

COURSES

PDF COURSE LIST

ACCOUNTING

ACC 241 Intermediate Accounting II 3.0 UNITS
This course is a continuation of Accounting 240, Intermediate Accounting I. It covers Long-Lived Assets, Long-Term Liabilities, Stockholders' Equity, Financial Statement Preparation and Analysis.

ACC 121 Principles of Accounting I 3.0 UNITS
Previous accounting knowledge is not required. The course covers the entire accounting cycle from analysis of transactions, journalizing, posting, worksheets, preparation of financial statements, closing entries, post-closing trail balance and reversing entries. Also introduced are the accounting principles as applied in the United States (GAAP). Emphasis is placed on practical applications of accounting procedures as well as conceptual comprehension of accounting principles used in both service- and product-related businesses. Led by faculty, lab hours are used to reinforce topics covered in lecture. Students also participate in group work and complete projects.

ACC 211 Computerized Accounting 3.0 UNITS
An introduction to the construction and implementation of computerized accounting systems used to accurately document, record and summarize financial information. The course emphasizes how such systems safeguard the assets of the client and ensure the integrity of the reporting system. Students will use source documents as a means of developing an information base. Students will design special journals and voucher systems as a means of facilitating recording functions and they will also develop a subsidiary ledger for purposes of recording secondary information. The course will conclude with students operating a fully-integrated computerized general ledger system that may be applied to the accounting needs of individuals, organizations and small business enterprises. Students will also independently complete computer laboratory projects using specialized computer software.

ACC 221 Principles of Accounting II 3.0 UNITS
Continuation of Principles of Accounting I, emphasizing accounting applications for partnerships, corporations, and manufacturing. A survey of cost accounting and budgetary procedures including the preparation and use of financial information needed for management planning and decision-making. Led by faculty, lab hours are used to reinforce topics covered in lecture. Students also participate in group work and complete projects.

ACC 224 Federal Taxation 3.0 UNITS
A study of Federal Income Tax law and its practical application in the preparation of tax forms for the individual, partnerships, and corporations.

ACC 226 Auditing 3.0 UNITS
This course will cover the theory of auditing principles and standards employed by the external and internal auditor. These standards are based on generally- accepted auditing standards and the related literature of the American Institute of Certified Public Accountants. Emphasis is on Auditing procedures.

ACC 228 Cost Accounting 3.0 UNITS
Examines cost accounting information systems; cost of materials, labor and manufacturing expenses, standards, and cost controls; direct costing and cost analysis.

ACC 240 Intermediate Accounting I 4.0 UNITS
This course presents a balanced approach to the treatment of conceptual and procedural problems in accounting. The course explains the rationale behind business transactions and addresses the accounting and reporting of those transactions. The course will include discussions of the latest developments in the accounting profession and practice.

ADVANCED MANUFACTURING

ADM 201 Materials Science 3.0 UNITS
This course is an introduction to materials science. Topics include physical and mechanical properties of materials including metal alloys, plastics, rubbers, ceramics, glass, and composites. Students learn standard techniques for measuring mechanical properties including American Society for Testing and Materials (ASTM) D638 Tensile Test, ASTM D2240 Hardness Test, ASTM D5630 Ash Test, ASTM D3418 Melting Point and Crystallization Point Test, ASTM D256 Impact TEST and ASTM D648 Heat Deflection Test. Hands-on laboratory sessions reinforce topics covered during lecture.

ADM 120 Manufacturing Processes 3.0 UNITS
Catalog Course Description: This course covers the basic processing methods for metals and woods. Topics include hand tools and power tools, machining, joining, shaping, bending, surface preparation and finishing, Computer-Aided Drafting (CAD) and blueprint.

ADM 230 Plastic Manufacturing 3.0 UNITS

This course covers the basic processing methods for plastics and rubbers. Topics include an introduction to plastics, injection molding, compression molding, blow molding, thermoforming, compound extrusion, pipe extrusion, film casting, film blowing, additives and fillers, and color matching. This course meets two hours per week for lecture, as well as an additional two hours of lab per week where concepts introduced during lecture are reinforced.

ADM 231 Computer Numeric Control 3.0 UNITS

This course introduces students to basic Computer Numeric Control (CNC) Mill and Lathe operation. Concepts to be covered include Pendant operation, basic G and M coding, and tool setup. This course prepares students for the National Institute for Metalworking Skills (NIMS) CNC Milling Operator certificate test. The concepts covered in lab reinforce concepts covered in lecture.

ADM 182 Wood Science 3.0 UNITS

Catalog Course Description: This course familiarizes the student with the basic structure, anatomy, moisture relationships, and deterioration process of the various woods used in U.S. commercial manufacturing.

ADM 232 Welding 4.0 UNITS

This course introduces the students to the fundamentals of welding. It provides the student with opportunities for training in Shielded Metal Arc Welding (SMAW) and Flux Cored Arc Welding (FCAW). This course prepares students for the Certified Welder Test accredited by the American Welding Society.

ADM 241 Manufacturing Design 3.0 UNITS

This course is an overview of the manufacturing industry. Topics include organization structure, lean manufacturing, regulations, environmental and safety concerns, quality assurance, and modern manufacturing. There will be two field trips visiting nearby manufacturers. Students will also work on Capstone projects. Concepts discussed during lectures are reinforced during laboratory hours.

ADM 282 Machine Processes Architectural Woodwork 3.0 UNITS

This course covers the processing methods for woodworking. Students will learn to set up and properly use woodworking equipment including Gang Ripsaw, Shapers, Sliding Table Saw, Double Miter Saw, Wide Belt Sander, Dovetailer, Band Saw, Pocket Screw-Machine, Planer, and Jointer. Concepts discussed during lectures are reinforced during laboratory hours.

ADM 185 Fund. Architectural Manufacturing 3.0 UNITS

This course covers the basic processing methods for woodworking. Students will learn to safely use hand tools and power tools, machining, joining, shaping, bending, surface preparation and finishing, Computer-Aided Drafting (CAD) and blueprint. Concepts discussed during lectures are reinforced during laboratory hours. Students may not receive credits for both ADM120 and this course.

ADM 240 Robotics 3.0 UNITS

This course addresses autonomous control of robots for woodworking applications and machine learning. The course covers a variety of multidisciplinary topics necessary to understand the fundamentals of designing, building, and programming robots. Students learn to write their own programs and build their own robot prototypes using a hands-on approach to engineering design. Each topic is presented in the format of two-hour lectures immediately followed by a two-hour laboratory where students will apply the concepts discussed during the lecture.

ADM 256 CNC for Woodworking 3.0 UNITS

This course introduces students to basic Computer Numeric Control (CNC) Mill, Router, and Lathe operation. Concepts to be covered include woodworking router operation, basic G and M coding and tool setup. Concepts discussed during lectures are reinforced during laboratory hours. This course prepares students for the NJ DOE Recognized CTE End-of-Program Assessments, which involves the CNC skills. Students may not receive credits for both ADM231 and this course.

AMERICAN STUDIES

AMS 135 Introduction to American Studies 3.0 UNITS

This course provides an introductory overview to the field of American Studies. It seeks to answer the question, "What does it mean to be an American?" It integrates several disciplines, taking a holistic view of the American perspective. The goal is to introduce students to the ideas and theories most closely linked to the field. These include topics in American history, philosophy, cultural studies, art, literature, political science and international relations.

ANTHROPOLOGY

ANT 101 Intro to Cultural Anthropology 3.0 UNITS

This course is an introduction to the anthropological study of the nature and functions of human culture. The course examines how different cultures respond to certain needs expressed by religion, art, social organization and general patterns of life. The cultural diversity of humankind is emphasized.

ANT 102 Introduction to Physical Anthropology 3.0 UNITS

In this course, students examine evidence for the origin and evolution of humankind from our earliest ancestors to modern populations. This course incorporates theories and data from a host of anthropological, biological and archaeological expertise and seeks to explain how and why human beings developed and adapted all over the world.

COMPUTER ART**ARC 105 Intro to Computer Arts 3.0 UNITS**

This course provides an introductory level exploration of the Macintosh Operating System; print, interactive and time-based graphics applications; typography; and color theory for print, web and video. Students will also learn conceptual, historical, and theoretical aspects of art and design made with digital media. 3 hours lecture/1 hour lab

ARC 106 Digital Imaging 3.0 UNITS

This course provides students with the necessary knowledge and techniques for the creation and manipulation of photographic digital images using digital cameras and scanners for input, Photoshop for editing and manipulation, and photo quality inkjet printers for output. Assignments and discussions address critical issues in contemporary digital practices.

ARC 115 3D Digital Design for Fabrication 3.0 UNITS

The course provides students with the foundation knowledge of the technical and creative aspects of digital three-dimensional design that will allow students to conceive, edit and fabricate objects using 3D scanners, 3D modeling software and 3D printers.

ARC 107 Print Design 3.0 UNITS

This course will provide students with the necessary technical, conceptual and aesthetic knowledge to create effective designs for print that comprehensively communicate ideas through visual graphic form. Preparation of photos, graphics and text for use in layout and design will be thoroughly addressed. The use of typography and its integration with images to communicate specific ideas and content to a desired audience will also be a main focus of the course. Adobe InDesign, Illustrator and Photoshop software applications will be utilized.

ARC 109 Interactive/Web Design 3.0 UNITS

This course will provide students with the necessary conceptual knowledge of the visual aesthetics of interactive design. Students will design websites that use intuitive visual layouts and interactivity to communicate information and ideas to a specific audience. The course also covers the basic technical skills required to prepare images and content for the web. The Adobe Dreamweaver software application will be utilized in this course.

ARC 201 Digital Video 3.0 UNITS

Through lectures, demonstrations and project-based assignments, students will acquire knowledge of digital video preproduction, production and postproduction by studying treatment and storyboard design, lighting techniques, shot composition using high-definition video cameras, editing video and sound, creating title sequences, compositing video, compressing data, and publishing digital video. Industry standard desktop video and audio editing software applications will be utilized. This course will also examine the role digital video and moving images have played in contemporary art, documentation, and mass media. Equipment will be supplied.

ARC 202 Digital Animation 3.0 UNITS

This course provides students with the necessary knowledge and skills to create dynamic two-dimensional digital animation and motion graphics. Students will acquire the analytical and critical thinking skills required to conceive, produce and publish original digital animations utilizing industry standard software applications. Students will use storyboarding, rotoscoping, animated typography, original character development and scene production techniques. 2D animation fundamentals as well as concepts of motion and continuity will be thoroughly covered in this course. This course will also briefly introduce 3D compositing and interactivity. Equipment will be supplied.

ARC 280 Computer Arts Portfolio and Presentation 3.0 UNITS

Computer Arts Portfolio and Presentation provides student artists and designers with the knowledge to meet both their educational and professional goals. Students will prepare their work to be presented to both future clients and employers as well as for admission to senior academic institutions. Students will acquire conceptual knowledge and technical skills to effectively present their work in many formats including as a printed portfolio, a web-based portfolio, a video reel for animation and video works, an interactive video disk, in an exhibition setting and as a multimedia presentation to an audience. The course will culminate with an exhibition and presentation of students' work. Computer Arts Portfolio and Presentation is the Capstone course for the A.F.A. Studio Arts / Computer Arts Option.

ART**ART 125 Art History II 3.0 UNITS**

Art History II traces the development and evolution of techniques and styles from the 15th to the 20th century. This course will cover major movements of art including the Baroque, Rococo, Neo-Classicism, Romanticism, Impressionism, Post Impressionism, Dada, Surrealism, and Modernism. Students follow art into the twenty-first-century, and view how social, technological, and spiritual changes affected its development.

ART 103 Two Dimensional Design 3.0 UNITS

Two-dimensional design introduces the organization of visual elements on a two-dimensional plane. The elements of art and concepts of design such as composition, perspective, color and other art elements will be examined through lectures, demonstrations and related studio problems for the students to explore and solve. Techniques for handling materials will be developed.

ART 106 Drawing I 3.0 UNITS

This is an introductory course in basic drawing skills. Emphasis is on drawing from direct observation or life with a variety of traditional drawing materials and techniques. It includes an introduction to various systems of drawing - e.g., linear perspective and principles of chiaroscuro.

ART 107 Painting I 3.0 UNITS

This course is an introductory studio (laboratory) course in basic painting skills and techniques. Focus will be upon the use of paint to create fine art and explore individual creative potential. Emphasis will be on control and proficiency in handling the medium of paint and learning the fundamental painting techniques. This course is designed for beginners with little or no experience of painting. Proficiency in drawing is beneficial but not critical to successful completion of the course.

ART 113 Three Dimensional Design 3.0 UNITS

Student artists will learn to create practical and theoretical three-dimensional objects using a variety of techniques and materials. Through the study of nature and geometry, students will learn to use line, plane, mass, volume and surface.

ART 114 Color Theory 3.0 UNITS

Color theory teaches student artists how color affects the human brain, psyche, emotion and eye. Through lecture, multimedia presentation, and hands-on studio assignments, they learn how color functions with light, computers, and pigment.

ART 210 Introduction to Gallery Management 3.0 UNITS

Introduction to Gallery Management introduces students to the hybrid nature of arts-related careers including museum education, curatorship, arts administration, and operating commercial galleries. Students gain first hand experience in the day-to-day gallery experience working in the Benjamin J. Dineen, III and Dennis C. Attachment II Hull Gallery and demonstrate the scholarship, production and marketing skills necessary for the successful creation of an art exhibition and/or sustained gallery program. The material covered in Introduction to Gallery Management provides students with a general model of how art galleries function as cultural institutions that collect, display and interpret art and objects. Topics include the history of art display and art exhibition education and students explore curatorial practice within the vast range of gallery and museum exhibition spaces. The course provides practical experience for students interested in pursuing a career in the visual arts. As students engage with the course material they also develop and enhance their skills in visual and verbal literacy, self-expression, creative problem solving, writing, and critical thinking. The course material is complemented by field trips to museums and galleries in New York and New Jersey. Students will complete independent work as a docent at the Benjamin J. Dineen, III and Dennis C. Hull Gallery for twelve hours over the course of the semester.

ART 115 Art History I 3.0 UNITS

Art History Part I traces the development of art from prehistory through the early Renaissance. The course surveys the major developments in painting, drawing, sculpture, ceramics and architecture through the western canon and provides an introduction to the art of Africa, the Near East, South and Southeast Asia, China and Japan.

ART 116 Drawing II 3.0 UNITS

A continuation of Drawing I, this course will focus on individual development, a thorough understanding of drawing principles and further the use of drawing materials and techniques. Students are responsible for the purchase of their own supplies.

ART 220 Art in Context 2.0 UNITS

ART 220 is a co-requisite course to ART 130 and ARC 280 enables students to identify and research major trends in visual arts and their cultural and historical context through first-hand experience. Students develop a deeper understanding of the contemporary art world through increased engagement and familiarity with various New York and New Jersey art institutions. Students visit museums, galleries, art fairs, artist and design studios, auction houses, conservation studios and attend artist lectures to experience and better understand contemporary art and the structure of the contemporary art world.

ART 117 Painting II 3.0 UNITS

A continuation of Painting I, this course is an advanced studio painting class stressing individual painting skills and personal style. Painting II focuses on compositional theories and practice, experimentation with mediums, and creative approaches to subjects. Students are responsible for the purchase of their own supplies.

ART 130 Portfolio and Presentation 3.0 UNITS

Portfolio and Presentation will provide student artists with the knowledge and skills to meet both their educational and professional goals. First, student artists will develop a physical and digital portfolio showcasing their best works created at HCCC. This will allow students to seamlessly enter the third year of any four-year art program. Second, student artists will learn to market themselves to clients, museums, and galleries. A resume, artists statement, PowerPoint presentation, slide packet and web site will be produced. New technologies will be stressed along with traditional (non-digital) methods to prepare the student for the professional art world.

ART 120 Survey of Contemporary Art 3.0 UNITS
 Survey of Contemporary Art examines the development of the formal and conceptual concerns that have shaped 21st Century art. Distinguished by the absence of a uniform organizing principle or label, contemporary art is a diverse and eclectic combination of subjects, concepts, materials, and methods. Students explore the notion of what art is and how it can be made through the consideration of ideas, practices and concepts that are unique to our contemporary world.

ART 101 Experiencing Art 3.0 UNITS
 This course is designed as an introduction to the Studio Arts for non-art majors. Students will learn through the basic theories and practices of Art History, Drawing, Painting, Printmaking, and Sculpture.

ART 126 Figure Drawing 3.0 UNITS
 Student artists will learn to draw the nude and clothed male and female form. Emphasis is placed on scale, proportion, anatomy, expression and appreciation of the figure.

ART 127 Water Color 3.0 UNITS
 In this course, students will learn through demonstration and experience how to paint using the medium of watercolor. Students will create still life, landscape (out of doors, weather-permitting), figurative, and abstract paintings. Students who successfully complete this course will possess a basic painting kit, a portfolio of watercolor paintings, and the fundamental knowledge and basic skills needed to effectively use the medium.

AMERICAN SIGN LANGUAGE

ASL 101 American Sign Language I 3.0 UNITS
 ASL 101 is an introductory course to American Sign Language as it is used within the American Deaf community, as well as an introduction to Deaf Culture and history. The class will emphasize non-verbal communication as students learn basic vocabulary, sentence structure, facial expressions, signing parameters and other grammatical markers. Students will start to build basic expressive and receptive skills in American Sign Language that will be reinforced by a variety of activities.

ASL 102 American Sign Language II 3.0 UNITS
 ASL 102 is a second level course in American Sign Language as it is used within the American Deaf community, as well as a continuation of discussion of Deaf Culture and history. The class will emphasize non-verbal communication as students continue to build their sign vocabulary, sentence-structure, facial expression, and other grammatical markers. Students will continue to strengthen their expressive and receptive skills in American Sign Language as they engage in conversations that will be reinforced by a variety of activities. Content from ASL 101 will be continually reviewed and built on in this course.

ASL 105 Deafness as a Cultural Experience 3.0 UNITS
 This course explores Deafness through a cultural lens defined by members of the Deaf community. Students will explore the American Deaf community as a cultural minority, united using American Sign Language (ASL), and not as a group defined by their physiological condition of hearing loss. This course will further explore Deafness as a culture and how it intersects with other sub-groups including race, gender, and sexuality. Students will explore the American Deaf community as a linguistic minority whose traditions, beliefs, ethics, and heritage differ from the worldview that has been ascribed to the community. This course will prepare students who are entering a variety of fields such as, but not limited to, healthcare, social justice and human services, education, law enforcement and corrections, and hospitality among others. This course will increase student sensitivity, awareness, and understanding of Deaf culture.

BIOLOGY

BIO 270 Cell Biology 4.0 UNITS
 This course is a study of the mechanisms occurring within the cell. It is an overview of the structure and function of eukaryotic cells. It reviews in depth the organization of the cell plasma membrane and organelles. The physiology of each cell component is further detailed.

BIO 260 Molecular Biology 4.0 UNITS
 This Course is designed to give students a comprehensive understanding of the function and structure of nucleic acids and proteins in cells. Students learn various cell signaling pathways including protein transport, protein activation, apoptosis, and cell cycle control in both Eukaryotic and Prokaryotic Cells. Students also learn various Molecular Biology laboratory techniques including gene expression, recombinant DNA technology, Chromosome mapping, Protein and RNA extraction. Attachment

BIO 100 General Biology 3.0 UNITS
 This is an introductory course in contemporary biology designed to provide a foundation for further studies in biology. Instructional techniques include lectures, demonstrations and laboratory.

BIO 107 Human Biology 4.0 UNITS
 This course focuses on an understanding of the biological functioning of humans. Additional emphasis is given to genetics, ecology and microbiology. Laboratories include hands-on exercises and lab dissections.

BIO 111 Anatomy and Physiology I 4.0 UNITS

This course examines the structure and physiological processes of the human body and provides a background for understanding health problems, diagnosis, and treatment.

BIO 116 Principles of Biology II 4.0 UNITS

This course is a continuation of Principles of Biology I. Students will study the structure, function, and behavior of organisms and the unity and diversity of life. They will learn about biological organisms and processes and how to correlate new biological concepts with the ones previously learned. Laboratory exercises will encourage students to practice science through hands-on experiments.

BIO 201 Practical Nutrition 3.0 UNITS

This course stresses the application of nutritional principles to daily health maintenance and conditions that require special diet management. It is designed for Nursing and Health-related or Culinary Arts/Hospitality Management programs.

BIO 208 Ecology 4.0 UNITS

In this course, students will understand the mechanisms governing the structure and function of ecological systems, particularly the relationship between organisms and the environment. Students will investigate key environment issues such as; global climate change, acid deposition, loss of biodiversity and genetically modified food.

BIO 211 Anatomy and Physiology II 4.0 UNITS

This course is a continuation of Anatomy and Physiology I. Students will become acquainted with the basic functions, complexities, and inter-relationships of the components of the human body. Topics will include the circulatory, endocrine, digestive, excretory, and reproductive systems. Lectures are supplemented by laboratory sessions which will include dissection and elementary physiologic experiments.

BIO 250 Microbiology 4.0 UNITS

This course is geared for individuals entering the medical or health sciences professions. It will encompass a survey of microorganisms with emphasis on bacteria and applications of microbiology. The laboratory sessions will stress isolation, cultivation, and various biochemical and identification techniques of selected bacteria and other microorganisms.

BIO 240 Genetics 4.0 UNITS

This course examines the principles of inheritance and gene action, from the molecular to the organism level, and populations. Topics include Mendelian principles, molecular genetics, genetic mapping, population genetics, quantitative genetics, gene regulation, mutations, repair mechanisms, and the modern genetic manipulation.

BIO 120 Human Sexual Biology 3.0 UNITS

This non-lab science course is designed for liberal arts and other non-science majors. It gives students the opportunity to discover and understand the major biological aspects of human sexuality. It focuses on the anatomical and physiological study of the reproductive system, conception process, pregnancy period, prenatal development and delivery stages, sexual maturation, gender distinctiveness, and the infectious maladies and specific medical conditions associated with human sexuality. Video simulations in selected topic are incorporated to reinforce scientific exploration and formulation.

BIO 115 Principles of Biology I 4.0 UNITS

Biology is a vast subject that explores all of life, from molecules to ecosystems. Students will acquire a framework of key biological concepts into which they can fit the many new things they will learn. They will become familiar with the scientific process, in particular, the posing and testing of hypotheses, and the scientific study of life, evolution, ecology, plants, and animal forms and functions. Laboratory exercises will encourage students to practice science through hands-on experiments.

BIO 230 Histology 4.0 UNITS

In this course, students will recognize the structure and function of cells, tissues, and organs at the microscopic level. They will identify and recognize all of the major cell and tissue types of the human body. Histology is a laboratory course and lectures often take the form of slide demonstrations. The lab and lecture will be combined into a single learning experience.

BUSINESS

BUS 103 Introduction to Business 3.0 UNITS

This is an introductory course in contemporary business practices. Students develop a basic understanding of key functional areas of business including management, marketing, finance, economics, accounting and technology. The course focuses on current dynamic issues facing business such as globalization, entrepreneurship, ethical reasoning and the legal/regulatory environment.

BUS 205 Global Business 3.0 UNITS

The course provides a broad overview of international/global Business highlighting the opportunities and challenges multinational organizations face in today's dynamic environment. Students are introduced to the cultural, economic, political, competitive and legal environments in which international/global businesses operate.

BUS 299 Business Internship 3.0 UNITS
 This course provides the student with on-the-job business experience. The course allows the student to gain supervised practical experience working in a setting related to the student's area of business interest. Students must successfully complete 225 hours of practical experience in an approved business workplace. There is an additional lecture component for students to share their experience and discuss lessons learned.

BUS 230 Business Law 3.0 UNITS
 Provides a basic knowledge of business law covering the nature, structure and processes of our legal systems and the laws involving constitutional law, contracts, intellectual property, torts, and product liability. The case study approach will be used extensively, and the ethical issues in the business environment will also be addressed throughout the course.

