EVS 2942L  
Environmental Technology Practicum  
3.00 Credits  
Focuses on hands on experience in environmental sampling and analysis methods by assigning students to agencies or businesses for 24 hours per week. Emphasis will be to gain practical experience in protocols, methods and use of equipment in an applied setting; includes the possibility of outdoor work and mildly strenuous skills such as carrying and lifting. Prerequisite: EVS 2893C.

FAS 1012C  
Aquacultural Organisms  
3.00 Credits  
The field of aquaculture uses a variety of organisms to culture from fresh water fish, to marine fish, plants, shrimp, lobster, and many others. In this course, the students will learn about the variety of organisms that can be cultured and the methods learned to do so. Prerequisites: College level reading and writing skills are required.

FAS 1401L  
Aquacultural Lab Techniques  
3.00 Credits  
The field of aquaculture uses a number of laboratory techniques to assist the technician in the treatment of fish, identification of fish, breeding techniques, raising of fish, feeding, and a whole host of controls on the artificial environment of the aquarium. This laboratory teaches the techniques used in the field. A special fee will be charged for this course. Prerequisites: College level reading and writing skills are required.

FAS 1404C  
Aquacultural Field Techniques  
3.00 Credits  
Focuses on the practical aspects of establishing a fish farm, setting up the ponds, maintaining environmental conditions, and harvesting the fish. College level reading and writing skills are required. A special fee will be charged for this course. Prerequisites: College level reading and writing skills are required.

FAS 2240C  
Aquacultural Nutritional Tech  
3.00 Credits  
Focuses on the nutritional aspects of fish. Fish digestive anatomy, nutrition requirements, metabolic rates, diets, and available food sources will be covered. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

FAS 2253  
Aquacultural Disease Processes  
3.00 Credits  
Studies the disease processes that affect fish that includes bacterial diseases, infections, viruses, fungi, parasites, immune diseases, nutritional diseases and environmental diseases. Prerequisites: College level reading and writing skills are required. Corequisite: FAS 2253L.

FAS 2253L  
Aquacultural Disease Process Lab  
1.00 Credit  
Designed to teach laboratory techniques to identify disease causing organisms and to use some of the treatment methodologies. A special fee will be charged for this course. Prerequisites: College level reading and writing skills are required. Corequisite: FAS 2253.

FAS 2263C  
Aquacultural Reproductive Technology  
3.00 Credits  
Focuses on the principles of reproductive biology for the aquaculture industry. The primary emphasis will be on freshwater fish reproduction, however, other aquaculture organisms will be discussed. Prerequisites: College level reading, writing and math skills are required.

FAS 2353C  
Aquacultural Management Practices  
3.00 Credits  
Aquaculture operations are businesses. This course teaches the basic operations of the business side, showing profit and loss statements, marketing, how to manage people, and the general principles of how to manage an aquaculture establishment. In addition, decision making tools for the manager will be presented that include the use of computers and records management. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

FAS 2941L  
Aquaculture Field Experience I  
3.00 Credits  
Focuses on the hands on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the first of the four field experience courses. Prerequisites: College level reading and writing skills are required.

FAS 2942L  
Aquaculture Field Experience II  
3.00 Credits  
Focuses on the hands on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the second of the four field experience courses. Prerequisite: FAS 2941L.

FAS 2943L  
Aquaculture Field Experience III  
3.00 Credits  
Focuses on the hands on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the third of the four field experience courses. Prerequisite: FAS 2942L.
FAS 2944L
Aquaculture Field Experience IV
3.00 Credits
Focuses on the hands on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the last of the four field experience courses. Prerequisite: FAS 2943L.

FFP 1000
Introduction to Fire Science
3.00 Credits
Provides an overview of the fire protection field, with an emphasis on fire protection agencies, equipment, building design & construction and fire fighting tactics. Topics include fire suppression & equipment, characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents and public relations.

FFP 1304
Aerial Operators Course
3.00 Credits
Covers driving laws and techniques, construction and operation of ladder trucks, aerial platforms and apparatus maintenance.

FFP 1506
Fire Prevention and Investigation
3.00 Credits
Deals with the principles of prevention and investigation, a study of the fire hazards of various occupancies, a review of fire prevention codes, OSHA requirements, surveying and mapping procedures. Topics include recognition of hazards, engineering and enforcement of solutions, public relations and presentation of arson evidence.

FFP 1710
Company Officer
3.00 Credits
Designed to assist officers in solving problems and situations encountered in today’s changing fire service. The curriculum includes a review of fire department organization and administration, management theory, leadership, communication, motivation and group dynamics.

FFP 1810
Fire Fighting Tactics and Strategy I
3.00 Credits
Involves a review of fire chemistry, equipment, manpower, strategies, methods of attack and pre planning fire problems.

FFP 2151
Fire Service Information Management
3.00 Credits
Emphasis on the development and implementation of effective information services systems, strategic planning documentation and technology.

