine, 3 credits**

This course covers the history and development of the wind industry, types and applications of various wind turbines, environmental and economic issues of the wind industry, the future of the wind industry, and related terminology.



**WTT 1020 Wind Turbine II, 3 credits**

This course provides an overview of wind turbine technology, wind farm design and development, an in-depth examination of aerodynamics and performance of land-based horizontal axis wind turbines, a survey of alternative machine architectures, and an introduction to the design of key components.

**WTT 1100 DC Electrical, 3 credits**

This course focuses on Direct Current theory, application and circuits, especially as they apply to wind turbines and power distribution.

**WTT 2100 Hydraulics, 3 credits**

This course focuses on the theory, design, application, operation and maintenance of hydraulic systems, especially as applied to wind turbines.

**WTT 2200 Electrical Motors and Generators, 3 credits**

This course focuses on the theory, operation and maintenance of electrical motors and generators especially as applied to wind turbines.

**WTT 2300 AC Electrical, 3 credits**

This course focuses on Alternating Current theory, application and circuits, especially as applied to wind turbines and power distribution.

**WTT 2400 Mechanical Systems, 3 credits**

This course provides an in-depth examination of gearboxes and other mechanical subsystems of modern wind turbines.

**WTT 2500 Wind Turbine Siting & Cost Control, 3 credits**

This course covers techniques, methodology and concepts used to develop wind projects around the world, focusing on site selection and economic analysis.

**WTT 2800 Wind Turbine Field Experience, 5 credits**

Students work in wind turbine environments on and/or off campus. They work with instructors, industry professionals, government agencies, other students and other College approved groups to create a capstone project. Pre-requisites: WTT 1010 Wind Turbines I, WTT 1020 Wind Turbines II, WTT 1100 DC Electrical, WTT 2300 AC Electrical, WTT 2100 Hydraulics, WTT 2200 Electrical Motors and Generators, REL 1501 Standard First Aid, or permission of instructor. Co-requisites: WTT 2400 Mechanical Systems, WTT 2500 Wind Turbine Siting and Cost Control or permission of instructor.