CULINARY ARTS

CAI 115 Food Sanitation and Culinary Principles 3.0 UNITS
 This course introduces students to the principles of conduct and employment in the food service industry, coupled with sanitation concepts in the operation of a food service establishment. Professionalism, ethics, conduct, and employment opportunities during and after completion of a degree are discussed. Personal hygiene, fire safety regulations, including state and federal laws pertaining to the handling of food products are studied. This course prepares students for a nationally recognized ServSafe certification exam provided by the National Restaurant Association Educational Foundation (NRAEF)

CAI 114 Tableservice I 2.0 UNITS
 An introduction to the various types of table service styles and settings, including American, French, Russian, banquet, and family style. Emphasis is placed in proper dining room preparations, customer relations, placing and retrieving orders, clearing of tables, and securing the dining room. Students will also be exposed to the role of the dining room in the overall business plan of the restaurant business. The course also covers an introduction of wines and wine making.

CAI 117 Production Kitchen Skills I 2.0 UNITS
 This course is intended to provide a strong foundation in the basic fundamentals of commercial food preparation and practices. Proper knife skills and the use and care of tools and equipment is demonstrated and practiced in the laboratory. Emphasis is placed with students using hands-on experience in food production utilizing designed introductory menus. The hands-on experience is supported with demonstrations and lecture in the laboratory. Students will learn the appropriate cooking methods that may be applied to meats, fish, poultry, starches, and vegetables. The basic cooking methods are introduced and practiced in the laboratory. Students will also learn the proper techniques used in the preparation of stocks, soups, and sauces.

CAI 118 Pantry and Breakfast Cookery 2.0 UNITS
 An introduction to the basic and advanced level of breakfast cookery, including basic egg preparations, breakfast meats, potatoes, quick breads, batters, various breakfast items, farinaceous and hot and cold cereals. Students will experience short order cooking, and will gain knowledge of time and temperature in the preparation of various breakfast items. Skills and techniques will be developed in the preparation of meat products, such as sausage-making, and in the preparation of other breakfast meats. Ethnic and multicultural breakfast foods will be explored, as well as creative and modern breakfast alternatives. This course also serves as an introduction to the preparation of various salads, including simple, composed, bound, and hot/cold combinations. Emphasis will be on the preparation of dressings, dips, spreads, classical and modern sandwich-making, identification and use of salad greens, and fruit preparations.

CAI 119 Bakeshop I 2.0 UNITS
 An introduction to the preparation of basic quick breads, rolls, breakfast items, and basic desserts, including various icings and butter cream, puddings, cakes, cookies, and pies. Students will gain skills in the preparation of pie crusts, pie washes, and pie fillings. Emphasis will be placed on the understanding and use of ingredients, weights and measures, tools, and equipment used in the bakeshop.

CAI 124 Tableservice II 2.0 UNITS
 An extension and reinforcement of the skills practiced in Table Service I. Emphasis is placed on knowledge of the menu, suggestive selling techniques, napkin folding, and the use of wines and spirits in the restaurant business. Banquet service will be performed through a designed and scheduled buffet.

CAI 125 Externship I 1.0 UNIT
 This is a course designed to provide the student with on-the-job food service experience. The course allows the student to gain supervised practical experience working in a variety of food-service settings related to the student's area of interest. Students must successfully complete 150 hours of practical experience in an approved food-service establishment.

CAI 127 Production Kitchen Skills II 2.0 UNITS
 A continuation and reinforcement of the concepts and practices of Production Kitchen Skills I. This course exposes the students to more advanced techniques and applications utilizing different cooking methods. Students will be exposed to a variety of seafood items, as well as commercial meat cuts used for beef, lamb, veal, pork and poultry.

CAI 128 Introduction to Garde Manger 2.0 UNITS
 This course exposes students to the preparation of brunch items, fish and shellfish, hot and cold hors d'oeuvres, cold canapes, cold plated entrees, and specialty sandwiches as well as the design of salad bar setups. Basic forcemeat preparations used for pates,

CAI 121	Product Identification and Purchasing	3.0 UNITS
This course brings together the four most important foundations in foodservice purchasing: market and distribution systems, storeroom operations, cost controls, and product identification. In addition, this course covers current issues like security, legal and regulatory compliance, sustainable agriculture, aquaculture and genetically modified organisms (GMOs).		
CAI 210	Menu and Facilities Design	3.0 UNITS
This course introduces students to the fundamental principles of menu development as well as the procedure for designing and building a foodservice operation. Strong emphasis is given to the consequential interrelationship between the two and is substantiated through cogent explanation and demonstration. Students develop basic menus for a variety of meal periods based on a learned systemization. The course examines the tried and true process for designing, building and commissioning a restaurant including space allocation, work and product flow, facilities engineering, equipment selection and energy practices.		
CAI 215	Externship II	1.0 UNIT
This is a course designed to provide the student with on-the-job food service experience. The course allows the student to gain supervised practical experience working in a variety of food service settings related to the student's area of interest. Students must successfully complete 150 hours of practical experience in an approved food service establishment.		
CAI 206	Introduction to Sustainability	3.0 UNITS
This course addresses the costs and ethical implications of utilizing sustainable resources within the hospitality industry. The course covers alternative energy, recycling, and preservation of our diverse world's resources. World hunger and its ethical impact are addressed. Corporate responsibility in promoting socially-positive consumer behavior is also addressed.		

CANNABIS

CAN 101	Cannabis Compliance	3.0 UNITS
This course provides basic knowledge of the law and regulations governing the cannabis industry. Students will be instructed on methods to track good compliance to ensure consumer health and safety and diversion prevention. This course familiarizes students with a point-of-sale system, which tracks sales and inventory. Students also develop a simulated peer-to-peer training session that demonstrates their knowledge of the compliance procedures most common in the field, combined with their ability to communicate them to regulatory agencies. The course also describes the application processes for cannabis licenses.		
CAN 121	Justice in Cannabis	3.0 UNITS
This course provides basic knowledge regarding the roots of cannabis prohibition and its multi-generational impact on our country and around the world. Students demonstrate knowledge about the global re-legalization efforts surrounding cannabis use. Students effectively demonstrate knowledge of the social equity programs in the State of New Jersey, among other states.		
CAN 201	Cannabis Health and Safety	3.0 UNITS
This course introduces the fundamentals of biosecurity, various pests that pose a threat to cannabis production, and products throughout the entire vertical supply chain. The various insects, microbes, birds and rodents that pose a threat to the production of quality cannabis are discussed. Students learn about leading integrated pest management theory, workplace sanitation, reporting, and accountability. Students are introduced to safe-handling procedures and the basics of OSHA.		
CAN 221	Cannasseur Level I	3.0 UNITS
This course provides students with skills to properly profile strains of cannabis and ability to identify most, if not all the different types of products offered to consumers, including basic chemical makeup and their effects and side-effects. Students will also learn about the various production processes and consumption methods.		

ADULT TRANSITION

CBICAT AP	Acces Program- Courses	0.0 UNITS
N/A		

BAKING PASTRY

CBP 211	Meringues, Souffles, and Frozen Desserts	2.0 UNITS
Students will learn how to work with an ice cream machine to create basic frozen desserts, such as sorbets, sherbets, ice creams, and Italian ices. Techniques to produce meringues and their various applications will be taught. An introduction of hot and cold souffles completes the course. Prerequisite: CBP 124		
CBP 212	Desserts for Restaurant andin Store Retail	2.0 UNITS
This class is designed for students to have an understanding of a different career option available in the pastry arts. The class is divided into two distinct styles of desserts. The first half of the class will be devoted to learning restaurant and cafe style pastries along with the art of plating. The second half of the course will cover the mass production aspect of the pastry industry. The focus will be on in-store retail/ bakery style desserts using pre-mixes. Prerequisite: CBP 211		

- CBP 220 Petits Fours, Mignardise and Candies 2.0 UNITS**
The art of working with chocolate, candy making, and petits fours is the emphasis of this class. Students learn chocolate tempering, and will be able to apply it to create a wide variety of truffles, molded candies and decorations. Students produce popular candies using knowledge gained in Introduction to Professional Baking. The course also covers the production of mignardise, petits fours, such as sec and glace.
- CBP 226 Chocolate and Sugar 2.0 UNITS**
Students use classical and current techniques to create a Chocolate, Sugar and Pastillage showpiece. Students learn the elements of planning, designing and assembling a competition caliber showpiece of their own design. Through multiple techniques inclusive of template making, casting, sculpting, blowing, pulling, and decorating, students will create a multiple medium showpiece.
- CBP 225 Advanced Artisanal Bread Baking 2.0 UNITS**
The Advanced Bread Baking class is designed for bakers seeking to further their technical knowledge and to refine their hands-on skills in the art of making artisanal bread. The course offers a complex and detailed examination of the bread baker's art. Content material focuses extensively on the creation and use of sprouted, whole, and heirloom, flours in the maintenance of sourdough and levain cultures, as well as the production of sourdough bread using ancient grains. Students produce various breads of both contemporary and ancient origin. Hands-on time is also devoted to the creation of a decorative bread display. A key focus is on naturally leavened breads that use ancient grains.
- CBP 120 Introduction to Professional Baking 2.0 UNITS**
This course introduces the basic principles and techniques used in bread baking and pastry arts. It covers: Product identification, proper use of equipment, measurements, baking terminology along with food costing and storeroom procedures, and demonstrations of mixing methods for yeast raised breads, cakes, custards, chocolate, sugar and creams are included. Prerequisites: CAI 113, CAI 114, CAI 117, CAI 118, CAI 119
- CBP 121 Basic Bench Work 2.0 UNITS**
Emphasis will be on various bread mixing methods and their characteristics. Students will learn the relationship between mixing and fermentation. The understanding of gluten and its importance in the bakeshop will be a key component to the lab. Lean and rich doughs will be produced using hands-on techniques. Also the craft of artisan breads will be taught using a diversity of pre-ferments and sponges showing their advantages and disadvantages. Pre-requisite: CAI 119 Co-requisite: CBP 120
- CBP 124 Tarts, Tortes and Gateaux 2.0 UNITS**
Students will utilize cake mixing methods to create traditional and nontraditional desserts. The use of timeless fillings and icings such as ganache and Bavarian cream will culminate with the student creating classical desserts such as Linzer Torte, Sacher Torte and Gateau St. Honore. The ever popular cupcake will also be produced showing its versatility in today's market. Prerequisite: CAI 129 and CBP 122; Co-requisite: CBP 120

CDA-INFANT/TODDLER

- CDI 100 Infant/Toddler CDA Workshop I 4.0 UNITS**
This course introduces students to the Child Development Associate Credentialing process and provides comprehensive instruction in early childhood education/child development. Students will begin development of a Professional Portfolio and practice strategies for observing and recording children's behavior. At the conclusion, students will have satisfied 60 hours of the 120 hours of formal training, covering the six Competency Standards required by the Council for Professional Recognition, which issues the CDA to qualified candidates. Students are expected to be employed, or to volunteer, either full or part-time, in an Early Head Start program or a child care center, with children between the ages of birth through 36 months. The course may be applied to the Early Childhood Education programs as a substitute for ECE 201, Introduction to Early Childhood Education.
- CDI 110 Infant/Toddler CDA Workshop II 4.0 UNITS**
This course helps students expand their knowledge of the Child Development Associate credentialing process and provides comprehensive instruction in early childhood education/child development. Students will develop skills in planning curriculum for infants and toddlers and complete the Professional Portfolio. The course offers 60 contact hours of formal training covering the six Competency Standards as required by The Council for Professional Recognition. Combined with CDI 100, Infant/Toddler CDA Workshop I, students will satisfy the 120 contact hours of formal training, as required by the CDA National Credentialing System. Students are expected to be employed, or to volunteer, either full- or part-time, in an Early Head Start program or a child care center, with children between the ages of birth through 36 months. The course can be applied to the Early Childhood Education programs as a substitute for ECE 230, Infant/Toddler Curriculum. Prerequisite: CDI 100; Co-requisite: CDI 120
- CDI 120 Field Experience Infant/Toddler Setting 3.0 UNITS**
Students will be expected to self-place in a licensed Infant/Toddler center, an Early Head Start program or may be observed in their place of employment. All students will meet once a week for 50 minutes of class time, as well. These 120 hours may be applied to the 480 hours necessary to apply for the Infant/Toddler CDA Credential. Prerequisite: CDI 100; Co-requisite: CDI 110

CDA-PRESCHOOL

CDP 100 **Preschool CDA Workshop **4.0 UNITS****

This course introduces students to the Child Development Associate Credentialing process and provides comprehensive instruction in early childhood education/child development. Students will begin development of a professional resource file and practice strategies for observing and recording children's behavior. At the conclusion, students will have satisfied 60 hours of the 120 hours of formal training required by the CDA National Credentialing Program. Students are expected to be employed, or to volunteer, either full or part-time, in a child care center, preschool, or pre-kindergarten program with children between the ages of 3 and 5. The course may be applied to the Early Childhood Education programs as a substitute for ECE 201, Introduction to Early Childhood Education.

CDP 110 **Preschool CDA Workshop II **4.0 UNITS****

This course helps students expand their knowledge of the Child Development Associate credentialing process and provides comprehensive instruction in early childhood education/child development. Students will develop skills in planning curriculum for preschoolers and complete their professional resource file. The course offers 60 contact hours of formal training. Combined with CDP 100, Preschool CDA Workshop I, students will satisfy the 120 contact hours of formal training, as required by the CDA National Credentialing System. Students are expected to be employed, or to volunteer, either full- or part-time, in a child care center, preschool or pre-kindergarten program, with children between the ages of 3 and 5. The course can be applied to the Early Childhood Education programs as a substitute for ECE 211, Early Childhood Curriculum. Prerequisite: CDP 100; Co-requisite: CDP 120

CDP 120 **Field Experience in a Preschool **3.0 UNITS****

Students will be expected to self-place in a licensed preschool center, a Head Start program, or may be observed in their place of employment. All students will meet once a week for 50 minutes of class time, as well. These 120 hours may be applied to the 480 hours necessary to apply for the Preschool CDA Credential. Prerequisite: CDP 100; Co-requisite: CDP 110

CHEMISTRY

CHP 105 **Introduction to Environmental Chemistry **4.0 UNITS****

This course explores the earth's atmosphere, hydrosphere, lithosphere and biosphere from a chemical perspective, and investigates the chemical composition and reactions that characterize the earth's systems. Chemical processes in each of these spheres are used to illustrate and explain fundamental chemical concepts. Other topics include ozone depletion, acid rain, radiochemical dating, and global climate change.

CHP 201 **Environmental Chemistry **4.0 UNITS****

Students study pollutants in air, water and solid waste, as well as their sources, lifetimes, spread, and toxicity to human health. The explanation is based on chemical reactions, mechanisms rate, and some physiology. Laboratory work introduces experiments pertinent to the lecture subjects, using micro-scale chemical analysis, instrumental analysis, and computer-interface.

CHP 100 **Introduction to Chemistry **3.0 UNITS****

This course is designed for students who have not had high school chemistry and for those who wish to review the subject. The course emphasizes descriptive chemistry. Topics include measurements and units, the periodic table, the atom, nuclear radioactivity, bond formation, simple stoichiometry, acid-base, redox, and organic compounds. The associate laboratory involves common measurement techniques and illustrates the lecture materials presented.

CHP 111 **College Chemistry I **4.0 UNITS****

This course is an introduction to common physical and chemical properties of substances and solutions. Topics cover scientific measurements and SI units, atomic structure and the periodic table, inorganic nomenclature, gas laws, chemical stoichiometry, chemical bonding, molecular geometry and polarity, thermochemistry, liquid properties, cubic crystals, and solutions. Laboratory work illustrates common lab techniques as well as chemical principles.

CHP 211 **College Chemistry II **4.0 UNITS****

This course is a continuation of College Chemistry I and an introduction to physicochemical concepts. Topics cover reaction rate, chemical equilibria, precipitation, acid-base, complex ion, redox, electrochemistry, nuclear reactions and thermodynamic quantities. Laboratory work introduces experiments pertinent to lecture subjects and consists of semiquantitative analysis.

CHP 225 **Organic Chemistry I **4.0 UNITS****

This is the first of a two-course sequence of introductory organic chemistry. The physical and chemical properties of organic compounds, including aliphatics, alicyclics, and aromatics are studied through an examination of their structure, preparation, reactivity, and spectral properties. The study of organic functionality centers in the hydroxyl and carbonyl groups. The laboratory component includes separation and purification techniques and other synthetic procedures.

CHP 230 **Organic Chemistry II **4.0 UNITS****

This course is a continuation of Organic Chemistry I. The studies proceed to aromatic compounds, aldehydes, ketones, carboxylic acids and their functional derivatives, amines, phenols and arylhalides. Emphasis is placed on group functionality and reaction mechanisms. Laboratory work illustrates organic synthesis, reactions, chemical analysis, and spectroscopic identification.

CONSTRUCTION MANAGEMENT

CNM 120 Intro Engineering Sci and Calc 4.0 UNITS

This is a preparatory class for the students who intend to pursue a career in Construction Management or in the field of Civil Engineering. The course develops an understanding of the science and mathematics involved in engineering. Students learn to perform mathematical calculations used in construction and project management. Students analyze physical laws and how to apply that analysis in engineering fields.

CNM 201 Introduction to Basic Structures 3.0 UNITS

This course provides students with a basic knowledge of structural analysis and design for buildings, bridges and other structures. Students investigate the behavior of structural systems and elements through design exercises, case studies, and load testing of models. Students design structures using timber, masonry, steel, and concrete and gain an appreciation of structural design, with an emphasis on environmental impact associated with large scale construction.

CNM 222 Construction Project Management 4.0 UNITS

Students learn the processes, techniques and procedures involved in a construction project from conception to completion. The course provides an opportunity to learn about common construction methods and materials involved. Students also learn technical skills involving in the areas of cost control, scheduling, risk analysis, delay analysis, administrative procedures, safety regulations, labor relations, and record keeping.

CNM 220 Construction Codes 3.0 UNITS

This course provides students with a theoretical understanding of how to examine new and old structures to ensure they are built properly and follow applicable building codes and safety regulations. This course provides an introduction to the basics of working in the building inspection field with the knowledge of construction codes, required documentation protocol, and standard practices.

CNM 205 Surveying and Site Planning 3.0 UNITS

Students learn site development, site selection, site analysis, site plans, designs, and approval processes. Students are introduced to the principles of construction surveying, project layout, and operation of surveying equipment. Topics include: interaction of surveying with other disciplines, measurements, concepts, accuracy, precision, and levelling; methods for measuring distance, elevation angles, bearings and azimuths using level instrument and transits; traverses and computations; basic topography and mapping. Laboratory and fieldwork experiences include a field trip to a nearby construction project to review equipment site planning and surveying procedures; and a team project to review steps involved in site planning through completion of two types of construction sites: a traverse and an as-built survey.

CNM 202 Const. Proceed Materials and Tests 4.0 UNITS

Construction Procedures, Materials and Testing is a course in which construction systems are discussed along with material stresses and other engineering concepts. The course provides an introduction to materials used in construction as well as techniques used in blueprint reading for building construction. Students learn about construction methods through demonstrations and lab experiments. The main emphasis is on structural steel, masonry, wood, reinforced concrete, and combined structural systems. Students develop understanding of the construction process with different materials. They understand the relevant engineering and mathematical relationships.

CNM 225 Cost Estimation 3.0 UNITS

Students acquire a basic understanding of managing a project's cost. The course introduces the types of cost estimation from the conceptual design phase through the more detailed design phase of a construction project. In addition, the course highlights the importance of controlling costs and how to monitor project cash flow. Students develop a break-even analysis of construction tasks in a project.

CNM 230 Project Planning and Control 3.0 UNITS

Students develop a basic understanding of project management by comparing alternative designs and construction plans, methods of contracting, design management, and forms of information flow. Activities include preparing master plan schedules, tendering procedures, contractor cost calculations, and bid preparation. Students learn to budget, to plan and schedule construction, to manage production, and to employ project controls. Students acquire a basic level of proficiency in appropriate software.

COMMUNICATIONS

COM 115 Writing for Emerging Media 3.0 UNITS

Writing for Emerging Media introduces students to the theories and practices behind interactive new media writing including the history of and ethics involved in writing for online media. Students analyze new media and write their own online projects such as blogs, websites and wikis.

COM 101 Interpersonal Communication 3.0 UNITS

This course introduces students to the fundamentals of interpersonal communication. Students learn about the communication process, interpersonal theories and research, and the various ways that gender and cultural differences can affect interpersonal communication. Students also learn how to use effective communication skills in professional, social, and personal relationships. Students analyze the elements of interpersonal communication through group discussions, written assignments, and assessments.

COM 102 Introduction to Communication Theory 3.0 UNITS
Introduction to Communication Theory is an introductory survey of human communication on many levels of interaction, from interpersonal to mass communication. Through the study of theoretical communication models, students will analyze the influence of language, perceptions, culture, and media on the communication process. Theoretical and practical skills will help students become more competent communicators with other individuals and groups.

COM 270 Digital Media and Society 4.0 UNITS
Digital Media and Society examines the cultural implications of computer-mediated communication and related media, specifically digital media technologies and new media innovations. The course will explore theories of digital media and how they relate to current research and debates about social media, virtual communities, mediated realities, and artificial intelligence. The course investigates how various forms of digital media shape, guide, intersect, influence, and bound today's culture in a variety of contexts from organizations to social and political movements. The course also entails an in-class, praxis component where some class time will be dedicated to the creation and production of digital media content.

COM 202 Mass Media 3.0 UNITS
Mass Media explores the themes, issues, and theoretical debates central to the modern study of mass communication. Mass Media examines factors that influence the media and, in turn, examines the influence of media on attitudes, values, and behaviors, both individual and social. Mass media literacy, media economics and ethics, modern trends and changes in mass communication, and the critique of mass media as a source of information and influence of all "new media" are examined to aid students in understanding the evolution of mass communication as an academic discipline.

COM 201 Intercultural Communication 3.0 UNITS
This course provides a general introduction to and overview of the communication between cultures, domestically and globally. Emphasis is placed on how cultural differences and similarities impact generational and gender communication as well as the challenges of communication in a rapidly changing, culturally diverse society.

CRIMINAL JUSTICE

CRJ 221 Policeman's Role in the Community 3.0 UNITS
Focuses on the nature and responsibilities of the police officer's role. Topics include the following: police work as a profession, image of the police, tensions, conflicts, and the cooperation between the police and the community.

CRJ 120 Intro to Criminal Law 3.0 UNITS
This course is a case and textbook study of substantive criminal law, and the variations and similarities between the states and the federal system of criminal law principles, with an emphasis on New Jersey criminal law.

CRJ 200 Constitutional Liberties and Rights 3.0 UNITS
An introduction to the Constitutional civil liberties and rights assured to the American people. The course provides students with an understanding of the dynamics of the United States Supreme Court's approach to the Constitution's guarantees of personal liberties and civil rights. Students will explore such diverse topics as the preferred freedoms of speech, press and religious expression, separation of Church and State, the Constitutional right of privacy, the rights of persons accused of crime and the civil rights of historically-disadvantaged groups and persons.

CRJ 213 Criminal Justice Rpt Writing 3.0 UNITS
Focuses on report content through interpretation and evaluation of information. Emphasis is placed on accurate terminology.

CRJ 214 Corrections 3.0 UNITS
Various correctional settings and approaches are examined. Topics include punishment, probation, the prison community, and parole. Also studied is the role of community resources in treating the non-institutionalized offender, i.e. through halfway houses, alternative programs, and work and study release.

CRJ 215 Juvenile Justice System 3.0 UNITS
An introduction to the American juvenile justice system. The course provides an overview of the history of juvenile justice and a theoretical basis for interpreting the meaning and frequency of delinquent behavior and status offenses. Students will explore the various causes of delinquency, including psychological and sociological theories, the relationship between gangs, drugs and delinquency and the modes of interaction between law enforcement and juveniles. Students will also examine juvenile court procedures, due process rights of juveniles, alternative dispositions of offenders, including community intervention and residential/institutional confinement, and the future of juvenile justice.

CRJ 220 Gen Police Organization and Admin 3.0 UNITS
Examines the organization and functioning of law enforcement agencies including recruitment, career development and leadership selection. The historical and contemporary relationships of various levels of police organization are examined as well as the structure of police organizations in the United States.

- CRJ 222 Criminal Investigation 3.0 UNITS**
Examines the techniques, methodologies, and procedures of criminal investigation. Topics include conduct at the scene of the crime, recognition, development and the preservation of evidence, and interview and interrogation techniques. Finally, the role of surveillance and use of informants are analyzed. Legal and ethical issues are also discussed.
- CRJ 290 Criminal Justice Internship 4.0 UNITS**
The Internship in Criminal Justice is designed to develop professional standards and practical skills. This elective course will provide students with the opportunity to integrate theoretical principles learned in the classroom with firsthand experience in actual Criminal Justice agency settings. Students will perform tasks and engage in meaningful learning activities in order to acquire knowledge of the workings of a significant component of the criminal justice system. Students will develop interpersonal skills, values and the attitudes associated with professional growth. Under the direction of a faculty member and the supervision of an agency Field Supervisor, students will perform agency tasks nine (9) hours per week for 15 consecutive weeks for a total of 135 hours [add]. In addition, students will attend weekly seminars at the College during the externship to discuss and share their experiences and observations with faculty and peers.
- CRJ 230 Ethics and Justice 3.0 UNITS**
This course explores a wide range of ethical issues and moral dilemmas confronting practitioners in the field of criminal justice. The student is exposed to the traditional and competing theories of ethics in general; and, using case studies, applies these approaches to contemporary issues and problems confronting persons engaged or practicing in law enforcement, the courts, corrections and criminal justice policy-making.
- CRJ 111 Intro to Criminal Justice 3.0 UNITS**
This is an introductory course on the nature of the criminal justice system. The history, development, and current functioning of the system are examined. Emphasis is on the inter-relationship of various elements within this system including the police, the prosecutor, the defense, the courts, corrections, probation and parole officers.

COMPUTER SCIENCE

- CSC 235 Network Security 3.0 UNITS**
In this course, students learn to analyze and detect potential threats related to networked or to standalone computers. The course addresses security issues for TCP/IP at various network layers of the Internet including different strategies to harden the system against threats and attacks. Topics covered include data privacy availability and integrity, security issues, basic cryptography, email security, ways to provide privacy, source authentication, message flow confidentiality, and management business responsibility regarding compromised confidential data. The laboratory portion of the course reinforces topics covered in lecture as students gain experience in detecting vulnerabilities, identifying malicious malware, and hardening the network by implementing countermeasures against cyber threats and attacks.
- CSC 232 Cybersecurity 3.0 UNITS**
This course covers several topics such as Computer Security Technology and Principals, software security and trusted systems, threats, attacks and assets, security functional requirements, computer security strategy (security policy, security implementation, assurance and evaluation), data integrity, data confidentiality, data authenticity and data availability.
- CSC 100 Intro to Computers and Computing 3.0 UNITS**
This course introduces beginning students to computers and the latest application software. The course includes the history of computers, information processing, file management, discussion of hardware and software, operating systems and utility programs, and the Internet. The laboratory component includes Microsoft Office XP (Word, Excel, Access, PowerPoint). This course may not be used for credit by Computer Science or Management Information Systems majors.
- CSC 245 Ethical Hacking 3.0 UNITS**
This course provides students with the skills and knowledge required in the field of ethical hacking. Lecture topics introduce the concepts of security testing and network defense/countermeasures against vulnerabilities in networks and incident-handling-methods used when information security is compromised. Students learn how hackers compromise systems and remove their footprints. The laboratory portion of the course reinforces topics covered in lecture by enabling students to learn how to protect networks and systems by using methods learned in class. This course prepares students to take and pass the Ethical Hacking Certificate, which is recognized by industry and sponsored by the Ethical Hacking Console (EC).
- CSC 242 Computer Forensics and Investigation 3.0 UNITS**
This course is a restricted program elective required for students majoring in Cybersecurity. Students learn about the science of computer forensics and the important procedures necessary for investigating various cybercrimes. Digital forensics investigations are based on the concepts of collecting, analyzing, recovering, and preserving forensic evidence; students learn computer file system storage, analysis, and retrieval. This course prepares students to take and pass the Certified Forensic Investigation Practitioner exam (CCE), industry-recognized certificate by forensic investigators and law enforcement. This course requires two hours of lecture and two hours of hands-on lab.
- CSC 101 Scientific Programming 3.0 UNITS**
This is an introductory course in scientific programming using a current programming language to solve science and engineering problems. Emphasis is on the logical analysis of a problem and the formulation of a computer programming leading to the solution.

- CSC 109 Web Page Design 3.0 UNITS**
 This course introduces the different tools needed to design and maintain web pages. The standard tool of web page design, HTML (HyperText Markup Language), will be the core design tool. Interactivity through the use of scripts will also be addressed. The process of transferring HTML pages through FTP (File Transfer Protocol) to be published on an official web site will also be addressed. Auxiliary tools such as graphics design, which is an important component of web page design, will also be investigated.
- CSC 111 Computer Science I 3.0 UNITS**
 Introduces the fundamentals of computer science. Algorithm design, flowchart, structure, programming methodology, hardware and software are discussed. A programming language such as Pascal, C++, or Visual Basic 6.0 is used to illustrate these concepts.
- CSC 113 Computer Logic and Discrete Math 3.0 UNITS**
 The basics of number systems. Boolean algebra and logic gates lay the foundation for the study of combinational logic and computer science. Combinatorial applications include Karnaugh Map techniques for logic simplification.
- CSC 115 Programming in C++ for Comp Science 3.0 UNITS**
 In this course the fundamentals of computer science are introduced, with emphasis on programming methodology and problem-solving. Topics include, but are not limited to, concepts of computer systems, software engineering, and algorithm design, programming languages and data abstraction, with applications. A high level language is fully discussed and implemented and serves as a vehicle to illustrate many of the concepts taught.
- CSC 117 Java Programming 3.0 UNITS**
 This course will introduce students to Java Programming, an object-oriented language. Students will develop stand-alone business applications and create applications called from within HTML page (applets) designed to be transported over the Internet and executed by browsers. The syntax, control structures, methods, arrays, strings and characters and graphics will be applied to bring interactive applications to web clients.
- CSC 212 Computer Organization and Design 4.0 UNITS**
 The operation of Flip-Flops as memory elements and counter analysis of Ripple/Synchronous mod counters are covered as building blocks for future design application. The major emphasis on counters is on the design of irregular and truncated counters using D and J-K Flip-Flops and integrated circuit applications of Up/Down counters and dividers. Also includes a coverage of timers, oscillators, and three-state operation. Registers are covered and include counting (Ring and Twisted Ring) shifting (Left/Right) and timing applications. The latter part of the course is devoted to arithmetic applications including 2's complement adders and subtractors with overflow and underflow detection, and BCD arithmetic and arithmetic/logic I.C. units. Computer instructions, timing and control, executions of instructions, and designs of a basic accumulator-based computer are also covered. The laboratory exercises are organized to support the above theory and to enable students to design, assemble, and test applications constructed with MSI/LSI chips.
- CSC 214 Data Structures and Advanced Programming 3.0 UNITS**
 Examines data structures and their software implementation. Topics include top-down design; pointer variables and dynamic data structures; linked lists, stacks, queues, recursion, graphs, tree search and backtracking; and sorting/searching techniques.
- CSC 226 Database Design and Concepts 3.0 UNITS**
 Provides both the basis for a solid education in the fundamentals of database technology and an introductory coverage of SQL. Topics include database management systems, relational data base systems, query languages, and application development systems.
- CSC 227 Intro to Operating Systems 3.0 UNITS**
 This course is structured to explain the functions of an operating system. During the course, students will be introduced to what operating systems are, what they do, how they do it, how their performance can be evaluated, and how various operating systems compare with each other. The main purpose of this course is to give students a solid background in the components of the operating system, their function, and goals, and how to interact and interrelate with them.
- CSC 231 Info Systems Analysis and Design 3.0 UNITS**
 The course will cover the basic theoretical and analytical foundations for systems planning, formulating strategic plans, optimizing operations in business, designing information systems, and augmenting business activities on web. Topics include five systems cycles, hardware selection criteria, input/output design, file structures, and design. This is a case study-oriented course.
- CSC 240 Intro to Networks and Networking 3.0 UNITS**
 This course provides students with the basic concepts of network computing, the seven layers of the Open System Interconnection (OSI) Model, Institute for Electrical and Electronics Engineering (IEEE) 802 networking model, and the benefits of various protocols. Students will understand peer-to-peer and server-based networks and their differences. They will become familiar with various networking topologies and how to select the best network topology for an environment. Students will learn how to install and configure NetWare TCP/IP software, how to use common TCP/IP applications, and how to troubleshoot common problems that may occur in a TCP/IP environment. This course also provides the background information needed in preparation for network management and certification.
- CSC 118 Python Programming 3.0 UNITS**
 The course is an introduction to basic principles of programming using Python. Python is an open-source scripting language that allows rapid application development of both large and small software systems. The course introduces students to the fundamentals of data

storage, input and output, control structures, functions, sequences and list, dictionary, sets, and file Input/Output. Students learn how to design algorithms, write external and internal documentation and design and write source code in Python.

CSC 216 Python Programming II 3.0 UNITS

This course is intended for students who have completed the Python Programming course (CSC 118) or have the prerequisite knowledge of the course topics discussed in that class. By the end of this course, students should have a solid understanding of program classes, objects, inheritance, exceptions, file handling, database modules, graphical modules, and numerical analysis modules. Students will explore core libraries that allow programs to access operating system services, manipulate data of many types, interact with the user through graphical user interfaces (GUIs), and crunch out data metrics. Labs will be used to reinforce concepts introduced during lectures.

CSC 217 Fundamentals of Data Science 3.0 UNITS

This course will introduce the students to a data science cycle, including manipulating, processing, cleaning, and visualizing data in Python language + Jupyter Notebook environment, for making reasonable decisions and communicating results. Lab hours reinforce concepts introduced and during lecture.

CSC 218 Data Visualization 3.0 UNITS

This course introduces students to the principles and techniques of data visualization. Students learn how to use Power BI to Drive Dashboard, the value of visualization, design principles of visualization, visualization with Data Tables, using shapes to create Infographics, visualizing performance comparison, visualizing parts of a whole, and visualizing changes over time. R and/or Python programming language will be used to teach students how to manage datasets and use plotting systems. Labs will be used to reinforce concepts introduced during lectures.

COLLEGE STUDENT SUCCESS

CSS 100 College Student Success 1.0 UNIT

Helps students acquire the skills and perspective they need in order to simultaneously succeed in college and prepare for careers. Students explore the cultures of college and the workplace with an emphasis on the role of communication skills, credentials, and research techniques in each. Time and stress management are also considered. Students submit weekly journals on assigned topics. In addition, they participate in small group discussions and seminars, investigate the support services available in the College and community, and prepare job search portfolios.

COMPUTER TECHNOLOGY

CTC 212 Computer Organization and Design 4.0 UNITS

The operation of Flip-Flops as memory elements and counter analysis of Ripple/Synchronous mod counters are covered as building blocks for future design application. The major emphasis on counters is on the design of irregular and truncated counters using D and J-K Flip-Flops and integrated circuit applications of Up/Down counters and dividers. Also includes a coverage of timers, oscillators, and three-state operation. Registers are covered and include counting (Ring and Twisted Ring) shifting (Left/Right) and timing applications. The latter part of the course is devoted to arithmetic applications including 2's complement adders and subtractors with overflow and underflow detection, and BCD arithmetic and arithmetic/logic I.C. units. Computer instructions, timing and control, executions of instructions, and designs of a basic accumulator-based computer are also covered. The laboratory exercises are organized to support the above theory and to enable students to design, assemble, and test applications constructed with MSI/LSI chips.

CTC 221 Microprocessor/Microcomputer System 4.0 UNITS

Presents the architecture and operation of the microcomputer. Topics include an introduction to the 8086 microprocessor including its architecture, operation, and instruction set. The instruction set is studied through programming examples. Interfacing to the 8086 microprocessor is thoroughly studied. Input/output port configuration and interrupt management are introduced and used in numerous design projects. The laboratory experiments consist of designing projects. Students are exposed to projects that include solving both software and hardware issues. The tools used include a PC loaded with an 8086 assembler and connected serially to a SDK-86 kit. Laboratory experiments cover an 8086 arithmetic program, accessing data in memory, using a PC to write a program with an assembler, generating digital waveforms, nested loops programming, reaction time programming, using D/A converters with microprocessors and vector graphics.

DATA SCIENCE

DSC 216 Python Programming II 3.0 UNITS

This course is intended for students who have completed the Python Programming course (CSC 118) or have the prerequisite knowledge of the course topics discussed in that class. By the end of this course, students should have a solid understanding of program classes, objects, inheritance, exceptions, file handling, database modules, graphical modules, and numerical analysis modules. Students will explore core libraries that allow programs to access operating system services, manipulate data of many types, interact with the user through graphical user interfaces (GUIs), and crunch out data metrics. Labs will be used to reinforce concepts introduced during lectures.

DSC 217 Fundamentals of Data Science 3.0 UNITS

This course will introduce the students to a data science cycle, including manipulating, processing, cleaning, and visualizing data in Python language + Jupyter Notebook environment, for making reasonable decisions and communicating results. Lab hours reinforce concepts introduced and during lecture.

DSC 218 Data Visualization**3.0 UNITS**

This course introduces students to the principles and techniques of data visualization. Students learn how to use Power BI to Drive Dashboard, the value of visualization, design principles of visualization, visualization with Data Tables, using shapes to create Infographics, visualizing performance comparison, visualizing parts of a whole, and visualizing changes over time. R and/or Python programming language will be used to teach students how to manage datasets and use plotting systems. Labs will be used to reinforce concepts introduced during lectures.

EARLY CHILDHOOD EDUCATION**ECE 231 Early Childhood Edu Extern I****3.0 UNITS**

The Externship courses in the Early Childhood Education Program are designed to allow the student to develop professional standards and practical skills in an early childhood setting. This course will provide the student opportunity to gain first-hand experience and learn the process of integrating knowledge skills and techniques with teaching practice. Students work or volunteer in 120-hour field experience at a child care center, school or site that provides care and education to children. They are expected to perform the required professional tasks of assisting the regular classroom teacher in implementing the center's child development and activity program, and to gradually assume the responsibilities of a ?group teacher.? Under the direction and supervision of the regular classroom teacher, the student will plan and implement activities that are appropriate to both the age and developmental level of the children.

ECE 241 Early Childhood Edu Extern II**3.0 UNITS**

A sequential continuation of ECE 231, Early Childhood Education Externship I, this course will provide the student opportunity to gain firsthand experience and learn the process of integrating knowledge skills and techniques with teaching practice. Students are placed in a field experience at a child care center, school or site that provides care and education to children. They are expected to perform the required professional tasks of assisting the regular classroom teacher in implementing the center's child development and activity program, and to gradually assume the responsibilities of a ?group teacher.? Under the direction and supervision of the regular classroom teacher, the student will plan and implement activities that are appropriate to both the age and developmental level of the children. Students will work or volunteer 120 hours at the externship site in fulfillment of course requirements.

ECE 216 Clinical Observations**2.0 UNITS**

In this course, students learn to be reflective educators by documenting and assessing student learning, analyzing classroom management strategies, collecting information relating to instruction, and evaluating professional relations to support the process of teaching and learning. This course is a two-hour lecture for a full semester and complements the field work requirements of the courses in the A.A.S. Early Childhood degree program.

ECE 100 Child Dev Associate Cda Workshop**4.0 UNITS**

This course introduces students to the Child Development Associate Credentialing process and provides comprehensive instruction in early childhood education/child development. Students will begin development of a professional resource file and practice strategies for observing and recording children's behavior. At the conclusion, students will have satisfied 60 hours of the 120 hours of formal training required by the CDA National Credentialing Program. Students are expected to be employed, or to volunteer, either full-or- part-time, in a child care center, preschool or pre-kindergarten program. The course is required for the Child Care Certificate and can be applied to the A.A.S. in Early Childhood Education as a substitute for ECE 201, Introduction to Early Childhood Education.

ECE 110 Child Dev Associate CDA Wkshp**4.0 UNITS**

This course helps students expand their knowledge of the Child Development Associate Credentialing process and provides comprehensive instruction in early childhood education/child development. Students will develop skills in planning curriculum for preschoolers and complete their professional resource file. The course offers 60 contact hours of formal training. Combined with ECE 100, CDA Workshop I, students will satisfy the 120 contact hours of formal training, as required by the CDA National Credentialing System. Students are expected to be employed, or to volunteer, either full- or-part-time, in a child care center, preschool or pre-kindergarten program. This course is required for the Child Care Certificate and can be applied to the A.A.S. degree in Early Childhood Education as a substitute for ECE 211, Early Childhood Curriculum.

ECE 120 Externship for CDA**3.0 UNITS**

Students are either placed, or expected to be employed, at a child care center, school or site that provides care and education to children. Students will demonstrate competence in assisting the regular classroom teacher and gradually assume the responsibilities of a ?group teacher.? Students will plan and implement activities that are appropriate to both the age and developmental level of the children. This course is required for the Child Care Certificate and can be applied to the A.A.S. degree program in Early Childhood Education as equivalent to ECE 231, Early Childhood Education Externship I.

ECE 201 Intro to Early Childhood Educ**3.0 UNITS**

An introduction to the field of early childhood care and education, core knowledge is introduced in the areas of child development theory, a healthy, safe environment, developmentally-appropriate curriculum, child guidance, family relationships, cultural and individual diversity and professionalism. Students will understand the importance of early childhood education as part of the whole educational process. Pre- or Corequisite: ENG 101(This course meets one of the required components of the New Jersey Infant/Toddler Credential.)

ECE 211 Early Childhood Curriculum**3.0 UNITS**

In this course, students extend their understanding of early childhood education. Emphasis will be on planning programs and activities that are developmentally-appropriate for children ages birth through eight. To help in understanding and meeting the needs of different

age groups, developmental characteristics for each age group will be related to planning, curriculum, and general expectations. Students will develop themes and lesson plans, construct learning materials, and collect ideas for interest areas and activities.

ECE 213 Creative Experience 3.0 UNITS

Students will develop curricula based on a few important principles. The approach is a practical one, with opportunity to gather a wide repertoire of ideas, as students experience creative and cooperative learning practices. Field trips to museums and places of interest are required.

ECE 214 Guiding the Young Child's Behavior 3.0 UNITS

Students will acquire knowledge, skills and dispositions in using individual and group guidance and problem-solving techniques to develop positive and supportive relationships with children. Methods will be practiced in promoting positive strategies of conflict resolution, and in developing personal self-control, self-motivation and positive self-esteem for the child, ages birth to eight.

ECE 215 Emerging Literacy 3.0 UNITS

Students will learn how children acquire communication skills, and how teachers can strengthen children's natural explorations of speaking, listening, writing and reading. Whole language, the natural approach and emerging literacy will be presented. The goal is for students to understand their role in helping children to become readers.

ECE 220 The Anti-Bias Curriculum 3.0 UNITS

Course materials and class activities will provide a means for students to develop an appreciation for diversity. Attitudes will be examined, along with the development of knowledge of culture, gender, social class awareness, and physical differences. Strategies for valuing children will prepare future teachers for teaching with dignity in a diverse world. Students will practice, via class discussion, role play, and other process-oriented techniques, the infusion of an anti-biased perspective in all curriculum areas.

ECE 230 Infant and Toddler Curriculum 3.0 UNITS

This course is an introduction to the practice of caring for infants and toddlers in a group care setting. Students will become familiar with child development, the role of caregivers, developmentally-appropriate curriculum and materials associated with the care of infants and toddlers. Students will explore the importance of developing positive relationships with culturally diverse parents and communities. The course will involve students in observations, group discussions and projects, material-making, and reviewing infant and toddler policies and practices. Field work requirement is 12 hours of observations. Prerequisite: ENG 101 (This course meets one of the required components of the New Jersey Infant/Toddler Credential.)

ECE 225 Infant/Toddler Health and Special Needs 3.0 UNITS

This course involves the study of policies, guidelines, and procedures of providing high quality care in safety, health, nutrition, and special needs for children from birth to age three. Topics include creating and maintaining safe indoor/outdoor learning environments, emergency response procedures, promoting health and preventing illnesses, providing and fostering good nutrition, and recognizing, understanding, and supporting children with special needs. Developmentally appropriate materials, practices, and activities are discussed as they relate to infant toddlers' safety, health, nutrition and needs.

ECE 224 Infant Toddler Social Emotional Growth 3.0 UNITS

This course focuses on the ways early experiences and relationships impact infants and toddlers from birth to age 3, emphasizing infant/toddler mental health, risk and resiliency, family-centered practice, social-emotional development, supportive families, parenting, and the influences of cultural diversity. Students participate in 12 additional hours of observation outside of class time.

ECONOMICS

ECO 201 Principles of Macroeconomics 3.0 UNITS

This course introduces students to the basic structure, terminology, and scope of macroeconomics. Topics include a definition of economics; supply, demand, and the resulting macroeconomic problems; national income accounting; determination of output and employment levels; savings and investments; inflation and unemployment; money and banking; and fiscal and monetary policy.

ECO 202 Principles of Microeconomics 3.0 UNITS

This course is a continuation of ECO 201. It covers market structures; theory of consumer behavior; supply, demand and elasticity; costs of production; price and output determination; current economic problems; and international economics.

EDUCATION

EDU 211 Foundations of American Education 3.0 UNITS

Based on the current ideas about teaching in America today, this course is a practical introduction to the teaching profession. It explores the knowledge attitudes, behaviors, and skills of good teachers and provides a realistic foundation for understanding the field of education and teaching as a profession. Students build a foundation of self-knowledge, knowledge of education as an institution and as a career, knowledge of teaching competencies and of issues in education. Students are required to spend a minimum of 12 hours in an elementary or secondary school classroom observing and recording child behaviors.

EDU 221 Clinical Experience**1.0 UNIT**

In this course, students learn to be reflective educators by documenting and assessing student learning, analyzing classroom management strategies, collecting information relating to instruction, and evaluating professional relations to support the process of teaching and learning. This course is a one-hour lecture for a full semester and complements the fieldwork requirements of the courses in the Education degree programs.

ELECTRONICS ENGINEERING TECH**EET 111 Electric Circuits I****4.0 UNITS**

An integrated study of AC and DC circuits in which the sinusoidal system is introduced early in the course. The course covers the concepts of Ohm's Law, Kirchhoff's Laws, and DC circuits such as series circuits, parallel circuits, and series-parallel circuits. The study of capacitors and inductors serves as an introduction to the sinusoidal system and the behavior of R, L, and C in such a system. The laboratory component includes the use of test instruments in experiments dealing with Ohm's Law, series circuits, parallel circuits, and series-parallel circuits, followed by a study of internal resistance and loading. The final experiment supplies facility in the applications of the oscilloscope.

EET 212 Active Electronic Devices**4.0 UNITS**

Introduces solid state devices. Emphasis on device terminal characteristics and models. The course includes the PN junction transistor characteristics, BJT biasing techniques, BJT models, BJT small signal amplifiers, junction field effect (JFET) and metaloxide silicon-field effect (MOSFET) transistor characteristics. Experiments cover semiconductor diode circuits, half-wave rectifier, full-wave characteristics, common emitter transistor characteristics and the parameters and components of a transistor amplifier circuit.

EET 211 Electric Circuits II**4.0 UNITS**

Continuation of the integrated approach of Electric Circuits I. Concepts are extended to the analysis of AC systems power transformers, network theorems, network analysis, resonance, and filters. The associated laboratory supplements the course and introduces the use of additional test instruments as signal generators, frequency counters, and AC measuring instruments. The experiments cover Thevenin's Theorem, RC transients, Lissajous figures for phase-shift measurement, AC series circuits, AC parallel circuits, and series and parallel resonance.

EET 214 Active Circuit Analysis and Design**4.0 UNITS**

Continuation of EET 212, Active Electronics Devices. Bipolar junction transistor (BJT) small signal multistage amplifiers, decibels, and power amplifiers are studied. Junction field effect and metal-oxide-silicon field effect transistor biasing, and small-signal operations are covered. Consideration will be given to the frequency response characteristics of BJT and JFET circuits. The experiments study the performance of small-signal amplifiers, connected in the common-emitter mode, the emitter-follower mode, and the common-based mode, followed by an analysis of cascaded RC coupled amplifiers. The analysis and design of biasing, and FET small-signal amplifiers. The final experiment is a detailed analysis of the frequency response of a transistor amplifier.

EET 216 Pulse and Digital Circuits**4.0 UNITS**

Examines the characteristics, analyses and design of wave-shaping, switching, and digital circuits. Emphasis is on circuits and systems which use discrete semiconductor devices. Integrated circuit fundamentals and applications are present in succeeding courses. Topics include switching operation and characteristics of semiconductor devices; clipping, clamping, and limiting circuits; pulse nomenclature; logic circuit fundamentals; binary arithmetic and truth tables; triggered devices, and multivibrator circuits and counter circuits. The laboratory component of the course is intended to analyze circuit components, breadboarding of basic logic circuits, experimental analysis of pulse switching, and triggering circuits. In addition, proper testing techniques for these systems are developed. Experiments cover pulse fundamentals, pulsed response of RC circuits, diode clippers and clampers, BJT and FET switches, logic inverters and gates, discrete logic gates, Schmitt-trigger circuits, the unijunction transistor, the monostable and astable multivibrator, and the bistable multivibrator.

EET 222 Analog Integrated Circuits**4.0 UNITS**

Introduces the characterization and operation of integrated circuits in analog systems. Follows the sequence of courses in active electronic devices and their applications. This covers descriptions and applications of operational amplifiers and linear integrated circuits, as well as their use as building-blocks for linear and nonlinear analog systems. Topics included are inverting and noninverting amplifiers, buffer amplifiers, signal generators, timers, voltage regulators, active filters, function generators, multipliers, and D/A conversion. Limitations of op-amps are discussed, as well as other topics dictated by student and instructor interest. The laboratory component complements the course material. Proper breadboarding techniques are introduced and integrated circuit testing and evaluation are performed. The laboratory supports the theory with experiments in linear application of op-amps, nonlinear application of op-amps, signal generators and timers, data presentation-differentiator, integrator and triangular wave generator, and active filters. The student selects a project from the text or other literature.

EET 223 Integrated Circuits in Digital Systems**4.0 UNITS**

An introduction to the characterization and operation of integrated circuits in digital systems. A description of the various families of digital integrated circuits are given, including T-FL, ECL, and CMOS. Emphasis is on the operation and applications of TTL digital IC's such as the 7400 family of chips. Basic digital blocks such as the AND, OR and NOR gates are first studied, followed by the combinational and sequential IC systems, which are commercially available. These include the hex inverter, NAND/NOR gates, BCD to decimal decoder, exclusive OR, AND-OR-INVERT gate, full adder flip-flops, and memory. Also, counters shift registers and A/D-D/A conversion are discussed. The laboratory component of the course permits the student to properly breadboard, test, and evaluate digital integrated circuits and to observe and verify the applications of these systems by performing experiments in IC logic elements, combinational logic analysis and implementation, decoders, data selectors and data distributors, counter analysis, counters and registers, and trouble-shooting project.

EET 226 **Communications Systems** **3.0 UNITS**
 Presents the theory and operation of RF circuits, tuned circuits, amplifiers, and oscillator circuits. The theory of amplitude and frequency modulation including the principles of AM and FM transmitters and receivers are covered in detail. Also deals with single-side band transmission and pulse modulation. The laboratory exercises cover AM transmitters, AM receivers, FM transmitters, FM receivers, tuned RF amplifiers, and oscillators.

EET 228 **Electronics Projects Lab** **2.0 UNITS**
 This course involves the student in the practical aspects of electronic fabrication from proposal preparation to printed circuit board assembly and test. Application of electronic schematics, parts lists, layouts and artwork enables the students to produce similar documentation for a personal project that he/she will select as part of the course requirement. Heavy emphasis on parts selection and procurement, breadboarding, printed circuit board fabrication, assembly, soldering techniques and heat sinking are provided in this laboratory-based course.

EET 229 **Microprocessor/Microcomputer Sys Design** **4.0 UNITS**
 Presents the architecture and operation of the microcomputer. Topics include an introduction to the 8086 microprocessor including its architecture, operation, and instruction set. The instruction set is studied through programming examples. Interfacing to the 8086 microprocessor is thoroughly studied. Input/output port configuration and interrupt management are introduced and used in numerous design projects. The laboratory experiments consist of designing projects. Students are exposed to projects that include solving both software and hardware issues. The tools used include a PC loaded with an 8086 assembler and connected serially to an SDK-86 kit. Laboratory experiments cover an 8086 arithmetic program, accessing data in memory, using a PC to write a program with an assembler, generating digital waveforms, nested loops programming, reaction time programming, using D/A converters with microprocessors and vector graphics.

ENGINEERING SCIENCE

EGS 100 **Fundamentals of Engineering Design** **3.0 UNITS**
 The course employs fundamentals of geometry and engineering design to acquaint students with various disciplines of engineering. The course will utilize an engineering graphics component throughout the semester (freehand and CAD). It will include two engineering modules (chemical and mechanical). In addition to freehand sketching and instrumental drawing, the students are also introduced to AUTOCAD. Credit will not be awarded for both EGS-100 (Fundamentals of Engineering Design) and EGS-101 (Engineering Graphics).

EGS 101 **Engineering Graphics** **2.0 UNITS**
 The course is designed to familiarize students with technical drawing and design, orthographic projections, perspective, freehand sketching, instrumental drawing, tolerance, sectional views, descriptive geometry. Students are introduced to AUTOCAD mid-semester and perform some projects using this software. Credit will not be awarded for both EGS-100 (Fundamentals of Engineering Design) and EGS-101 (Engineering Graphics).

EGS 230 **Statics and Dynamics** **4.0 UNITS**
 This course is an extension of engineering physics courses on mechanics. Topics covered include the equilibrium of particle and rigid body systems subject to concentrated and distributed forces, the motion of particles and rigid bodies, the relation of motion of particles to various force distributions and torques, work energy relations, impulse momentum relations, and conservation principles.

PARAMEDIC SCIENCE

EMT 101 **Intro to Pre-Hospital Emergency Care** **3.0 UNITS**
 This is the introductory course for the Paramedic Program. The student will be introduced to their role and responsibility, concepts of illness/injury prevention; medical/legal issues, and communications.

EMT 110 **Pre-Hosp Medical Emergencies** **4.0 UNITS**
 This course covers airway management and ventilation, all areas of patient assessment and physical examination. Pathophysiology, pharmacology clinical decision-making, communication and documentation will be emphasized.

EMT 120 **Pharmacological Intervention** **4.0 UNITS**
 This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patients experiencing problems with the following systems: pulmonary, cardiology, neurology, endocrinology, allergy / anaphylaxis, gastroenterology, and renal/urology.

EMT 220 **Emergency Cardiac Care** **5.0 UNITS**
 This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for patients experiencing emergent problems of the following conditions: toxic exposure, hematopoietic dysfunction, environmentally induced (or exacerbated) medical condition, infectious and communicable diseases, and behavioral/psychological, gynecological, and obstetrical emergencies.

- EMT 230 Special Populations in Pre-Hospital Care 4.0 UNITS**
This course integrates pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for neonatal, pediatric, geriatric, patients and persons who have sustained abuse/assault, those with special challenges, and those with acute deterioration of a chronic problem.
- EMT 240 Pre Hospital Shock/Trauma Management 3.0 UNITS**
This course covers aspects of trauma care including: mechanisms of injury, hemorrhage, shock, soft tissue trauma, burns, head and facial, spinal, thoracic, abdominal, and musculoskeletal trauma.
- EMT 245 Pre-Hospital Special Operations 2.0 UNITS**
This course integrates the principles of assessment-based management in the implementation and plan for patients with common complaints. In addition, the course will cover the safe and effective ground and air medical transport, general incident management, multiple casualty management, rescue awareness and operations, hazardous material incidents, and crime scene awareness.
- EMT 250 Paramedic Field Internship 4.0 UNITS**
This course provides extensive clinical practice experiences so that the student may apply learned theories and skills while still under the guidance of a preceptor. Once completed, the student will be eligible for the certification examination for EMT ? Paramedic status.
- EMT 124 Paramedic Clinical Practicum I 2.0 UNITS**
In Clinical Practicum I, students participate in activities with live patients. Students rotate through various departments within the hospital gaining practical experience in patient assessment, basic medical procedures, and advanced medical procedures within the scope of practice for a New Jersey Paramedic. Students integrate into a comprehensive, multidisciplinary medical team who manage patients in the in-hospital setting in various levels of health. Co-requisites: EMT 101, EMT 110, and EMT 120.
- EMT 235 Paramedic Clinical Practicum II 3.0 UNITS**
In Clinical Practicum II, students continue to participate in activities with live patients. Students rotate through various departments within the hospital gaining practical experience in patient assessment, basic medical procedures, and advanced medical procedures within the scope of practice for a New Jersey Paramedic. Students integrate into a comprehensive, multidisciplinary medical team who manage patients in the in-hospital setting in various levels of patients' health. Pre-requisite: EMT-124; Co-requisites: EMT-220 and EMT-230.
- EMT 100 Emergency Medical Technician 6.0 UNITS**
The EMT course provides the didactic knowledge and practical skills required to become certified as an Emergency Medical Technician (EMT). Upon successful completion of this course, the student will be eligible to take both the State of New Jersey and National Registry of EMTs certification exams for EMT - Basic Providers. Note: There is a significant amount of lab/practice hours required for this course.
- EMT 248 Paramedic Clinical Practicum III 3.0 UNITS**
In Clinical Practicum III, students conclude their clinical experience while continuing to participate in activities with live patients. Students rotate through various departments within the hospital gaining practical experience in patient assessment, basic medical procedures, and advanced medical procedures within the scope of practice for a New Jersey Paramedic. Students integrate into a comprehensive, multidisciplinary medical team who manage patients in the in-hospital setting in various levels of health. Pre-requisite: EMT 235; Co-requisites: EMT 240 and EMT 245.
- EMT 252 Paramedic Clinical Capstone 2.0 UNITS**
The Paramedic Clinical Capstone are activities that occur at the end of the educational process to allow students to demonstrate and practice high-level decision making by integrating and applying all of their Paramedic learning. The capstone experience is the final clinical clearance before National Registry Testing. Students are required to successfully complete 18 out of 20 patient contacts in order to complete the requirement, as well as successfully complete the terminal simulation with the program's Medical Director. Pre-requisite: EMT 248; Co-requisite: EMT 250.

ENGLISH

- ENG 070 Fundamentals of Basic Writing 3.0 UNITS**
This course is designed for students who need to develop introductory writing skills before attempting college-level coursework. Students are guided through the process of writing by engaging in activities such as pre-writing, editing, and revising. They review essential grammar and paragraph structure. Offered in conjunction with RDG 070, Fundamentals of Basic Reading.
- ENG 071 Basic Writing I 3.0 UNITS**
This course is designed for students who need to develop writing skills before attempting college-level coursework. Students are guided through the writing process and practice such pre-writing activities as freewriting, brainstorming and outlining. They learn the principles of paragraph structure and development strategies for editing, and review essential grammar. Offered in conjunction with RDG 071, Basic Reading I.
- ENG 072 Basic Writing II 3.0 UNITS**
This course is designed for students who need to develop writing skills before attempting a full college-level schedule. Students are guided through the writing process and practice such pre-writing activities as freewriting, brainstorming and outlining. They learn the principles

of paragraph structure and development, strategies for editing, and review essential grammar. In addition, they learn the principles of developing and organizing longer essays. Offered in conjunction with RDG 072, Basic Reading II.

ENG 073 Basic Writing III 3.0 UNITS

This course is designed for students who need preparatory work in writing before attempting a full college-level program. Students practice developing and organizing essays in response to a series of challenging readings. Grammar is reviewed on an individual basis as needed. Offered in conjunction with RDG 073, Basic Reading III.

ENG 096 College Composition Workshop 1.0 UNIT

This workshop, required of ENG 101 students whose writing sample score is less than 7, provides instruction in essay revision. Students use word processors to facilitate revisions; instructors meet with students as essays are revised both at the terminals and at the conference desk.

ENG 101 College Composition I 3.0 UNITS

College Composition I helps students strengthen their college-level writing skills. Students deepen their critical thinking and hone their writing process and judgment as they compose for a variety of purposes and audiences. Throughout the semester, students revise and edit their writing to produce well-developed, grammatically clear, and coherent academic prose. While Composition it does not require a research paper, students begin to select, integrate, and synthesize outside sources into their compositions.

ENG 103 Technical Report Writing 3.0 UNITS

This is a writing course that prepares students for the many technical writing tasks they will encounter in the workplace. It provides thorough coverage of the basic skills and common techniques of technical writing. Students will use a wide range of examples and model documents to help them develop the skills necessary to produce clear and effective reports.

ENG 112 Speech 3.0 UNITS

This course teaches the oral communication skills students need in order to accomplish their college and career goals. All students address the class in talks designed to inform, persuade, and instruct. They also explore interviewing strategies; giving and using feedback; group discussion rules and roles, and the impact of culture, gender, and politics on communication. Students submit weekly logs chronicling their responses to readings and films as well as their own selected speaking/listening experience.

ENG 113 Intro to Journalism 3.0 UNITS

This course is designed for students interested in learning the art and science of journalism, including how to write a feature, conduct an interview and edit columns. It covers fundamental concepts and techniques that are common to all the media, with practical experience in those techniques; analysis of what is produced in the media; techniques that are specific to print, radio or television news reporting, with experience in producing material in the three media; and some of the professional issues, standards and traditions that inform journalism as a career. Further, it introduces electronic resources that are now part of everyday life for a journalist.

ENG 210 Creative Writing 3.0 UNITS

Students will develop their skills as fiction, poetry and drama writers. They work at conceptualizing, composing, revising, and editing their work. They keep a writer's journal, discuss assigned readings, participate in peer group criticism, and meet for individual conferences with the instructor. Key goals are to increase students' awareness of the possibilities of expressive writing forms, styles, and themes, and also to increase awareness of the creative process in its many variations.

ENG 211 Business Communications 3.0 UNITS

This course offers instruction in the techniques of effective business communication. Students practice formats and rhetorical strategies required in the business environment, including common types of letters, memoranda, and reports. Organization, tone, and diction are stressed, as are grammar, punctuation, and spelling.

ENG 115 Writing for Emerging Media 3.0 UNITS

Writing for Emerging Media introduces students to the theories and practices behind interactive new media writing including the history of and ethics involved in writing for online media. Students analyze new media and write their own online projects such as blogs, websites and wikis.

ENG EXEMPT Exempt AF Eng Multiple Measur 0.0 UNITS

ENG 007 Refresher: Eng Comp 0.0 UNITS

EOF No credit Refresher Eng Comp

ENG 006 Refresher: Basic English 0.0 UNITS

EOF NON CREDIT English 101 refresher

ENG 097 Composition Workshop for English 1.0 UNIT

This workshop is required of ENG 101 students whose Writing Sample score is less than 7 and who are enrolled in dedicated sections of College Composition I for former ESL students. The course provides guided practice in writing, revising and editing while offering additional instruction in two areas where proficiency is needed for communicative competence, but where non-native speakers' less extensive

knowledge puts them at a disadvantage: grammar and culture. Students use a word processor to write and revise paragraphs and short essays.

ENG 290 **Advanced English Seminar** **3.0 UNITS**
Advanced English Seminar is a culminating course for the English major. Students choose a focused and appropriate topic with significant direction and support from professor(s) and librarians, concentrating reading and research on a literary work(s), theme, time period, or author. Advanced English Seminar promotes advanced critical awareness of, and engagement with, a specialized topic and promotes creative and intellectual development. In addition to a final writing project and presentation, students compile a portfolio of their work throughout their college career. Advanced English Seminar prepares student writers to meet their educational and professional goals. Class lectures and discussion emphasize student-driven inquiry to include close reading, research, literary criticism, and analysis, and synthesizing sources.

ENG 215 **Memoir and Creative Non-Fiction** **3.0 UNITS**
students read diverse selections of non-fiction create their own personal essays and develop in-depth memoirs. develop and submit portfolios at mid semester and end of semesters.

ENG 102 **College Composition II** **3.0 UNITS**
This course is a continuation of College Composition I. It provides instruction in writing essays, with a special focus on argumentation and research. Required readings survey a range of current social and political issues. The course culminates in a research paper based on library research.

ENG 000 **Enrich Prog: Basic ReadandWrit** **0.0 UNITS**

ENG 001 **Workshop: ENG COMP** **0.0 UNITS**

ENG 002 **Bridge: Basic English** **0.0 UNITS**

ENG 003 **Refresher: Basic English** **0.0 UNITS**

ENG 004 **Refresher Basic ReadandWrit** **0.0 UNITS**

ENG 220 **English Internship** **3.0 UNITS**
English Internship is a practical course supplying English majors with hands-on experience in a work environment. Students gain experience in a supervised work setting related to the student's area of interest. Internships include government, non-profit, small businesses, newspapers, publishing, education, advertising, and other settings. Students must successfully complete 150 hours of practical experience in an approved internship site. Students may find their own placements, or seek help from the Career Services Office. Internships will include a significant writing component and may include writing in social media, marketing, websites, emails, letters, documents, reports, and creative expression. During the one hour of lecture time each week, students share internship experiences and the professor covers writing styles appropriate to various settings.

ENVIRONMENTAL

ENV 203 **Environmental Sociology** **3.0 UNITS**
This course focuses on the interactions between the natural environment, social organizations, and social behavior, with studies of the social factors that cause environmental problems, the societal impacts of those problems, and societal efforts to solve these problems. The course explores issues of science and technology, popular culture, economics, urbanization, racial and gender relations, as well as social movements. This course develops a broad understanding of society and environmental issues.

ENV 201 **The Urban Environment** **3.0 UNITS**
The course explores the relationship between theory, policy and the social construction of the urban environment. It examines the social, cultural and technological forces that shape our contemporary cities. The course also addresses issues that continue to challenge urban society, including environmental injustice and racism, degradation of local environmental quality, and the impact of local and global relationships on community scale environments.

ENV 110 **Introduction to Environmental Studies** **3.0 UNITS**
This course is designed to serve as an introduction to interdisciplinary thinking about the relationships between humans and their environments, and it seeks to explore the problems and possibilities that emerge from these relationships. Students will also learn the importance of natural resources, ecosystems and biodiversity; evaluate and discuss the effectiveness of environmental policies, and identify energy resources and approaches to waste management.

ENV 103 **Sustainability and Conservation** **3.0 UNITS**
This course introduces principles and practices of sustainability and conservation. It explores the origins and evolution of the discourse surrounding the idea of sustainable development, as it applies to local and global processes and practices. Other topics include: population and consumption, sources of energy, pollution, climate change, food, and water cycle and use.

ENV 105 Weather and Climate 3.0 UNITS
This course is designed for both students majoring in Environmental Studies and also for non-science majors who are interested in learning the fundamental weather and climate principles with major focus on the atmosphere as an important part of our environment. The topics will include the composition and general structure of the atmosphere, energy balance and energy exchange, atmospheric moisture and cloud formation, atmospheric pressure and wind, as well as general, regional and local circulations, cyclonic and several storms, climate classification and climate change and environmental issues relating to weather and climate.

ENV 205 Environmental Public Policy 3.0 UNITS
This course deals with environmental policies and how American society has responded to environmental problems through law and policy. Current environmental policies expressed in State and Federal legislation are examined. The course examines governmental agencies involved in regulations and implementing policies and acts, such as the National Environmental Policy Act, the Endangered Species Act, the Clean Water Act, and Right-to-Know Law.

ENV 207 Environmental Health 3.0 UNITS
This course introduces students to environmental effects on human health. Students gain an understanding of the impact of natural environmental factors and pollutants on human disease as well as formulate possible solutions to the major environmental health problems facing individuals and communities in industrialized and developing countries. Lecture topics include the effects of the environmental pollutants and chemicals on human health such as asbestos, lead, pesticides and tobacco. Students examine health issues through various case studies with an emphasis on possible future approaches to control health problems influenced by the environment.

ENV 107 Introduction to Beekeeping Science 3.0 UNITS
This course provides a deep dive into the scientific study of bees, covering their diverse species, life cycles, and essential roles in pollination and biodiversity. Through a combination of interactive lectures, hands-on demonstrations, and field visits to apiaries, students will gain practical knowledge in fundamental beekeeping techniques, hive assembly, disease prevention, and ethical practices.

ENGLISH AS A SECOND LANGUAGE

ESL 062 ESL Academic Discussion II 3.0 UNITS
ESL Academic Discussion II is taught in conjunction with ESL Reading II and builds upon the skills acquired in ESL Level I courses. Audio and visual media are used to support and enhance the content of the linked reading course. Students also learn and practice discussion strategies and the principles of English pronunciation in the context of the reading course material.

ESL 020 Introduction to ESL Writing 3.0 UNITS
Introduction to ESL Writing in conjunction with ESL 030 Introduction to Grammar for ESL Writing is designed for students whose placement scores indicate limited or no ability to write in English. Students begin by writing simple sentences about their own lives and experience. As they study vocabulary and the organization of writing in English, including concepts of main ideas and supporting details, they gradually move to writing multi-paragraph compositions using the structures and concepts they have studied.

ESL 023 ESL Writing III 3.0 UNITS
ESL Writing III provides intensive writing practice for low-intermediate ESL students. Both the writing process and the development of a clearly-written product are addressed. The course introduces multi-paragraph essays and focuses on paragraph and essay development in a variety of rhetorical modes. Use of coherence markers, cohesive devices and sentence variety is emphasized. Intermediate grammatical structures taught in ESL 033 are applied to writing using self- and peer-editing strategies.

ESL 024 ESL Writing IV 3.0 UNITS
ESL Writing IV builds upon the writing skills acquired in Level III. Using the process/product approach to writing, this course focuses on writing multi-paragraph essays. The thesis statement with appropriate topic sentences and supporting ideas and details are developed in a variety of rhetorical modes. Editing skills are developed through the application of grammatical structures taught in Grammar for ESL IV.

ESL 030 Intro to Grammar for ESL Writing 3.0 UNITS
Introduction to Grammar for ESL Writing combined with Introduction to ESL Writing supports and develops the ability of beginning writers to express themselves in English. It is designed for those students whose placement scores indicate limited or no knowledge of English. Basic grammatical structures are introduced and practiced in class through speaking and writing. Proficiency in grammar is defined as the ability to use the structures studied in the writing the students do.

ESL 031 Grammar for ESL Writing I 3.0 UNITS
Introduces basic grammatical structures in the context of writing. Structures such as the present and simple past tense verb forms, subject-verb agreement, basic modifiers as well as word order are studied and applied in writing activities using peer- and self-editing strategies.

ESL 032 Grammar for Esl Writing II 3.0 UNITS
Grammar for ESL Writing II develops usage of previously learned basic grammatical structures by focusing on word and tense choice in narrative and descriptive writing. Additional basic structures such as adverbs, prepositions, and future forms are addressed in the context of writing. Students apply grammar concepts in writing activities using self- and peer-editing strategies.

ESL 033	Grammar for ESL Writing III	3.0 UNITS
Grammar for ESL Writing III continues study and application of grammatical structures in the context of writing. The course refines usage of previously-learned structures and introduces use of perfect tenses, comparatives and superlatives, and adjective clauses. Students apply grammar concepts to writing activities using self- and peer-editing strategies.		
ESL 040	Intro to ESL Reading	3.0 UNITS
Introduction to ESL Reading together with ESL 060 Introduction to ESL Academic Discussion is designed for those students whose placement scores indicate limited ability to comprehend written English. Phonics and pronunciation, vocabulary, reading strategies, and skills such as comprehension, drawing inferences, identifying main ideas and supporting details are taught and practiced in the context of thematically related readings.		
ESL 041	ESL Reading I	3.0 UNITS
ESL Reading I is taught in conjunction with ESL Academic Discussion I and builds upon the skills acquired in ESL Level 0 courses. Through texts, supplementary readings and audio and visual media related to an academic theme, students learn to read for overall meaning and to identify main ideas, distinguishing them from supporting ideas. They develop critical thinking skills, increase their vocabularies and improve their reading comprehension.		
ESL 042	ESL Reading II	3.0 UNITS
ESL Reading II is taught in conjunction with ESL Academic Discussion II and builds upon the skills acquired in ESL Level I courses. Through texts, supplementary readings and audio and visual media related to an academic theme, students sharpen their critical thinking skills, increase their vocabularies and improve their reading comprehension.		
ESL 043	ESL Reading III	3.0 UNITS
ESL Reading III is taught in conjunction with ESL Academic Discussion III. Through texts, supplementary readings, and audio-video media related to an academic theme, students increase reading comprehension by developing their understanding of the relationship between textual content and structure. They learn to identify different rhetorical modes, word connotations and denotations, and the writer's purpose.		
ESL 044	ESL Reading IV	3.0 UNITS
ESL Reading IV is taught in conjunction with ESL Academic Discussion IV. Through texts, supplementary readings, and audio-visual media related to an academic theme, students refine their critical thinking skills, improve their reading comprehension, and develop an ability of thinking beyond the text.		
ESL 054	College Course Workshop	3.0 UNITS
College Course Workshop is a co-requisite of any content course offered to ESL students through paired-course-learning communities. It helps students meet linguistic challenges that they may encounter in the content course. At the same time that it helps students meet these challenges, it promotes students' development of the reading and writing skills that they need to cope with the content course demands. The instructors of both courses share materials and coordinate lessons throughout the semester.		
ESL 061	ESL Academic Discussion I	3.0 UNITS
ESL Academic Discussion I is taught in conjunction with ESL Reading I and builds upon the academic and communicative skills acquired in ESL Level 0 courses. Audio and visual media are used to support and enhance the content of the linked reading course. Students also learn to recognize and produce the sounds of American English in the context of the reading course material.		
ESL 063	ESL Academic Discussion III	3.0 UNITS
ESL Academic Discussion III is taught in conjunction with ESL Reading III. Audio and video media are used to support and enhance the content of the linked reading course. Students refine their pronunciation and communication skills through active listening, academic discussion, and presentation.		
ESL 064	ESL Academic Discussion IV	3.0 UNITS
ESL Academic Discussion IV is taught in conjunction with ESL Reading IV. Audio and video media are used to support and enhance the content of the linked reading course. Students learn and practice discussion strategies, debating techniques, presentation skills, and effective academic communication skills required in mainstream college level courses.		
ESL 084	Esl Reading and Discussion IV	4.0 UNITS
ESL Reading and Discussion IV is a four-credit course taught in conjunction with a college course, as a paired-course-learning community. Through texts, supplementary readings and audio-visual media related to the college course, students refine their critical thinking skills, improve their reading comprehension skills, and develop effective oral communication skills required for the linked college course.		
ESL 083	Esl Reading and Discussion III	4.0 UNITS
ESL Reading and Discussion III is a four-credit course which combines ESL Reading III, ESL Academic Discussion III and the content presented in the linked college-level course, as a paired-course learning community. The course teaches content vocabulary and general reading and academic discussion skills to help students meet the linguistic demands of a content course.		
ESL 004	Workshop: ESL Level 0	0.0 UNITS

ESL 005	Workshop: ESL Level I	0.0 UNITS
ESL 006	Workshop: ESL Level 2 Accelerated	0.0 UNITS
ESL 021	ESL Writing I	3.0 UNITS
Introduces the beginning ESL student to writing in English using the process approach and self- and peer-editing strategies. Fluency and correctness are developed through the application of basic grammatical structures taught in ESL 031.		
ESL 022	ESL Writing II	3.0 UNITS
ESL Writing II builds upon the writing skills acquired in Level I. Using the process approach to writing, this course focuses on developing topic sentences and expanding compositions through the use of supporting ideas and details. Editing skills are developed through the application of grammatical structures taught in Grammar for ESL Writing II.		
ESL 034	Grammar for ESL Writing IV	3.0 UNITS
Grammar for ESL Writing IV continues emphasis on structures acquired in previous levels and on self-editing strategies. More complex structures, such as the passive, noun clauses, unreal conditionals, and reported speech are introduced and incorporated in writing activities.		
ESL 007	Enrich Prog: ESL Pathway1	0.0 UNITS
ESL 008	Enrich Prog: ESL Pathway 2	0.0 UNITS
ESL 007	Bridge Prog: Pathway 1	0.0 UNITS
ESL 009	Bridge Prog: Pathway 1	0.0 UNITS
ESL 010	Bridge Prog: Pathway 2	0.0 UNITS
ESL 060	Intro to ESL Acad Discussion	3.0 UNITS
Introduction to ESL Academic Discussion is taught in conjunction with Introduction to ESL Reading. It is the listening and speaking component of a four-course program designed for those students whose placement scores indicate limited or no ability to understand spoken English. Phonics and pronunciation, vocabulary, reading strategies, and skills such as comprehension, drawing inferences, identifying main ideas and supporting details are taught and practiced in the context of thematically related readings.		
ESL 000	Enrich Prog: Esl Level 4 Writing	0.0 UNITS
ESL 001	Enrich Prog: Esl Level 4 Reading	0.0 UNITS
ESL 002	Workshop: ESL Level II	0.0 UNITS
ESL 003	Workshop: ESL Level III	0.0 UNITS
ESL 016	ESL Pathway 1	8.0 UNITS
ESL Pathway 1 is designed for students whose placement scores indicate limited ability to comprehend and produce written and spoken English. Students learn how to create short-written compositions and understand basic descriptive and informational texts. They learn to comprehend spoken English in the form of instructions and basic conversations, and they learn to produce simple oral descriptions of people and activities. Students are strongly encouraged to take ESL Pathway 1 in conjunction with ESL Skills for Success 1.		
ESL 017	ESL Pathway 2	8.0 UNITS
ESL Pathway 2 is designed for students whose placement scores indicate a developing ability to comprehend and produce written and spoken English. Students learn how to create short essays and understand descriptive, informational, and narrative texts. They improve their ability to understand conversations and short lectures, and they learn to deliver short oral presentations about topics of personal interest. Students are strongly encouraged to take ESL Pathway 2 in conjunction with ESL Skills for Success 2.		
ESL 026	ESL Skills for Success 1	4.0 UNITS
ESL Skills for Success 1 is a four-credit course that prepares low-beginning ESL students to live, study, and work in the United States. Students acquire skills that are necessary to succeed in college, make informed financial decisions, and clarify personal and career goals. They complete assigned readings and tasks, do short writing assignments, participate in classroom discussions, and incorporate the skills learned in the classroom into their daily lives.		
ESL 027	ESL Skills for Success 2	4.0 UNITS
ESL Skills for Success 2 is a four-credit course that prepares beginning ESL students to live, study, and work in the United States. It offers more advanced instruction in the practical skills introduced in ESL Skills for Success 1, providing students with the tools they need to succeed academically, to make informed financial decisions, and to clarify personal and career goals. Students complete assigned readings		

and tasks, do short writing assignments, participate in classroom discussions, and incorporate the skills learned in the classroom into their daily lives. Students are encouraged to take ESL Skills for Success 2 in conjunction with ESL Pathway 2.

NON-COURSE MEETING

EVENT 100 **Event/Non-Course Meeting** **0.0 UNITS**

EXERCISE SCIENCE

EXS 102 **Resistance Training Methods** **3.0 UNITS**

This course introduces students to simple and complex movements using free weights and machines. Students learn the principles underlying strength training and its relationship to human movement patterns. Students learn how to design personal resistance training programs that safely strengthen musculature. Lab activities apply lecture material and focus on safe and effective resistance training principles, basic functional anatomy, muscular strength and endurance, and basic nutrition.

EXS 115 **Sports Nutrition** **3.0 UNITS**

This course is an introductory study of nutrition. Sports nutrition incorporates the principles of biochemical and physiological processes related to cells and tissue responses to exercise. This course includes specific applications of nutritional theory to help individuals reach and maintain maximum sports performance. Students learn the basics of sports nutrition and how to apply this knowledge to their own active lifestyles. Additionally, this course examines vitamins, nutritional supplements, body composition, weight management and eating disorders in both male and female athletes.

EXS 101 **Intro to Exercise Science** **2.0 UNITS**

This course provides an overview of exercise physiology, sport and exercise psychology, biomechanics, motor behavior, sociocultural aspects of sport and exercise, sports nutrition, and other related topics. Various aspects of careers, requirements for advanced study and learning, certifications, and license necessary for professions in Exercise Science fields are explored.

EXS 103 **Aerobic Training** **3.0 UNITS**

Students learn a variety of formats for cardiovascular exercises and training. Self-assessment and development of realistic programs using specific training methods and equipment provide the student with a broad spectrum of options in cardiovascular training. Through lecture and laboratory exercises, students are introduced to both the practical and physiological aspects of a safe and effective workout program.

EXS 201 **Biomechanics** **3.0 UNITS**

This course emphasizes the analysis of the principles of movement through anatomical design. Major joints of the body, their actions, and muscles that do those actions are stressed. Application to physical exercise is stressed in lab work on strength, endurance and potential motion of major joints.

EXS 202 **Exercise Physiology** **3.0 UNITS**

This course includes the study of human responses and adaptations to exercise of varying levels of stress and intensity. Major topics include bioenergetics, the physiology of the circulatory, respiratory, muscular and nervous systems as they apply to exercise, and the underlying physiological basis of fitness. Laboratory experiences illustrate the practical application of theoretical content with hands-on experiences to measure and apply the concepts learned in lecture.

EXS 203 **Exercise Measurement and Prescription** **4.0 UNITS**

This course stresses the appropriate measurement of various aspects of human exercise. Measurement of body composition, cardiovascular efficiency, muscular strength and endurance, flexibility and other physiological parameters are explored and practiced. Students learn how to develop individualized and properly designed exercise prescriptions for adults, including special populations.

EXS 110 **Fitness Training Methods** **3.0 UNITS**

This course introduces students to the five health-related fitness components. Students learn a variety of formats, modalities, and equipment used for each fitness component. Laboratory activities apply lecture material and focus on performing various exercises safely and properly. Self-assessment of fitness in each of the categories allows students to create realistic fitness goals. Students learn the principles of fitness training and how to design a safe and effective personalized training program. Concepts introduced during lectures are reinforced during laboratory hours.

EXS 224 **Principles of Athletic Injuries** **3.0 UNITS**

This course introduces students to common athletic injuries and illnesses, prevention measures, signs and symptoms, emergency management, and common treatments. Emphasis is placed on prevention and emergency management of acute and overuse injuries common to active lifestyles. Pre-requisites: BIO-211, ENG-101.

FILM

FLM 101 Introduction to Film 3.0 UNITS

This is a basic course in film history focusing on the technical and artistic evolution of the medium and including the basic vocabulary of the cinema. Students view films from a variety of periods and genres by influential directors and studios, considering the political and social impact as well as historic perspective.

FLM 102 Latin American Literature in Film 3.0 UNITS

This course provides an introduction to the literature of Latin America through the examination of selected films. Major Latin American literary and historical periods are examined as represented within these films. Writing, in the form of reaction papers and a research paper, is an essential component of the class. The course is taught in English.

FLM 103 Women in Film 3.0 UNITS

This course explores the roles played by women in the movies, past and present, both on screen and behind the camera. Students consider the history of female directors, producers, and screen writers as well as actresses. Students also examine the ways the cinema has shaped the images of women in our society.

GEOLOGY

GEO 111 Physical Geology 4.0 UNITS

This course introduces basic landforms and geological processes. Topics include an introduction to plate tectonics, rocks and minerals, volcanoes, weathering, geologic history, earthquakes, crustal deformation, mountain building, and formation of the continents. The concept of global plate tectonic will be a frame structure for discoveries through the course. Laboratory work includes minerals and rocks analysis, earthquakes, and review of the geologic calendar. 2 hours lecture and 2 hours lab Pre-requisite: Exit Basic Math Co-requisite: ENG 101

GEOGRAPHIC INFORMATION SYSTEMS

GIS 104 Introduction to Geographic Information 3.0 UNITS

This introductory course covers the evolution of maps and projections, as well as the modern uses of GIS and Remote Sensing (RS). This course explores various methods of capturing data for use in GIS, including digitizing from maps, digital photos, satellite imagery, and Global Positioning Systems (GPS). A NASA program used to simulate satellite movements is utilized in this course. 2 hours lecture/2 hours lab Pre-Requisite: Exit all Basic Skills

HISTORY

HIS 211 History of Western Civilization II 3.0 UNITS

This course focuses on the principal political, economic, and social revolutions that have swept through Europe, Asia and Africa over the past 300 years. Students will consider, for example, how the Scientific Revolution and the Enlightenment have shaped our modern world view and its impact on the continents of Asia and Africa. Other topics that will be considered include the impact of the French Revolution on modern politics, and the meaning of "Liberty, Brotherhood, and Equality." The course will also cover the Industrial Revolution and its effect on the lives of ordinary men and women in Europe; Nationalism, Imperialism, and European expansion. Consideration will be given also to the horrors and accomplishments of the twentieth century on a global level.

HIS 104 History American Immigration and Ethnicity 3.0 UNITS

This course surveys the history of American immigration both forced and voluntary from colonial times to the present. Emphasis is placed on understanding how America changes immigrants and how immigrants have changed America. The course explores the formation of identity and values by different ethnic groups over time and the resultant tensions created within the common bonds of community.

HIS 106 U.S. History II 3.0 UNITS

This course traces the course of American history over the last 110 years. Subjects to be considered include Reconstruction, the destruction of the Plains Indians, the peopling of America, ethnic and racial tension, the rise of America to a global power, the Great Depression, World War II, the Cold War, the Civil Rights Movement, the Sixties, and the recent past.

HIS 130 African-American History 3.0 UNITS

The historical experience of African-Americans has often underlined the shortcomings of American society: slavery, Civil War, racism and Jim Crow laws. Yet, from Jamestown in 1619 to Anytown, USA today, African-Americans have helped build America, fought its wars, and, most importantly, helped to define our unique American identity. This is a story for all Americans.

HIS 131 History of the Islamic World 3.0 UNITS

This course considers the rise of Islam and the history of the Islamic World from approximately the sixth century C.E. to the present. Key issues include the life and teachings of the prophet Muhammad, the Islamic faith, its spread around the world, its different interpretations, Islamic empires, European imperialism, nationalism, authoritarian regimes, the post-9/11 world, and modern protest movements.

HIS 132 Latin-American and Caribbean History 3.0 UNITS

This course surveys the broad sweep of Latin American history from the Mayan and Incan civilizations through the recent past. The volatility of the multicultural societies of these lands, spilling over into fractious violence and brilliant creativity, will be a recurrent theme.

HIS 137 Women in American History 3.0 UNITS

This course is designed as a survey course that examines the experiences of women in the United States. This course will focus on the history of women from pre-European contact to the present. Students will come to understand the role of women and their contributions by examining their written records from the past to the present.

HIS 210 History of Western Civilization I 3.0 UNITS

This course examines the history of Western Civilization from ancient times to about 1400. It covers the development of Greek, Roman, Medieval, and early modern civilizations including Africa and Asia. Topics include the first world religions, the first cities, the origins of democracy and many other crucial beginnings. While the focus shifts from country to country, the subject always remains the same: the rise of the West from a global perspective.

HIS 135 History of Latin America 3.0 UNITS

This course surveys the broad sweep of Latin American history from the eve of European contact in the fifteenth century through the recent past. Patterns of change overtime, and their notable exceptions, are recurrent themes in the course, including colonialism, independence, nationalism, transculturation, artistic and literary expression, neoliberalism, and the region's contributions to important hemispheric and global developments. Prerequisite: ENG 101

HIS 220 World History I 3.0 UNITS

World History I introduces students to the broad sweep of human history up to c. 1500 C.E. The course examines many foundational developments in human history, including the origins of homo sapiens; the development of agriculture; the relationship between humans and the environment; the emergence of complex societies, states, and empires; worldwide cultural and artistic expressions; the origins of major world religions; the evolution of power structures, class, and gender divisions, and social hierarchies more broadly. Students will also be introduced to the nature of historical evidence and methods.

HIS 105 U.S. History I 3.0 UNITS

This course examines the various social, cultural, economic, and political currents that led to the formation of the United States of America. The course considers the first Americans, the settlement of North America by Europeans, the American Revolution, Federalism and the Constitution, slavery, the Civil War, and other key issues and events in the American past from pre-Columbian times to 1877.

HIS 133 History of Africa 3.0 UNITS

This course explores the history of the diverse continent of Africa from the origins of humanity to the present day. Key elements include empire and state formations, the development and influence of religion, diversity of cultures, the impact of geography, the Trans-Saharan trade, the slave trades, European intervention, African resistance, and independence.

HEALTH
HLT 124 Health and Wellness 3.0 UNITS

This is a course designed to identify principles of health, disease, nutrition, stress management, and exercise necessary in maintaining a healthy lifestyle. Concepts of risk factors, morbidity, and mortality are discussed.

HLT 211 Community Health 3.0 UNITS

Community Health is three hour lecture course that introduces the major concepts and principles of community health and the determinants of health status in communities. Community health covers the basics of administration, public health laws, and human resources managements. The course also discusses areas, such as health information, ethics and leadership.

HLT 103 Principles of First Aid 3.0 UNITS

This course combines lectures, demonstrations, and hands-on training and practice. Students will learn to recognize and respond to emergencies including shock, cardiac emergencies, poisonings and first aid assessments and interventions. A significant amount of the course involves demonstrations and practice labs.

HLT 212 Substance Abuse and Addiction 3.0 UNITS

The course provides an overview of the field of substance abuse and addictions including but not limited to the psychopharmacology related to treatment. In addition, the course conveys an understanding of the impact of abuse on individuals, families, communities and society. Substance use is approached from a variety of prospective; behavioral, pharmacological, historical, social, and clinical.

HLT 111 Introduction to Health Care 2.0 UNITS

This is an introductory course for students who are planning a career in healthcare or a health-related field. This course provides students with a foundation for success in future courses as well as an introduction to the various health professions and the interrelated interdisciplinary health care teams. The course explores resources for health career planning and the concepts of professionalism, healthcare ethics, cultural competence, global health issues, and health care polices.

- HLT 112 Pathophysiology 3.0 UNITS**
Examines the concepts of both wellness and illness in terms of causation, prevention, diagnosis, treatment, and classification. Knowledge of anatomy and physiology and medical terminology is helpful for the successful completion of this course. Course may be offered only once during an academic year.
- HLT 115 Dynamics of Health Care in Society 3.0 UNITS**
This course provides students with an understanding of the basic concepts and issues that are associated with the management and regulation of healthcare providers and the delivery of health services. Emphasis is placed on third party payers in reimbursement of health care services. These include Medicare, Medicaid and Private Insurers. Alternative systems of organization are also introduced, as are changes occurring in the health care professions and the health care sector as a whole. Prerequisite: Exit Basic English.
- HLT 210 Medical Law and Ethics 3.0 UNITS**
This course examines the legal aspects of the relationship between the patient and health care service providers. The legal obligations of health care providers are discussed. Subject matter covered includes, but is not limited to, topics such as negligence, malpractice, uniform donor acts, informed consent, medical ethics, living wills, and current trends in this area.
- HLT 110 Culture, Diversity, and Healthcare 3.0 UNITS**
This course is intended to cultivate a student's knowledge and skill necessary to effectively communicate and interact with culturally diverse populations in the health care setting. Students gain an understanding of the process in developing cultural competence as a means of responding effectively to the ethnic and racial demographic changes challenging our health care system, identify potential social, political, and economic determinants of health care disparities; and understand the importance of providing culturally and linguistically appropriate healthcare services with accreditation and regulatory agencies.
- HLT 207 Environmental Health 3.0 UNITS**
This course introduces students to environmental effects on human health. Students gain an understanding of the impact of natural environmental factors and pollutants on human disease as well as formulate possible solutions to the major environmental health problems facing individuals and communities in industrialized and developing countries. Lecture topics include the effects of the environmental pollutants and chemicals on human health such as asbestos, lead, pesticides and tobacco. Students examine health issues through various case studies with an emphasis on possible future approaches to control health problems influenced by the environment.
- HLT 216 Healthcare Navigation 3.0 UNITS**
This course incorporates the many areas of responsibility for healthcare navigators. Students learn to build client relationships, communicate in a culturally competent manner, assess patients' needs, and locate health care resources to help overcome barriers to access, and to resolve problems.
- HLT 215 Service Learning Comm Health 2.0 UNITS**
Students are engaged in ongoing service through partnerships with community agencies as an integral part of the course. The service-learning component addresses such topics as basic communication and relationship skills. Students learn about and are exposed to under-served and under-represented populations. Students are introduced to skills and issues relevant to medicine, nursing and health professions, social work, and epidemiology.
- HLT 205 Health Services Administration 3.0 UNITS**
This is a comprehensive course that encompasses the scope of responsibilities of administering a health care unit or facility. The theoretical basis for health systems as well as the overall planning, organizing, managing, and evaluating systems and policy issues are discussed.
- HLT 128 Consumer Health 3.0 UNITS**
This course allows students to have a framework for evaluating consumer health information. This course enables students to make intelligent decisions about how to obtain and use health related products, services, facilities, and personnel.
- HLT 218 Health Disparities in the United States 3.0 UNITS**
This course introduces students to the concepts of health equity and health disparities. The course uses the lens of social justice as the broad overview of health disparities in the United States is explored. The course examines relevant historical issues, theories, and empirical data, emphasizing critical analysis and application of knowledge. Students gain a better understanding of research on health disparities and interventions to promote health equity. Pre-requisite: ENG-101.
- HLT 126 Principles of Public Health 3.0 UNITS**
This course provides a broad perspective of public health and presents both local and global public health challenges that face our society in the 21st century. The course provides an overview of the dynamic field of public health, its basic framework, concepts, and methodologies. The focus of this overview is on improving and maintaining health on a population level through identification, surveillance of disease, and injury prevention strategies. Pre-requisite: ENG-101.
- HLT 130 Global Health 3.0 UNITS**
This course presents an overview of global health issues from the perspective of health as a human right. The course analyzes the impact of biological, socio-cultural, economic, environmental, and political determinants of health. Students examine past and emerging infectious diseases, chronic disease, and the impact of environmental and political emergencies on the delivery of disease prevention and health promotion.

HOMELAND SECURITY

HMD 110 Fundamentals of Emergency Management 3.0 UNITS

Students develop a basic understanding of the contemporary threats to, and challenges of, maintaining the safety and security of the citizens, critical infrastructure and interests of the United States. Students are introduced to the concepts of identification, mitigation, preparedness, response, and discovery when dealing with various civil crises.

HMD 111 Introduction to Homeland Security 3.0 UNITS

Students develop an understanding of the contemporary threats and challenges of maintaining the safety and security of the citizens, critical infrastructure, and interests of the United States. Through lecture and discussion, students develop an understanding of the balance between the identification of threats and the vulnerabilities of individual rights in a democratic society.

HMD 221 Domestic and International Terrorism 3.0 UNITS

This course provides insight into and analysis of the ideology, structure, financing, and driving forces behind domestic and international terrorist individuals and groups. Students explore the cultural and ideological philosophies as well as the social, economic, political, and religious conditions of select states, groups, and individuals that comprise the phenomenon of terrorism. Additionally, the course offers a critical analysis of governments' responses to the war on terrorism, including contemporary models of counterterrorism.

HMD 112 Introduction to Intelligence Function 3.0 UNITS

This course provides students with a comprehensive overview of the role of intelligence gathering as historically practiced in the United States and the way the intelligence community looks and operates today. Students in this course read, analyze, and discuss the role of intelligence gathering in maintaining the security of the United States. Students learn to identify and assess potential terror threats to the county taken from intelligence information.

HOSPITALITY MANAGEMENT

HMT 209 Tour Marketing, Sales and Promotions 3.0 UNITS

This course introduces Hospitality Management students to the dynamic and diverse tourism industry. This course views the industry from a business perspective - examining the management, marketing, and finance issues most important to industry members. Students learn the basics of marketing, selling and promoting to the traveling public, how to connect with tourism service suppliers, and the steps to putting together a tour for a specific market segment. This course offers a view of today's tourism industry that is as interesting and multi-faceted as the field itself. Prerequisites: HMT 112 and HMT 128

HMT 110 Introduction to the Hospitality Industry 1.0 UNIT

This course is an introduction to the organization and structure of hospitality organizations from a management perspective. It is designed to provide the student with the basic understanding of the dimensions and scale of the hospitality industry, and identify many of the career opportunities available to them. Guest lecturers are utilized to provide a balance from the industry's perspective.

HMT 121 Hotel Practicum 2.0 UNITS

Students must successfully complete 300 hours of practical experience within the 15 weeks of the semester at an approved establishment. Practical experiences may include hotel front office, telecommunications, guest reception, cash handling and control, housekeeping, and convention sales and services. Assistance in finding appropriate placement is provided. The employers evaluate the student's performance, and a coordinator monitors each student's progress. Practicum sites must be approved prior to the beginning of the semester by the Coordinator or Executive Director.

HMT 122 Front Office Operations 3.0 UNITS

This course introduces the student to the overall operations of a hotel through the front office guest cycle. It features information on front office computer/technology, yield management, and reservation systems. Emphasis is on the front office responsibilities and the various tasks involved during a guest's stay.

HMT 213 Principles of Hospitality Marketing 3.0 UNITS

The student will gain an understanding of the marketing function in the field of hospitality. Emphasis is placed on marketing, planning, generation and use of marketing information, segmentation, positioning and the development and use of specific marketing tools. The course also covers areas such as menu design, advertising, sales and promotion, merchandising, personal selling, and the use of external advertising media.

HMT 214 Hotel Group and Convention Sales 3.0 UNITS

This course introduces students to the related responsibilities involved in managing convention and group business. Convention sales, planning, post-convention evaluations, and marketing techniques used to promote ideas into the various market segments are discussed. The course is useful for both meeting planners and convention service managers.

HMT 215 Housekeeping Management 3.0 UNITS

This course is an overview of all aspects of housekeeping management. It includes the phases of staffing, planning and organizing the technical details of covering each area of a hotel. Topics covered also include laundry room management, inventory control, departmental operating budgeting, and risk and environmental management.

- HMT 216 Restaurant Operations Management II 3.0 UNITS**
The student will gain an in-depth knowledge of the overall operation and management of a restaurant. This course will also include the human resources aspect of restaurant operations to include employee training and the organizational structure of the service staff. Emphasis will also be placed on strategies of serving food, wines, and beverages. A financial overview of the industry will cover the financial analysis relative to operational costs and controlling variable expenses.
- HMT 204 Fundamentals of Wine and Food 3.0 UNITS**
This course will cover the basic knowledge of wine and food pairing. The student will review the categories of wine and how they may be used to make food combinations on menus and wine lists. This course will incorporate etiquette and protocol in business and social settings to include domestic and international common courtesies, greetings and introductions, communications, and dining etiquette.
- HMT 210 Hospitality and Travel Law 3.0 UNITS**
This course is designed to enable the students to identify and understand the principles of laws and their relevance to the hospitality industry. Students will obtain the legal knowledge needed to enhance the guest experience and to prevent hazards that could potentially lead to lawsuits.
- HMT 116 Restaurant Operations Management I 3.0 UNITS**
The student will gain knowledge of the overall operation and management of a restaurant, including employee training and the organizational structure of the service staff. Emphasis will be placed on strategies of servicing food, wines, and beverages. This course will include management's perspective on meeting customer expectations and the importance of the interaction with guests. This course will also cover a financial overview of the industry, the major factors affecting the growth of the business, food merchandising, promotion and sales. Students will learn the crucial elements involved in the successful operation of a restaurant.
- HMT 115 The Urban Entrepreneur 3.0 UNITS**
The urban approach to entrepreneurship will be discussed, emphasizing the successful use of interpersonal and presentation skills. This course is designed to assist students in identifying the environments within which urban entrepreneurs operate. While not only discussing the significant role that business owners play in urban communities, the course will also offer cross-functional solutions to business problems.
- HMT 202 Innovation, Creativity and Marketing 3.0 UNITS**
This course focuses on factors that contribute to creativity and innovation within organizations. The course includes experiential methods, case studies, workshops, team projects, guest speakers, and readings. Students are encouraged to try new approaches to creative problem solving in many different environments. Each class will focus on different variables related to creativity, such as team dynamics, creativity under pressure, or managing creative individuals.
- HMT 206 Information Systems in Hospitality and 3.0 UNITS**
This course introduces Hospitality Management students to the dynamic and critical field of technology within the hospitality and travel industry. Students learn the basics of purchasing, implementing, maintaining, and effectively managing today's information systems in hospitality and travel.
- HMT 217 Franchising 3.0 UNITS**
This course will help students to understand franchising and its role in the hospitality industry. Students will learn the differences between entrepreneurship and franchising, franchise selection, and market analysis. Topics for the course will include legal and business issues that arise in the franchise relationship.
- HMT 104 Culinary for Hospitality 3.0 UNITS**
This course is designed for Hospitality Management students with emphasis on equipment, tools and cooking methods used in the Culinary Arts. The student will develop an understanding of the "back of the house" operations and basic customer service from a management perspective.
- HMT 112 Introduction to Travel and Tourism 3.0 UNITS**
This course will cover an overview of the travel and tourism industry, through its involvement of transient clientele. Students will learn about the dynamics of the industry and its many foreign and domestic elements. The course will include an overview of the history of travel, including the characteristics of the popular modes of travel. Favorable destinations and career opportunities that can service those destinations will be covered. Co-requisite: HMT 110
- HMT 111 Introduction to Entrepreneurship 3.0 UNITS**
This course is designed to provide a foundation in entrepreneurship. The course will provide students with an understanding of the ongoing challenges for entrepreneurs in the key functional areas such as marketing, finance, and operations. Learning media, such as case studies and business plan templates, will be used to examine the opportunities that exist in new venture planning. Individual and organizational level issues will be addressed. Additionally, the course covers the legal and ethical implications that exist for Entrepreneurial planning. Prerequisite: Exit Basic Math and Basic English II

HMT 106 Culture and Geography in Tourism 3.0 UNITS

This course is designed to provide students with the knowledge and skills necessary to work and travel in a global environment focusing on the interrelationships between geography, tourism, and culture. The course includes the cultural, recreational, and social significance of geography and regional economy to the traveler. Co-requisite: ESL Writing Level III or Basic English II

HMT 128 Event Planning Travel and Tourism 3.0 UNITS

This course is designed to introduce students to the methods and techniques utilized in planning, organizing, and promoting events specific to the travel and tourism industry. The course will emphasize the planning process and students will develop the skills expected of meeting and event planners within travel tourism. Topics will include negotiations and contracts, site selection, and program development. Prerequisite: Exit all Basic Skills

HUMANITIES**HUM 101 Cultures and Values 3.0 UNITS**

Integrates materials from literature, the fine arts, the social sciences, and religion. Students learn about cultures and perspectives other than their own and write a series of essays examining value systems and cultural differences. Readings for the course are chosen from novels, short stories, plays, autobiographies, and ethnographic works.

HUM 120 Intro to Women's Studies 3.0 UNITS

An introductory course in Women's Studies that includes explanation of the origins of traditional male and female roles and the effects of these on work, family, sexuality and education.

HUM 121 Seminar in Women's Issues 3.0 UNITS

The Seminar on Women's Issues examines the principles of feminist literary analysis, scholarship and research through texts authored by women writers and through diverse theoretical writings on race, language, sexuality, creativity, class and subordination which form the basis of feminist criticism. Within the theoretical context students will explore writings by women from diverse ethnic and cultural traditions on issues of current feminist scholarship.

HUM 128 Food and Culture 3.0 UNITS

This course examines the effect that food acquisition and production has had on the development of civilization. Topics include ancient to modern methods of food-gathering and preparation, as well as technological developments. These topics will be examined for their relationships to the anthropological and sociological evolutions as affected by the diets throughout the history of humanity. Different cultures will be explored in an effort to better understand their origins and how they evolved.

HUMAN SERVICES**HUS 251 Practicum in Addiction Counseling 4.0 UNITS**

Students are placed in an agency that focuses on addictions issues in order to apply their coursework in the field. This course integrates knowledge and theory gained from the classroom throughout the human services and addictions sequence as it is applied to the field experience. Students use evidence based practices. The requirements are fulfilled on the basis of working 135 hours of work at a site placement and attending a weekly seminar class to discuss their experiences. Prerequisite- HUS 231

HUS 101 Intro to Human Services 3.0 UNITS

This introductory course offers an overview of the human services profession. It emphasizes human needs and social problems; provides an historical perspective of the development of the profession; and introduces students to professional values, ethical behavior, theories, knowledge and methods necessary for helping others.

HUS 121 Helping Strategies and Relationships 3.0 UNITS

Students deepen their understanding of professional values, strategies of intervention, and behavior necessary for helping others. Students learn problem-solving skills and participate in activities to increase self-understanding.

HUS 200 Group Work in Human Services 3.0 UNITS

This course exposes students to various groups that are encountered when working in the Human Services field. Students observe and analyze key aspects of group dynamics such as power and control within a variety of small-group settings: counseling, discussion, support groups. Students explore and practice key interpersonal skills such as conflict resolution, decision-making and goal-setting under instructor-guided simulations. Leadership skills are developed along with personal behavioral style. Various theoretical perspectives are discussed throughout the course.

HUS 221 Community Organization 3.0 UNITS

Students learn how human service professionals produce change in the communities in which they live, work and participate in order to improve the quality of life and relationships among the members of those communities.

HUS 241 Internship in Human Services II 4.0 UNITS

Students are placed in a second social service agency that extends and deepens HUS 231. The the expectation in this course is the integration of knowledge and theory gained from the classroom throughout the human services sequence as it is applied in the field

experience. The requirements are fulfilled on the basis of working 9 hours per week for 15 consecutive weeks for a total of 135 hours. In addition, students attend a weekly seminar to discuss their experiences. Students may remain in the same agency two terms with permission from the faculty member.

HUS 230 Interviewing Techniques**3.0 UNITS**

Examines the methods of data collection employed within a variety of social service agencies. Emphasis is placed on the helping interview, its elements and characteristics. In addition, concepts of communication, interaction, the self, and interviewing skills will be examined and practiced.

HUS 231 Internship in Human Services I**3.0 UNITS**

Students are placed in a social service agency to perform tasks and engage in learning activities associated with acquiring professional standards, behaviors, and conduct. Under the supervision of a faculty member and a field supervisor, students are expected to fulfill these requirements 8 hours per week for 15 consecutive weeks. In addition, students attend a weekly seminar to discuss their experiences and observations. Co-requisite: HUS-121.

HUS 133 Counseling Theory and Techniques**3.0 UNITS**

This course promotes competence in addictions counseling by focusing on the following topics: individual, group, and family counseling; treatment of the addicted person; familial aspects of counseling; techniques of crisis intervention; and ways to provide education. Students already employed in fields related to Addictions Counseling can enroll in these courses to become a Certified Alcohol and Drug Counselor (CADC) working under the supervision of a Licensed Clinical Alcohol and Drug Counselors (LCADC). This course helps to fulfill the Counseling educational domain for the certification.

HUS 143 Addictions Counseling**3.0 UNITS**

This course introduces students to the fundamentals of addictions counseling and emphasizes the role of collaboration in seeking and using community resources. Students learn about resources available in New Jersey to assist clients. The course looks at the criminal justice system and its levels of involvement in addictions treatment. This course introduces students to the basic skills required for professional readiness including documentation and identifying levels of care. This class identifies and introduces underlying principles and competencies of modern addiction counseling, its complexity and application. This course helps to fulfill the educational requirements of the Certification Board of NJ to become a Certified Alcohol and Drug Counselor (CADC). Following completion of the educational requirements for the CADC students need to complete 3000 hours of supervised fieldwork experience to receive the certification.

HUS 163 Assm and Treatment in Addictions**3.0 UNITS**

This course addresses initial interviewing, assessment, intake and early phase counseling processes utilized at addiction treatment centers. Students address the role of screening and assessment in the initial intake process. Students develop skills in the area of initial assessment. Students analyze the current DSM categories and criteria of Substance Use Disorder and their implementation. Students learn about different forms of addiction including gambling. Students discuss the physical impacts addiction can have. This course helps to fulfill the educational requirements of the Certification Board of NJ to become a Certified Alcohol and Drug Counselor (CADC). Following completion of the educational requirements for the CADC students need to complete 3000 hours of supervised fieldwork experience to receive the certification.

HUS 123 Introduction to Addictions**3.0 UNITS**

This course reviews and reinforces the fundamentals of the effects of addictions on the abuser and the family. Biopsychosocial information is reviewed. Students develop competency in areas of ethical and legal conduct necessary to begin entry-level work in the addictions field. Competency is also developed in the area of multiculturalism as it impacts counselors at all service levels. This course emphasizes knowledge of the effects of the different drugs (i.e., Opioids, Stimulants, Depressants, Analgesics, THC). Students are able to define co-dependency and the roles commonly assumed by families affected by Substance Use Disorder.

HUS 153 Recovery in Addictions**3.0 UNITS**

This course introduces standards for ensuring thorough documentation in addictions counseling. Students learn about the counselor's need for cultural competence, personal growth, and professional growth. The course explores counselor/client expectations based on goals, objectives, rules, and obligations. This course reviews and reinforces the fundamentals of addictions counseling professionals' conduct related to ethical, legal, personal, and professional development, and the practice and benefit of clinical supervision. The importance of community involvement including professional networking is emphasized through lecture. This course helps to fulfill the educational requirements of the Certification Board of NJ to become a Certified Alcohol and Drug Counselor (CADC). Following completion of the educational requirements for the CADC students need to complete 3000 hours of supervised fieldwork experience to receive the certification.

INTERDISCIPLINARY

INTD 200 Death and the Human Experience**3.0 UNITS**

This course examines the important place that death and dying hold in the human experience and the many ways in which people come to terms with this essential aspect of living. Students will learn about the impact of history, culture, religion and developmental status on understanding death and final rites and rituals. Contemporary ethical issues involved with death and technology will also be considered.

INTD 250 The Child, Family and Community 3.0 UNITS

This course examines the nature of the contemporary family and its relationship to the school and provides practical advice for developing strong home-school relationships. Examples of building good home-school partnerships and fostering familial involvement in schools with examples of activities and strategies will be practiced. Students are required to spend a minimum of 12 hours in interviewing, observing and recording parent and child behaviors. Prerequisite: ECE 201 or EDU 211 (This course meets one of the required components of the New Jersey Infant/Toddler Credential.)

INTD 100 Culture and Values: Writing and Research 6.0 UNITS

This course integrates Cultures and Values (HUM 101) and College Composition II (ENG 102). Students learn about several cultures, Western and non-Western, ancient and modern, through selected readings, films, art and music. Instruction in writing essays and research papers is an integral part of the course.

INTD 235 Exploring Multicultural Studies 3.0 UNITS

This course will explore the significance, purpose and aim of multicultural studies in a diverse society. Relying on history, sociology, anthropology, political science and education, students will focus on learning the content and meaning of multiculturalism in America. Students will be encouraged and required to participate in activities intended to deepen their understanding of diversity and then reflect on the ways in which this knowledge might inform multicultural studies in practice. Aspects of culture and identity that will be covered include race, socioeconomic class, religion, ethnicity, gender and ability. Students will also be encouraged to consider the various approaches to multicultural studies and the schooling practices that result.

INTD 270 Restorative and Social Justice 3.0 UNITS

This is a special topics course and it provides a deep and critical exploration from either the psychological, the educational, or the sociological perspectives. This course allows students to analyze the various facets of Restorative Justice (RJ) under the "umbrella" of Social Justice. Students apply RJ and social justice concepts to the special topic chosen by the instructors. The course focuses on special populations e.g, immigrants, LGBTQ+, etc. Special Note: This course requires a capstone project. Students must also attend a separate fieldwork component of this class to discuss their experiences from the required attendance at on and off-campus community events. Prerequisite (s): ENG 101; SOC 101. Co-requisite(s): INTD 275

INTD 275 Restorative and Soc Just Fieldwork 1.0 UNIT

This course is a discussion lab that meets once per week. Students are required to discuss their experiences from attending the required community events, and interviews from social justice and/or restorative justice professionals. Students critique the community events and interviews in order to expand upon class lectures. Students are mentored by the lab instructor in preparation to present the capstone project for the lecture component of the course. Prerequisite (s): ENG 101; SOC 101; Co-requisite (s): INTD 270

INTD 110 Introduction to Advocacy 3.0 UNITS

This class integrates the issues of economics and class privilege with race, ethnicity, and social justice concepts. Students analyze the issues of exclusion, inequity, and discrimination as connections to deeper exploration for addressing continual unfair practices such as voting restrictions of minorities, inequities in securing small business loans, and homeownership in low-crime neighborhoods. Students apply social justice concepts to examine necessary reform efforts in economic reform and racial justice. Prerequisite(s): None. Co-requisite(s): ENG 101

LITERATURE**LIT 217 Women and Literature 3.0 UNITS**

Women and Literature more than introduces students to writings by and about women; it helps students explore and understand the varied roles women writers play in history. Students read global selections of twentieth-century and contemporary writings-fiction, essays, drama, and memoir- that examine diverse issues such as gender, politics, cultural division, and social status. Pre-requisite: ENG-101.

LIT 204 Introduction to the Short Story 3.0 UNITS

In this course students read, discuss, analyze, write about and experience the short story, in the process learning about the genre's elements and its variety of forms. Students are exposed to a range of periods, regions, and sensibilities, and are made familiar with a variety of literary sub-genres and literary terminology.

LIT 206 Introduction to Poetry 3.0 UNITS

Introduction to Poetry is a survey class that introduces students to poetry as a literary form. Students analyze poems in terms of language, meaning, form, and cultural and historical contexts.

LIT 201 Introduction to Literature 3.0 UNITS

This course aims at fostering appreciation for the language of literature, as well as for literature as an examination of human experience and values. Students read short stories, poetry, drama, and one or two novels. The readings for the course illustrate a variety of cultural perspectives. Students are required to write a series of interpretive essays.

LIT 202 Survey of American Literature 3.0 UNITS

This course fosters appreciation for the forms and content of American literature as an imaginative exploration of the nation's experience and values. It is a representative survey of American fictional and non-fictional prose and verse. Students read a variety of writers and genres from all periods of American literature, 1600 to the present. Students are required to write a series of interpretive essays.

- LIT 203 Caribbean Women Writers 3.0 UNITS**
This course introduces students to the literature of Caribbean women. Readings highlight Caribbean women's heroism, grassroots activism, courage and struggles in their own words from their own perspectives. Through a variety of readings, students will gain knowledge and an understanding of the struggles, difficulties and triumphs in the lives of Caribbean women.
- LIT 205 Introduction to Cultural Studies 3.0 UNITS**
This course introduces students to the academic study of culture. Novels, songs, movies and other cultural artifacts will be analyzed in the context of race, class, gender, ethnicity, etc. The students will read the writings of literary and cultural critics and learn to write and present their own analyses.
- LIT 207 Introduction to Drama 3.0 UNITS**
This course introduces students to a wide variety of dramatic forms through the study of plays ranging from ancient Greece to modern times. Students will learn to read, discuss and write about plays exemplifying a variety of approaches to drama.
- LIT 216 British Literature to 1650 3.0 UNITS**
British Literature to 1650 is a historical survey introducing the literary masterworks of Great Britain from the earliest writings to 1650. This course introduces pivotal literary works such as Beowulf and Canterbury Tales; Arthurian literature; and medieval poetry, prose and drama. The course concludes with William Shakespeare. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama.
- LIT 209 Children's Literature 3.0 UNITS**
In this course, students examine children's literature in its historical, cultural and literary contexts. Poetry, fiction, and nonfiction for children from infancy through adolescence are examined in the light of cultural and historical ideas about children and their development. Special attention is given to ways in which issues of culture, ethnicity, race, and gender are represented in children's literature.
- LIT 210 Latin-American Literature 3.0 UNITS**
This course provides an introduction to a variety of literature from Central and South America and the Caribbean. Special attention is given to the ways in which literary works reflect Latin America's political turmoil, social tensions, and remarkable cultural history. All works are taught in English translation.
- LIT 211 African-American Literature 3.0 UNITS**
In African-American Literature, students read a variety of fictional and non-fictional prose and verse by African-Americans from the eighteenth century to the present. In addition to oral literature, autobiographies, slave narratives and letters, the course surveys poetry, drama, the short story, and the novel. The material is treated in both literary and non-literary contexts in order to foster understanding and appreciation of the African-American experience.
- LIT 212 Introduction to Latino Literature of US 3.0 UNITS**
This course provides an introduction to the Latino literature of the United States, which is written in English. Although writers from various Latino backgrounds will be studied, the course will primarily examine the literature of the Chicano, Cuban-American, and Nuyorican writers who write from an American perspective. Topics such as identity, assimilation, bilingualism, and growing up in the U.S. are analyzed while exploring this new literature.
- LIT 213 Women's Voices: Autobiography 3.0 UNITS**
The many changes in women's autobiographical works of the 20th century now make it possible to explore contemporary issues of and about self in rewarding and challenging ways. Students will read a richly diverse selection of 20th century women writers across cultures. This course develops an understanding of the female experience through women's autobiographies and participants' writings including students' autobiographical essays. Discussions will be focused on literary techniques and the genre of autobiography.
- LIT 220 Science Fiction 3.0 UNITS**
An introduction to science fiction through a range of novels and short stories. Special attention will be given to ways in which science fiction imagines the impact of scientific and technological change.
- LIT 215 World Literature to 1650 3.0 UNITS**
World Literature I is a historical survey introducing the literary masterworks of the great world civilizations from the first extant creation narratives through the European Renaissance or 16th Century. Attention is also given to religious works underlying major world religions.
- LIT 225 World Literature From 1650 to Present 3.0 UNITS**
World Literature II is a historical survey introducing the literary masterworks of the great world civilizations from the 17th century to the present. This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Prerequisite: ENG 101
- LIT 226 British Literature 1650-PRESENT 3.0 UNITS**
British Literature 1650-present (LIT 226) is a historical survey introducing the literary masterworks of Great Britain from 1650 to the present time. The readings are organized by historical period, to include writers such as Aphra Behn, Olaudah Equiano, Mary Wollstonecraft, Jane Austen, Charles Dickens, Chinua Achebe, Kazuo Ishiguro, among others. Themes include slavery, women's roles, and sexuality, nature and

science, Industrialism, and colonialism. The course traces the development of British Literature in its historical, political, social, and artistic context.

LIT 214 **Intro to the Novel** **3.0 UNITS**
Introduction to The Novel traces this literary form from its beginnings in Don Quixote to the present time. Students read excerpts and full-length novels, learning what differentiates the novel from earlier literary forms: length of over 150 pages; a primary plot, and possibly several sub-plots; populated with several characters, showcasing a protagonist and an antagonist; depth and development of characters' inner lives.

LIT 208 **Contemporary Drama** **3.0 UNITS**
Contemporary Drama focuses on late 20th - 21st Century plays, and the analysis of their theatrical structures from the perspective of theatre artists - playwrights, actors, directors, and designers. The emphasis of the course is to develop the student's ability to appreciate the intellectual and intuitive work required to create a theatrical experience from a written text in today's theatre.

MANAGEMENT

MAN 121 **Principles of Management** **3.0 UNITS**
An introduction to the basic functions underlying the sound management of a business enterprise. Topics covered are planning, organizing, staffing, influencing, and controlling.

MAN 221 **Marketing** **3.0 UNITS**
A study of business activities involved in the flow of goods from physical production to consumption. Operations management, international management and business ethics are also studied.

MAN 232 **Human Resource Management** **3.0 UNITS**
The development and direction of personnel, including job planning, recruitment, selection, career development, evaluation, grievances, and discipline.

MAN 241 **Corporate Finance** **3.0 UNITS**
The financial problems and policies of a business corporation are discussed. The following areas are covered: financial planning, management of short-term and intermediate credit, working capital, trade credit, financial statements, retained earnings, credit and collection practices.

MAN 242 **Labor Relations** **3.0 UNITS**
A study of labor/management relations focuses on the collective bargaining process. Federal/state legislation, grievance procedures, and wage issues are discussed.

MAN 231 **Management of Small Enterprise** **3.0 UNITS**
Introduction to the challenges and problems encountered in small business operations. Specific evaluation of organizational, financial, and personnel aspects are studied. The role of the Small Business Administration is examined as well as other types of assistance to the small enterprise. Prerequisite: MAN 121 or permission of instructor.

MATHEMATICS

MAT 114 **Introduction Probabilities and Statistics** **3.0 UNITS**
This course offers an analysis of the basic ideas and methods of collecting, tabulating, and representing data. Topics include frequency distributions, histograms and frequency polygons; measures of central tendency, variability percentiles; Z-scores, elementary probability, binomial and normal distributions; linear regression and correlation, and hypothesis testing.

MAT 100 **College Algebra** **3.0 UNITS**
This course teaches the essentials of college algebra. The topics include polynomials, first-degree equations, word problems, graphing, systems of linear equations, factoring, exponents, quadratic equations, matrices, and radicals.

MAT 102 **Mathematics for the Health Science** **3.0 UNITS**
This course provides an introduction to the logic of mathematics and measurement. The role of mathematics in the health professions and the application to problems encountered by the health professional are discussed. Topics covered include basic computation with non-negative rational and real numbers, ratios and proportions, scientific notation, and logarithms. The metric system, its nature, and specific applications to medical dosages and other health problems are also examined.

MAT 103 **Business Mathematics** **3.0 UNITS**
This course covers the mathematical and numerical skills for ratios, proportions, rate and percentage problems, and the metric system. Also included are the following: the mathematics of buying, pricing and selling, payrolls, insurance, depreciation and profits, simple and compound interest, bank discounts, consumer credit, corporation stocks and bonds, and other investments.

MAT EXEMPT **Exempt AF MAT Multiple Measure** **0.0 UNITS**

MAT EXPC	Exempt MAT-100 Mult Measure	0.0 UNITS
MAT EXCAL	Exempt MAT-110 Mult Measure	0.0 UNITS
MAT 211	Calculus III	4.0 UNITS
Continuation of MAT 112. The main topics considered are conic sections; parameterized curves; polar, cylindrical, and spherical coordinates; vectors in plane and space; functions of two or more variables; multiple integrals; and integrations in vector fields. Use of mathematical software in problem-solving is emphasized.		
MAT 006	Refresher: Basic Algebra	0.0 UNITS
EOF NON CREDIT Refresher: Basic Algebra		
MAT 070	Basic Algebra Workshop	1.0 UNIT
This workshop is required for all students taking MAT 073, Basic Algebra I. The workshop emphasizes problem-solving.		
MAT 071	Basic Mathematics	3.0 UNITS
Basic computational skills and problem-solving using these skills. Topics include whole numbers, common fractions, decimals, percents, ratio and proportion, measurement, and geometry. Placement is determined by the College Placement Test.		
MAT 073	Basic Algebra	3.0 UNITS
Topics in this elementary algebra course include signed numbers, linear equations, polynomials, factoring, algebraic fractions, quadratic equations, simultaneous equations, and the coordinate system. Placement is determined by the College Placement Test.		
MAT 116	Pre-Calculus for Business	4.0 UNITS
A course in mathematics with special emphasis on applications to business, economics and related fields. Topics include linear, quadratic, exponential and logarithmic functions with applications involving supply, demand, revenue, cost, profit and break-even points, matrices and systems of linear equations, graphing, Leontief Input-Output model, and mathematics of finance. Classroom instructions will be presented using a TI-83+ graphing calculator.		
MAT 080	College Algebra Workshop	1.0 UNIT
This course covers topics in pre-calculus, including polynomials, rational, logarithmic, and exponential functions and their applications. The lab hour reinforces concepts discussed during the lecture hour.		
MAT 000	Enrich Prog: Basic Math	0.0 UNITS
MAT 001	Enrich Prog: Basic Algebra	0.0 UNITS
MAT 110	Precalculus	4.0 UNITS
This course provides the preparation necessary for students who intend to study calculus for science and engineering programs. Topics include the following: fundamentals of algebra; linear inequalities; functions and relations; polynomial, rational, exponential, and logarithmic functions; trigonometric functions; analytic trigonometry; analytic geometry; complex numbers; and discrete algebra, logic, and proof.		
MAT 123	Mathematics for Liberal Arts	3.0 UNITS
Students in appropriate non-STEM programs apply mathematics to real-world problem solving. Topics include critical thinking skills, sets, Venn diagrams and their applications, logic, tree diagrams, graphs and sets, mathematical system, graphs, functions, linear and quadratic functions, probability, and statistics.		
MAT 111	Calculus I	4.0 UNITS
This course considers the limits, continuity, theory and techniques of differentiation and integration, with applications of both processes to science/engineering. The use of mathematical software in problem-solving is emphasized.		
MAT 002	Bridge: Basic Math	0.0 UNITS
MAT 003	Bridge: Basic Algebra	0.0 UNITS
MAT 112	Calculus II	4.0 UNITS
This course is a continuation of MAT 111. Topics include calculus of transcendental functions, integrations by parts, trigonometric integrals, improper integrals, sequences and infinite series. The use of mathematical software in problem-solving is emphasized.		
MAT 004	Refresher: Basic Math	0.0 UNITS
MAT 005	Refresher: Basic Algebra	0.0 UNITS

MAT 212	Differential Equations	4.0 UNITS
Methods for solving ordinary differential equations are studied, together with physical and geometrical applications. Laplace transforms and numerical and series solutions are included. Use of mathematical software in problem-solving is emphasized.		
MAT 007	Refresher: Basic Math	0.0 UNITS
EOF NON CREDIT Basic Math workshop		
MAT 215	Linear Algebra	3.0 UNITS
Systems of linear equations, Gauss elimination, matrices, determinants, vector spaces of ordered n-tuples and functions, linear transformations, inner products, orthogonal basis, eigenvalues, eigenvectors and related vectors. Machine computation will be used to illustrate and supplement mathematical ideas and concepts.		
MAT 008	Enrich Prog: Basic Math and Algebra	0.0 UNITS

MEDICAL ASSISTING

MDA 114	Medical Office Procedures I	3.0 UNITS
This course begins the administrative portion of the medical assisting curriculum. It is a study of the techniques associated with patient reception, appointment scheduling, processing mail, management of telephone calls, medical record keeping, maintenance of medical office files, composing and processing medical correspondence. Course is offered only once during the academic year.		
MDA 211	Clinical Office Procedures II	3.0 UNITS
This course is a continuation of COP I. Practical experience is provided in the following: minor office surgery, administration of medications, venipuncture, ECG, asepsis, examinations and procedures in specialties, first aid and CPR. Course is offered only once during the academic year.		
MDA 214	Medical Office Procedures II	3.0 UNITS
This course continues the study of the administrative aspects of a medical practice, beginning with professional fees and credit arrangements to an overview of management responsibilities CPT-4 and ICD9 CM coding will be introduced and the student will code insurance forms. Course is offered only once during the academic year.		
MDA 106	Medical Terminology	3.0 UNITS
This is a basic course in the development of the medical vocabulary commonly used in medical practice. Emphasis is placed on the study of prefixes, suffixes, root words, and combining forms. Physiologic and anatomic terms referring to human tissues and organ systems are introduced. Emphasis is also placed on building the professional vocabulary required of a career in a health care facility.		
MDA 113	Clinical Office Procedures I	3.0 UNITS
An introduction to the clinical aspects of medical assisting. Practical experience is provided in the following areas: vital signs, positioning and draping, assisting with examinations, sterilization, asepsis, dressing wounds, recording health history, nutritional needs. Course is offered only once during the academic year.		
MDA 223	Typing and Medical Machine Transcription	3.0 UNITS
The course focuses on the mastery of the typewriter, PC, dictaphone, and care and operation of the equipment. Correct English usage, business letter forms, and the transcription of recorded medical dictation in appropriate report form are stressed. Emphasis is placed on the development of accuracy and speed to meet the special requirements of the medical field.		
MDA 224	Pharmacology	3.0 UNITS
This course is an introduction to drugs and drug therapy, including sources of drugs, dosage forms, drug legislation, principles of drug action and pharmacokinetic factors in drug therapy, drug interactions and incompatibilities. Major drug classifications are identified and studied according to physiologic action and/or body system affected. Course is offered only once during the academic year.		
MDA 231	Medical Assisting Externship	3.0 UNITS
Students are placed in the offices of participating physicians, HMOs, or clinics for a minimum of 200 hours of practical experience in medical assistance during the healthcare facility's regular hours of operation. They perform the duties of a medical assistant under the direction and supervision of the physician and those health care providers employed in the practice. Students also gain insight into the operation of a medical office. Students are supervised and evaluated by both the site supervisor and the faculty member assigned to the externship program. All prerequisite courses must be completed with a grade-point average of 2.0 before the student is permitted to begin the externship.		

MEDICAL CODING

MDC 101	Clinical Coding I	3.0 UNITS
This course familiarizes the student with coding and classification systems used in health information management. Emphasis is on inpatient coding and classification utilizing ICD-10-CM/PCS. Course work focuses on the official coding guidelines and use of the two volumes of ICD-10-CM and ICD-10-PCS. The laboratory component of the course emphasizes the use of computer-based coding software		

MODERN LANGUAGE ARABIC

MLA 101 Elementary Arabic I 4.0 UNITS
 Elementary Arabic 1 provides students with an introduction to the Arabic language and culture through a competency-based approach. Pronunciation and vocabulary are emphasized through guided student interaction with one another and with the instructor. Cultural awareness and grammar are integrated as students' progress through the course. *This course is not open to, or designed for, Arabic heritage speakers. Heritage speakers are encouraged to enroll in MLA 111 Arabic for Heritage Speakers or an alternate modern language course such as Spanish, French, or American Sign Language.

MLA 111 Arabic for Heritage Spkr I 4.0 UNITS
 Arabic for Heritage Speakers I is a course designed for students who are familiar with spoken Arabic ('Ammiyya) to develop proficiency in Modern Standard Arabic (Fusha), the variety of the language that is learned in school. The course is intensive by design, as it combines into one semester all of the material that is taught in two semesters of Basic Arabic. Its focus is on the productive skills (speaking and writing) in Fusha, while simultaneously exposing students to grammar and vocabulary of a high register. Successful completion of this course and its sequel, Arabic for Heritage Speakers II (MLA 112), will permit a student to enroll in Third Year Arabic. Modern Standard Arabic is the primary language of instruction.

MLA 112 Arabic for Heritage Spkr II 4.0 UNITS
 Arabic for Heritage Speakers II is a continuation course that follows Arabic for Heritage Speakers I - MLA 111. The course is designed for students of Arabic descent who are familiar with spoken Arabic ('Ammiyya) to develop proficiency in Modern Standard Arabic (Fusha), the variety of the language that is learned in school. MLA 112, and its predecessor, MLA 111, are intensive by design, as they combine into two semesters all of the material that is taught in four semesters of Basic Arabic. The two courses focus on the productive skills (speaking and writing) in Fusha, while simultaneously exposing students to grammar and vocabulary of a high register. Successful completion of both courses, i.e., MLA 111 and 112, will permit a student to enroll in Third Year Arabic. Modern Standard Arabic is the primary language of instruction. Attachment IV

MLA 102 Elementary Arabic II 4.0 UNITS
 Elementary Arabic II is a proficiency-based course designed to continue development of linguistic skills necessary for academic, personal, and professional modes of communication. The course will continue the development of all four major language skills (listening, speaking, reading, and writing), and will expose the student to additional aspects of Arab cultures beyond those to which the students were first introduced in Basic Arabic I, the prerequisite to this course. Arabic is the primary language of instruction. Prerequisite: MLA 101

FRENCH

MLF 101 Basic French I 3.0 UNITS
 Basic French 1 provides students with an introduction to the French language and French and Francophone cultures through a competency-based approach. Pronunciation and vocabulary are emphasized through guided student interaction with one another and with the instructor. Cultural awareness and grammar are integrated as students' progress through the course. *This course is not open to, or designed for, French heritage speakers. Heritage speakers are encouraged to enroll in an alternate modern language course, such as Spanish, Arabic, or American Sign Language.

MLF 102 Basic French II 3.0 UNITS
 This course is a continuation of Basic French I. Language skills are developed further through intensive practice of listening, speaking, grammar, and writing.

KOREAN

MLK 101 Basic Korean I 3.0 UNITS
 Basic Korean I provides students with an introduction to the Korean language and culture through a competency-based approach. Pronunciation and vocabulary are emphasized through guided student interactions with one another and with the instructor. Cultural awareness and grammar are integrated as students' progress through the course. *This course is not open to or designed for, Korean heritage speakers. Heritage speakers are encouraged to enroll in higher-level Korean classes as they become available, or an alternate modern language course such as Arabic, French, or American Sign Language.

SPANISH

MLS 101 Basic Spanish I 3.0 UNITS
 Basic Spanish 1 provides students with an introduction to the Spanish language and culture through a competency-based approach. Pronunciation and vocabulary are emphasized through guided student interactions with one another and with the instructor. Cultural awareness and grammar are integrated as students' progress through the course. *This course is not open to, or designed for, Spanish heritage speakers. Heritage speakers are encouraged to enroll in MLS 111 Spanish for Heritage Speakers or an alternate modern language course such as Arabic, French, or American Sign Language.

MLS 102 Basic Spanish II 3.0 UNITS

This course is a continuation of Basic Spanish I. Students are encouraged to expand acquired listening, speaking, grammar, reading, and writing skills in Spanish by the use of real-life situations in the classroom. In addition, students are introduced to social customs and attitudes of Spanish-speaking people. NOTE: This course is not open to Spanish speakers.

MLS 201 Intermediate Spanish 3.0 UNITS

This course is designed for the fluent or near-fluent speaker of Spanish who needs to develop proficiency in reading and writing. Oral presentations, reading, and numerous written assignments emphasize speaking and writing skills. Attention is given to individual grammatical problems. The course is taught in Spanish.

MLS 202 Latin American Literature - 1500 to Pres 3.0 UNITS

In this course, students are introduced to the literature of Latin America, from pre-Columbian times to the present. The course proceeds in chronological fashion, and each literacy period and its works are studied within the historical framework in which they were created. All work in this course, from the readings to the assignments, is done in Spanish.

MLS 103 Spanish for Health Professions 3.0 UNITS

This course is intended for students who are interested in pursuing a career in one of the health professions or who are already working in a health-related field. In this course, students will be exposed to the terminology needed for basic communication with patients and colleagues in elementary Spanish. No prior knowledge or formal study of the Spanish language is needed.

MLS 112 Spanish for Heritage Speakers II 3.0 UNITS

This course is designed for students who grew up in a home where Spanish was the dominant language and have received limited to no formal instruction of the heritage language (Spanish). Students build awareness of common grammatical, orthographical (spelling), and phonological errors that are often ignored or misunderstood by heritage language learners. In addition, students also work on their cultural and communicative competencies in order to be successful in both academic and professional settings while exploring their bilingual and bicultural language learning experiences.

MLS 111 Spanish For Heritage Speakers 3.0 UNITS

This course is intended for those students whose first language is Spanish, but who have had little or no formal instruction in the language. The course is appropriate for those who lack the necessary skills to read and/or write Spanish at the level required to be considered literate in the language. If you speak Spanish at home or with your friends, but find that you cannot communicate as well in it as you can in English, and feel more comfortable expressing yourself in the latter, this course is for you. The course is conducted in Spanish.

MUSIC

MUS 101 Introduction to Music 3.0 UNITS

This course is designed to develop an appreciation of music from the Western classical and popular traditions to selected styles from other parts of the world. Students are also introduced to the fundamentals of music theory. NOTE: Students must have a CD player.

MUS 102 Intro to World Music 3.0 UNITS

Introduction to World Music is a survey of musical traditions found around the world. The course examines the interaction of music with larger cultural and social patterns. MUS 102 includes an introduction to the fundamentals of musical sound and the principles of ethnomusicology.

MUS 105 Intro. to Latin-American Music 3.0 UNITS

Introduction to Latin-American Music explores the rich musical diversity of Latin American cultures through observation and discussion of the music, and sociological elements that create and define these distinct genres. The course focuses on the inter-relation of religion, dance, cultural traditions and socio-historical background of Native American, African, Mestizo-Criollo and Iberian- European have on the region's music.

MUS 104 The African American Musical Heritage 3.0 UNITS

This course surveys the forms of music associated with the African-American community from the 19th Century to the present ? worksongs, spirituals, gospel, blues, jazz, RandB, soul and hip-hop, among others. The course considers the influence of the music?s African roots and also the role of race in American cultural history.

NURSING

NSG 220 Nursing IV 9.0 UNITS

This course focuses on patient in crisis requiring complex nursing care. Content will be arranged in physiologic, self-concept, role function, and interdependent modes. It will include Child Health Nursing. Emphasis will be placed on managing nursing care for multiple patients, delegation and assumption of leadership role. Pharmacology will be integrated throughout the course.

NSG 240 Nursing Leadership 2.0 UNITS

This seminar consists of an analysis of current health trends and issues and their impact on the practice of nursing. Emphasis will be placed on an exploration of contemporary ethical dilemmas, economic and social issues, and concepts related to nursing leadership and the role transaction.

NSG 120 Nursing II 8.0 UNITS

This course builds on the knowledge and skills learned in the first nursing course. The student will care for patients with simple acute and chronic health alterations. Content will be arranged in physiologic, self-concept, role function, and interdependent modes. Mental health nursing and physical/psychosocial assessment of those experiencing health deviations will be included.

NSG 210 Nursing III 9.0 UNITS

This course continues to examine more complex acute care and chronic health alterations. Content will be arranged in physiologic, self-concept, role function, and interdependent modes. The Childbearing Family will also be included. Pharmacology will be integrated throughout the course.

NSG 110 Nursing I 6.0 UNITS

This introductory course includes basic nursing concepts and skills. The focus is on wellness. Areas of emphasis will include the profession of nursing, values, communications, nursing process, physical/psychosocial assessment, nutrition, and pharmacodynamics.

OCCUPATIONAL THERAPY ASSISTANT

OTA 999 Occupational Therapy Assistant 1.0 UNIT

PERSONAL FITNESS TRAINING

PFT 101 Foundations of Personal Training 2.0 UNITS

This course is the first of three major courses that are linked to provide in depth study of the basic policies, guidelines, and procedures of providing high quality personal fitness training with emphasis on safety, health, nutrition, and special needs of chronic health conditions, children, women and the aging population. Topics include scientific rationale for integrated training, basic exercise science including functional anatomy, biomechanics and exercise physiology. The cardiovascular system is examined in conjunction with exercise metabolism and bioenergetics. Health risk appraisal enable students to practice pre-activity screenings and fitness decision making Attachment III skills. Students explore the legal responsibilities of this profession and their scope of practice. The development of communication styles and teaching practices lead students to developing trusting relationships with clients. Basic elements of behavioral change and health psychology encourages students to look at all aspects of motivation for exercise, fitness and health changes in their own lives and their clients. Course materials and class activities provide a means for students to develop a commitment to meeting individual needs of all genders, ages, and special needs populations in the realm of personal fitness training. Through class discussions, role playing, case studies, lab experiments and other active learning techniques students acquire the knowledge, attitude, and skills to support and promote a safe, healthy and realistic program for clients who want to see a positive change in their fitness and health.

PFT 202 Program Design and Implementation 4.0 UNITS

This course provides students with practical application of current testing procedures and instrumentation used in exercise testing. Students perform and interpret basic measurement protocols for cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure. Concepts and procedures are introduced through lecture and applied in the laboratory setting. Students learn the principles related to exercise prescription and develop the necessary skills to design and implement training programs. Safeguards and effectiveness for all fitness levels are addressed. This course incorporates American College of Sports Medicine (ACSM), National Academy of Sports Medicine (NASM), National Strength and Conditioning Association (NSCA), and American Council on Exercise (ACE) curriculum.

PFT 220 Advanced Personal Fitness 3.0 UNITS

The Personal Fitness course prepares students to work as personal fitness trainers to clients of all ages. Students design and practice components of physical fitness to create an appropriate fitness/exercise program that is based on an analysis of the client's needs. Every class session includes essential theory (lecture) and a practical lab application. In the lab session, students gather and then critically analyze the data to tailor the program for the client's specific needs, goals and abilities. Students obtain opportunities to incorporate the newest practical and technical skills into their assessment planning. This course incorporates American College of Sports Medicine (ACSM), National Academy of Sports Medicine (NASM), National Strength and Conditioning Association (NSCA), and American Council on Exercise (ACE) curriculum.

PFT 230 Personal Fitness Internship/Test Prep 2.0 UNITS

The internship in Personal Fitness Training affords students the opportunity to learn from personal trainers, exercise scientists, athletic trainers, and owners/managers of fitness studios/gymnasiums, and current industry professionals in various types of fitness programs, including corporate fitness, wellness, and health care facilities. Students gain hands-on experience and develop health and fitness industry knowledge. Students apply their pre-existing knowledge in real-world settings by interacting with clients and professionals. Each setting or placement is unique and individualized. Students complete a minimum of ninety (90) hours in their internship placement. Students receive weekly didactic reviews in preparation for national certification exams.

PFT 103 Health Fitness Management 3.0 UNITS
This course is an introductory course exploring all aspects of the health and fitness industry and the multiple knowledge areas that are required by trainers and managers to run a successful business. Incorporation of health and fitness principles are applied to business practices. Areas included are: the individual trainer, private personal training business; independent club or a chain/franchise group of clubs.

PFT 240 Personal Training Internship 3.0 UNITS
The internship in Personal Fitness Training affords students the opportunity to shadow and learn from current industry professionals in various types of fitness programs, including corporate fitness, wellness, and health care facilities. Students gain hands-on experience and develop health and fitness industry knowledge. Students apply their pre-existing knowledge in a real-world setting by interacting with clients and professionals. Each setting or placement is unique and individualized. Each student will complete a minimum of ninety (90) hours at the internship placement site. Students also receive weekly didactic reviews in preparation for a national personal training certification exam.

PHILOSOPHY

PHL 101 Introduction to Philosophy 3.0 UNITS
This course introduces students to the nature, history, patterns, and problems of philosophic thought. In addition, students are encouraged to understand philosophy as a means of learning about the world and our place in it.

PHL 102 Religions of Asia 3.0 UNITS
This course offers an introduction to the history, structure and scriptural doctrines of the major religions of Asia, including Islam, Buddhism and Hinduism.

PHL 103 Religions of the West 3.0 UNITS
This course is an inquiry into the origin, meaning, and evolution of the three following monotheistic religions: Judaism, Christianity, and Islam. This goal is accomplished through an analysis of the following basic concepts as they pertain to: the beliefs of these three as concerns the divine; their respective heritages and spiritual practices; and the many forms each of these religions takes within its own nexus (for example, historical alterations). Or put differently, interest is in exploring the way of life, structure, practice, and historical reality of each of these three great monotheistic religions.

PHL 218 Contemporary Moral Issues 3.0 UNITS
This course introduces students to a variety of ethical approaches to moral issues and to general problems involved in moral reasoning. Various controversial contemporary moral problems relating to business, science, law, medicine, and personal relations are examined.

PHYSICS

PHY 111 Engineering Physics I 4.0 UNITS
This is an introductory course in calculus-based mechanics. Topics include vector algebra, equilibrium of particles and rigid bodies, and kinematics and dynamics of particles and simple rigid body systems. Emphasis is placed on Newton's laws of motion and conservation principles involving work, energy, and momentum.

PHY 113 Physics I 4.0 UNITS
This is the first of a two-course sequence in introductory physics that deals with mechanics. Topics include measurements, vectors, simple kinematics of uniformly accelerating bodies, projectile and circular motion work, energy, power, and simple rotational dynamics.

PHY 211 Engineering Physics II 4.0 UNITS
Provides an introduction to electricity and magnetism. The course starts with electrostatics and culminates with Maxwell's equations. Topics covered include Coulomb's laws, the electric and magnetic field, the electrostatic potential, Gauss's law, Biot-Savart law, Ampere's law, and Basic DC and AC circuit theory.

PHY 212 Engineering Physics III 4.0 UNITS
The third course of a three-course sequence on introductory engineering physics. Topics covered include vibratory and wave motion in general, interference of mechanical waves and related standing wave patterns, resonance and phenomena of beats, Doppler shift of sound waves, geometrical optics and applications to lens and mirror system, diffraction interference, and polarization of light. Also covered are special relativity, photoelectric effect, Bohr-atom, continuous and discrete spectra, Compton effect, DeBroglie and wave particle duality of matter, wave mechanics modification of classical mechanics, and the nuclear atom. Lab experiments are performed spanning the broad-spectrum of topics discussed in lecture.

PHY 213 Physics II 4.0 UNITS
Covers the following topics: simple harmonic motion, wave motion, light and lenses, electric forces and Coulomb's Law, electric fields, and electromagnetism.

PLACEMENT MATH

PLMAT 071 Exempt Mat 071 0.0 UNITS

PLMAT 110	Exempt MAT 110	0.0 UNITS
PLMAT 100	Exempt MAT 100	0.0 UNITS
PLMAT 073	Exempt MAT 073	0.0 UNITS

PRACTICAL NURSING

PNU 204	Practical Nursing Capstone	2.0 UNITS
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This course is a comprehensive synthesis of key practical nursing principles. Aligned with the NCLEX-PN blueprint, students learn about patient safety and content specific to medical/surgical, maternal/child, and psychiatric nursing care. Clinical simulations and case studies reinforce concepts and focus on prioritization and delegation using multiple patient assignments. NCLEX-PN readiness exams, review, and test-taking techniques are integrated to reinforce student learning. Concepts discussed during lectures are reinforced during lab hours.

PNU 101	Practical Nursing: Fundamentals of	6.0 UNITS
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This introductory nursing course presents basic nursing concepts and skills. The focus is on wellness and disease prevention. Using Maslow's Hierarchy of Needs, concepts basic to physical, psychological, sociocultural, developmental, and spiritual needs are presented. Clinical experiences are provided in varied sites caring for adult and geriatrics clients. These sites include hospitals and nursing homes.

PNU 102	Practical Nursing: Nursing Clients With	8.0 UNITS
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This course builds on the knowledge and skills learned in PNU 101. It will focus on acute health problems that occur in adults causing alterations in basic human needs. Mental health concepts and alterations will also be discussed. Clinical experiences are provided in varied sites.

PNU 201	Practical Nursing: Maternal Child Health	5.0 UNITS
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This Nursing course builds on the knowledge and skills learned in PNU 101 and PNU 102. The course focuses on reproduction, childbearing, and child-rearing families. Clinical experiences are provided in varied clinical sites.

PNU 202	Practical Nursing: Nursing Clients With	8.0 UNITS
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This course builds on the knowledge and skills learned in the first three nursing courses. It will focus on chronic and emergent health problems that occur in adults across the life span and cause alterations in basic human needs. Clinical experiences are provided at varied sites.

PNU 203	Practical Nursing: Role Transition	1.0 UNIT
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This course will focus on current trends and issues that impact nursing practices and health care delivery. Concepts related to role transition will be explored.

POLITICAL SCIENCE

PSC 101	Introduction to Political Science	3.0 UNITS
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Provides an introduction to political theories and methods of politics as a science. The course includes analysis of structures and processes that characterize political behavior and political institutions.

PSC 102	American Government	3.0 UNITS
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Examines the structure and operations of the American political system, the philosophical principles and theories upon which it rests, and the social forces and pressures operating on it.

PSC 200	State and Local Government	3.0 UNITS
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This course is an introduction to the structures and functions of state and local government in the United States. The student is exposed to state and local institutions, processes and policies including their powers, organizations, functions and development as well as the interrelationship between the federal, state, and local political jurisdictions.

PSC 210	International Relations	3.0 UNITS
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This course introduces students to the development and contemporary status of international relations and world politics. The course examines the emergence of the modern nation-state system, competing theories and strategies in foreign policy decision making, the great power rivalries between states, including their causes, consequences and implications for the future. Other topics include the status of power politics in the 21st century, terrorism, non-state actors in the global system of politics, the emergence of a global-political economy and the Global South in a world of wealthy nation-states.

PSYCHOLOGY

PSY 216 Theories of Personality 3.0 UNITS

This course reviews the psychoanalytic, sociocultural, trait, learning, sociobiological, and existential-humanistic theories of personality. Personality characteristics are emphasized and basic assumptions underlying selective theoretical approaches are examined. Empirical research findings used to support various theoretical paradigms are critically evaluated and real-world applications are explored.

PSY 101 Introduction to Psychology 3.0 UNITS

This course is designed to present an overview of psychology. As an introduction to the field, students learn current perspectives and the methods used in psychology today. They become familiar with problems and general findings in the processes of sensation, perception, learning and memory, and consider issues related to language, thought, and intelligence. They focus, too, on understanding the connections between emotions, stress, and health, and examine current theories in developmental, personality, and abnormal psychology. Students are encouraged to apply psychological principles to personal and social concerns.

PSY 211 Developmental Psychology I 3.0 UNITS

This course is designed to investigate human development from the prenatal period through adolescence using a life-span approach. The class will focus on the interaction of biological, social, emotional, and cognitive factors as they affect the developing child. Contemporary developmental theories and research issues will be discussed, and emphasis will be placed on the applications of theory to parenting, education, and therapy.

PSY 121 Psychological Methods and Applications 3.0 UNITS

This course offers students majoring in the field or those interested in further study of psychology an opportunity to familiarize themselves with theories within selected areas of scientific psychology (Interpersonal and Social relations, Sensation, Perception, Emotions, Motivation, Intelligence, Personality Assessment, Psychological Disorders and Therapies).

PSY 260 Lifespan Development 3.0 UNITS

Lifespan Development investigates current theories related to the changes that occur from the prenatal period through old age. Emphasis is placed on understanding the complex interactions of biological, cognitive, social and emotional factors that shape the life course. Students will be expected to apply developmental theories to their own life experiences.

PSY 270 Psychology of Teaching and Learning 3.0 UNITS

This course is intended primarily for students majoring in education or interested in the learning process. Psychological theories related to development, learning, cognition and motivation will be reviewed and applied to an understanding of student characteristics and differences, the importance of classroom environment, and various means of assessment. Emphasis will be placed on the practical implications of psychological theory, a constructivist approach to learning, and the importance of reflective teaching.

PSY 280 Abnormal Psychology I 3.0 UNITS

This course examines historical views of abnormal behavior and focuses on contemporary causes, classifications and treatments. Major disorders are considered from psychodynamic, cognitive, humanistic, biological and sociocultural perspectives.

RADIOGRAPHY

RAD 101 Radiography I 4.0 UNITS

Content is designed to provide an overview of the general principles of patient care, ethics and medico-legal standards. Principles of mathematical formulas, prime factors and electromagnetic energy are introduced. Equipment operation introduces the use of grids, screens, darkroom and digital imaging processing, and all components involved in image production. The foundation of radiation protection and safety standards in radiographic imaging is emphasized. The history of radiography, career opportunities and human diversity and its relationship in the health care system are covered. Learning the basics of medical terminology for use in the health care environment is given.

RAD 104 Radiographic Imaging I/Lab 3.0 UNITS

In this first course, anatomy and positioning terminology and their procedure protocols for chest, abdomen, and upper extremity are presented. Demonstration of applicable factors and radiation protection methods are learned in order to achieve quality radiographs while providing compassionate and optimum patient care. Clinical lab experience will complement didactic instruction. Pre/Co-requisite: RAD 101

RAD 102 Radiography II 4.0 UNITS

This course builds upon the foundation of image production identifying the prime components of radiographic image quality and its control. Image processing for screen-film versus digital imaging along with radiographic accessories for routine diagnostic radiography are analyzed. Radiation protection and biology discuss radiation interaction with atoms and cellular structures. Patient care methodologies are continued emphasizing imaging techniques for mobile, OR and trauma patients including age specific routines. Quality management will include theory and application of basic quality control tests of radiographic equipment. Pre/Co-requisites: RAD 101; RAD 104; 105

RAD 105 Radiographic Imaging II/Lab 3.0 UNITS

In this second course of imaging series, anatomy and positioning terminology and their procedure protocols for lower extremity, shoulder and pelvic girdles, ribs and sternum as well as pediatric and geriatric methodologies are learned. Patient care protocols are always emphasized. Clinical lab experience will complement didactic instruction. Pre/Co-requisites: RAD 101; 102; 104

- RAD 103 Radiography III 3.0 UNITS**
Biological Aspects of Radiation, personnel protection and minimizing patient exposure are studied in depth. Patient Care introduces the relationship of pharmacology to contrast media studies along with learning venipuncture technique and patient assessment skills. Advanced modalities and special studies will prepare students for senior year clinical rotations. Pre/Co-requisites: RAD 101; 102; 104; 105; 106
- RAD 106 Radiographic Imaging III/Lab 1.0 UNIT**
In this third course of imaging series, anatomy and positioning terminology and their procedure protocols for the entire spinal column are presented. Patient care protocols are always emphasized. Clinical lab experience will compliment didactic instruction. Pre/Co-requisites: RAD 101; 102; 103
- RAD 204 Radiography IV 4.0 UNITS**
This course is a continuation of RAD-101, -102, and -103. Discussion centers on advanced principles of digital radiography along with an introduction to digital peripheral equipment. Lecture topics include the use of digital equipment for routine fluoroscopy imaging, quality management including continuous quality improvement, and quality assurance. Radiographic Pathology introduces the concepts of diseases and etiology related to radiographic imaging. Students create an oral presentation demonstrating their understanding of image production, equipment, evaluation, and pathology. Pre/Co-requisites: RAD 101; 102; 103; 104; 105;106; 207
- RAD 207 Radiographic Imaging IV/Lab 3.0 UNITS**
In this last course of imaging series, anatomy and positioning terminology and their procedure protocols for contrast studies, skull, and advanced studies such as Myelography, Arthrography and ERCP are learned. Patient care protocols are always emphasized. Clinical lab experience will complement didactic experience. Pre/Co-requisites: RAD 101; 102; 103; 104; 105; 106 ; 204
- RAD 205 Radiography V 4.0 UNITS**
This course is a review of content covered in RAD- 101, -102, -103, -104, -105, -106, -204, and -207. This course covers in detail the content covered in previous courses such as digital radiography, construction of circuit tubes, comparison of atomic interactions, and the effect on exposure when as low as reasonably achievable and principles of exposure incorporating technical factor conversions for the control panel. Students gain an understanding of the relationship of patient body habitus and patient dosage. The course also reviews content previously covered in Radiographic Imaging courses. Students begin studying for their certification exams through the Online American Registry of Radiologic Technologists (ARRT) review programs. Pre: RAD 101; 102; 103; 104; 106; 204; 207
- RAD 208 Radiography VI 1.0 UNIT**
A general comprehensive review of all learned material prepares the student for the upcoming ARRT national registry examination. Content Specifications, test taking preparation, and continuing education opportunities will be discussed. Students will be required to pass mock simulated registry exams and comprehensive tests by the required 80% grade in order to pass this final course in order to graduate.

READING

- RDG 070 Fundamentals of Basic Reading 3.0 UNITS**
This course offers practical application of reading skills. Working with a variety of written texts, students learn to use reference materials to find information, locate central ideas and supporting details, and develop vocabulary through the use of context clues and word parts. Students also learn to apply annotating, note taking, and summarizing skills.
- RDG 071 Basic Reading I 3.0 UNITS**
This course is designed for students who need to develop reading skills before attempting college-level coursework. Students are encouraged to become active readers, listeners and thinkers through a variety of reading and study experiences. Assistance is given with comprehending, summarizing, analyzing, and evaluating assigned readings, including full-length works of fiction or non-fiction.
- RDG 072 Basic Reading II 3.0 UNITS**
This course is designed for students who need to improve reading skills before attempting a full college-level schedule. Students develop their skill in comprehending, summarizing, analyzing and evaluating assigned readings, including full-length works of fiction or non-fiction.
- RDG 073 Basic Reading III 3.0 UNITS**
This course is designed for students who need preparatory work in reading before attempting a full college-level program. Students refine test-taking and study skills and develop comprehension through reading of college-level essays, textbook materials and novels and/or non-fiction books.
- RDG 074 Intro to Analytical and Critical Reading 3.0 UNITS**
This course is designed for students needing preparatory instruction before entering ENG/RDG 071 and RDG 075. It offers practical application of study skills by using a variety of written materials. Students will learn to identify central ideas, supporting details, and to imply meaning from the text. In addition, they will apply annotating, note taking and summarizing skills in various content area materials. Vocabulary development will be an important component of instruction in this course.

RDG 075 Developing Analytical Thought I

3.0 UNITS

Focuses on analytical reading skills. Students are taught to identify logical patterns of thought in formal written and spoken language. Practice is provided in reading maps and graphs; analyzing and solving word problems; and understanding analogies, making inferences, and drawing conclusions.

SCIENCE

SCI 102 Intro to Science Real World

4.0 UNITS

This course introduces students to real-world problems and their solutions through the process of scientific inquiry. Students explore the relationship between science and everyday life. The instructor provides the research question, and students are responsible for the design, data collection, analysis, interpretation, and reporting of their investigations. To reinforce the concepts covered in lecture, laboratory classes include hands-on, inquiry-based laboratory investigations. Pre-requisite: Exit Basic Mathematics. Co-requisite: ENG-101.

SCI 101 Introduction to Physical Science

3.0 UNITS

This course is for students who have not had high school physics and for those who wish to review the subject. It covers mechanics, electricity and magnetism, elements of heat, work, and waves. The associated laboratory supplements and illustrates the principles discussed in class.

SCI 105 Introduction to Astronomy

4.0 UNITS

Introduction to Astronomy, one of the earliest sciences, is intended for non-science majors. Students learn a wide range of scientific content, including the sky, Moon phases and eclipses, the Solar System, the nature of light and waves, as well as the Sun and galaxies. Along the chronological path of scientific discoveries and technological developments, students learn about this amazing field and understand how scientists across the centuries contributed to the development of modern astronomy. The associated laboratory activities and demonstrations supplement and illustrate the principles discussed during lecture.

SUPPLY CHAIN MANAGEMENT

SCM 101 Supply Chain Management Principles

3.0 UNITS

This course defines the concept of a supply chain and all of its components from raw materials extracted from the earth to retail products ready for purchase by consumers. The principles learned in this track provide the necessary foundation for fully comprehending the following certification tracks. Supply Chain Management Principles assures success in the remaining certification SCM tracks and is recommended as a prerequisite to other certification tracks. The Supply Chain Management Principles certification also stands alone as a high level overview of supply chain management.

SCM 110 Transportation Operations

3.0 UNITS

Transportation Operations explains in detail the different types of transportation modes: air, water, rail, and pipeline used throughout the supply chain and reasons for selected modes. Transportation Operations looks at cost drivers such as dimension, weight and speed along with delivery requirements and other special requirements as input to key transportation decisions.

SCM 115 Warehousing Operations

3.0 UNITS

Warehousing Distribution introduces the student to the processes, software, and terminology used in modern distribution operations. This course trains students on the basics of warehousing so that they may quickly acclimate themselves and be effective contributors in warehousing and distribution operations. Discussion centers on the role of warehousing regarding facility configuration, storage and handling techniques, performance metrics, customer service considerations, and safety concerns across various types of distribution facilities.

SPECIAL EDUCATION

SED 235 Young Children With Special Needs

3.0 UNITS

This course focuses on the origins, theoretical and philosophical foundations, and practical issues associated with education and intervention services for children birth through eight years of age. This unique group may have disabilities, or may be developmentally delayed, or at risk for problems in learning. Topics include issues related to public laws, effectiveness of early intervention, biological and environmental influences on development, definitions of "at-risk" and "disabled" populations and assessment. Students will gain knowledge in curriculum design and strategies for teaching young children with special needs in collaboration with their families. Students will gain practical experience via field assignments. They are expected to complete observations of young children with special needs in various settings, as well as implement an extensive case study.

SED 290 Inclusive Teaching and Learning

3.0 UNITS

An introduction to the field of special education, the etiology, societal attitudes, federal and state laws, and responsibility of educators will be explored. Emphasis will be on the exceptional child as a learner by developing an understanding of the handicapping conditions and applying modifications to educational practices and environments. Current programs and services for educating exceptional children in the State of New Jersey will be discussed.

SOCIOLOGY

SOC 203 Environmental Sociology 3.0 UNITS

This course focuses on the interactions between the natural environment, social organizations, and social behavior, with studies of the social factors that cause environmental problems, the societal impacts of those problems, and societal efforts to solve these problems. The course explores issues of science and technology, popular culture, economics, urbanization, racial and gender relations, as well as social movements. This course develops a broad understanding of society and environmental issues.

SOC 101 Introduction to Sociology 3.0 UNITS

This course provides an introduction to the discipline of sociology, its major concepts, theories, and research methods, as well as key findings in the field. Using scientific and theoretical principles, students learn about the relationship between social organization, group dynamics, and human behavior, and about the functions of institutions such as religion, family, economy, government, education, the media, and medicine. Sub-topics include culture and identity development; group formation and dynamics; urban life and social change; causes and consequences of social inequality in areas of race, ethnicity, gender, sexuality, and social class.

SOC 200 Intro to Gerontology 3.0 UNITS

This course examines the aging process and problems of aged people. The biological, psychological and sociological dimensions of aging are explored. Implications for social policy will be addressed.

SOC 201 Sociology of the Family 3.0 UNITS

This course examines the family as a social institution and explores its functions, structure, structure and change. The family in a multicultural environment is examined and a comparative approach is applied. Challenges of modern times are addressed.

SOC 211 Social Problems 3.0 UNITS

This course examines the dysfunctions and contradictions in social institutions, structures and processes. The role of power in social and individual problems is emphasized.

SOC 230 Religion and Society 3.0 UNITS

The course examines the diversity of world religions and their structure and functions from the sociological perspectives. The role of religion in pluralistic societies will be explored. The conflicting trends of fundamentalism and secularization will also be addressed.

SOC 240 Criminology 3.0 UNITS

This course covers historical and contemporary as well as philosophical and scientific approaches to the understanding of criminal behavior. Medical, psychological, political, economic and sociological dimensions will be explored. Crime statistics are also examined.

SOC 260 Race and Ethnic Relations 3.0 UNITS

This course examines the structure, functions, and conflicts associated with race and ethnic relations, and the interaction between minority and majority groups. Emphasis is placed on the intersection of race, ethnicity, gender, class and religion and its impact on racial/ethnic identities. Historical and contemporary experiences of various racial/ethnic groups will be explored and various sociological perspectives will be applied. Race and ethnic relations will be explored from both the national (U.S.) and the global perspectives.

SOC 280 Social Research Methods 3.0 UNITS

This course offers an introduction to the main concepts and methods of social research. It is designed to develop an understanding of scientific methods of inquiry. Both quantitative and qualitative methods are covered. Students gain expertise in report writing. Creative and critical thinking skills are also emphasized.

THEATER ARTS

THA 201 Acting II 3.0 UNITS

Acting II is an intermediate level acting course that delves more intensely into scene work, and builds upon the basic skills acquired in Intro to Acting. The curriculum focuses primarily on the foundations of Stanislavski's Method, but also emphasizes two offshoots of his concepts - the distinctive acting styles of both Stella Adler and Sanford Meisner. By concentrating on objectives, given circumstances, sensory work, affective memories, characterization, and moment-to-moment work, students will acquire the discipline and framework necessary to create a theatrical performance.

THA 208 Contemporary Drama 3.0 UNITS

Contemporary Drama focuses on late 20th - 21st Century plays, and the analysis of their theatrical structures from the perspective of theatre artists - playwrights, actors, directors, and designers. The emphasis of the course is to develop the student's ability to appreciate the intellectual and intuitive work required to create a theatrical experience from a written text in today's theatre.

THA 205 Introduction to Playwriting 3.0 UNITS

Introduction to Playwriting is designed to create a supportive and stimulating environment for student playwrights to develop the essential tools necessary to craft plays. The art of playwriting is explored through analytic as well as creative work, including the use of writing prompts, play analysis, re-writing exercises, and play readings. The study and practice of these fundamental playwriting techniques culminate in the writing of a 10-minute play.

THA 101 Introduction to Acting

3.0 UNITS

The course is designed for the college student possessing little or no background in the performing arts, and for experienced performers who wish to brush up on their skills. Course content includes beginning technique, theory, and the methodology needed to grasp the concept of acting. The practice of acting is explored through exercises using imagination, concentration, relaxation, intention, improvisation, spontaneity, and the reality of doing (as each applies to the craft of acting).

THA 102 Introduction to Theater

3.0 UNITS

Introduction to Theatre explores the fundamentals of the theatre by bringing to the forefront the work of the theatre practitioners -- playwrights, actors, directors and designers -- working in the world theatre today. The course will also examine the social, political, and artistic forces that shape a play in relation to culture and history.

THA 202 Acting for the Camera

3.0 UNITS

Acting for the Camera introduces the basic concepts of acting for film and television and the specific tools used in the medium. Building upon the basic skills acquired in Intro to Acting, the curriculum focuses on student actors who want to develop skills that will improve their performance on camera.

THA 207 Introduction to Drama

3.0 UNITS

This course introduces students to a wide variety of dramatic forms through the study of plays ranging from ancient Greece to modern times. Students will learn to read, discuss and write about plays exemplifying a variety of approaches to drama.