FFP 2280
Management of EMS for Fire Science
3.00 Credits
Provides a framework for the design and development of an emergency medical program. Focuses on current issues facing emergency medical services today.

FFP 2303
Fire Service Hydraulics
3.00 Credits
This course will cover the principles of fire service hydraulic formulas and calculations to determine pump pressures.

FFP 2305
Apparatus Operations
3.00 Credits
This course covers emergency vehicle driving fire ground pump operations including the use of master stream devices, pump construction and pump operational applications. Prerequisite: FFP 2303.

FFP 2401
Hazardous Materials I
3.00 Credits
On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

FFP 2402
Hazardous Materials II
3.00 Credits
On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

FFP 2484C
Hazardous Materials Scene Management
3.00 Credits
This course will focus on the strategies and safe procedures for mitigating the danger at a hazardous materials incident. The course will meet the requirements set forth by OSHA 1910.120 and CFR 1910.120. Credit for this course does NOT apply to the Associate in Arts degree.

FFP 2490C
Chemistry of Hazardous Materials
3.00 Credits
This course focuses on the chemistry knowledge required to evaluate the potential hazards and behaviors of materials considered hazardous. It examines the reasons for the chemical behavior of hazardous materials and is designed to improve decision making, safety operations, and handling. The course will meet the requirements set forth by OSHA 1910.120 and 40 CFR 1910.120. Credit for this course does NOT apply to the Associate in Arts degree.
FFP 2510
Codes & Standards
3.00 Credits
This course is designed to familiarize inspectors with the basic units of NFPA 101. This course includes statewide fire prevention code NFPA 1.

FFP 2521
Construction Documents & Plan Review
3.00 Credits
This curriculum is designed to have the student assimilate information contained in working drawings and specifications as they relate to the fire inspector. Topics include the interpretation of conventional graphic communication, symbols, abbreviations, principles of technical projection as well as a review of construction arithmetic and geometry.

FFP 2540
Private Fire Protection Systems
3.00 Credits
The study of private fire protection and detection systems, such as sprinkler and standpipe systems, chemical extinguishing systems, detection systems and devices. Each system is discussed as to its construction, preventive maintenance and individual uses.

FFP 2590
Management Fire Prevention Programs
3.00 Credits
Focuses on the ability of chief officers to effectively plan and execute fire prevention investigation functions.

FFP 2604
Cause and Origin
3.00 Credits
This course is designed to enhance the fire investigators ability to detect and determine the origin and cause of a fire. Specific topics include fire behavior review, investigation ethics, construction, ignition sources, reading fire patterns and scene reconstruction. Special topics on electrical fire investigation, woodland fires, vehicle fires, mobile home fires, RV and boat fires and scene documentation.

FFP 2630
Latent Investigation
3.00 Credits
A survey of the principles of latent fire and arson investigation.

FFP 2701
Organization and Command of Volunteer Fire Service Operations
3.00 Credits
Focuses on identifying the organizational structure, training, and the application of the incident command system to volunteer programs.

FFP 2720
Executive Fire Officer Leadership and Personnel Management
3.00 Credits
Provides a framework to identify the required skill and abilities necessary for administrative effectiveness and personnel management.

FFP 2730
Fire Service Organizational Theory
3.00 Credits
Provides a medium to relate current organizational theory to practical application in the fire service.

FFP 2740
Fire Service Course Delivery
3.00 Credits
Draws from many recognized authorities in exploring the methods and mechanics of imparting information, with an emphasis on techniques and multi-media materials for communication of ideas and strengthening the retention of skills obtained in the learning process.

FFP 2741
Fire Service Course Development
3.00 Credits
Emphasis on instructional design, course development and training manuals. Students develop their own course by establishing goals, objectives and evaluation criteria.

FFP 2750
Financial Management in Fire Service
3.00 Credits
Designed to assist fire executives in the planning and managing of a fiscal program.

FFP 2790
Analysis of Fire Department Operations
3.00 Credits
Designed for upper level management and officers who will direct operations of maximum involvement at fire or emergency incidents within their community.

FFP 2791
Interpersonal Management in Fire Science
3.00 Credits
Provides a critical self assessment of individual managerial techniques and the implementation of a successful human resource development plan.

FFP 2801
Incident Command and Disaster Management
3.00 Credits
Focuses on the command and control of large scale disasters. Emphasis on inter agency relationships, planning and implementation of a disaster plan, practice drills, and mutual aid agreements.

FFP 2811
Fire Fighting Tactics and Strategy II
3.00 Credits
Covers advanced fire fighting techniques, with an emphasis on incident command systems.

FFP 2830
Incident Command of Major Fire Department Operations
3.00 Credits
Focuses on the command and control for fire officers charged with a greater alarm fire or incident, by emphasizing preplanning, size up, ICS and safety.
FIL 1000
Introduction Film, Cinema and the Environment
3.00 Credits
This course will provide an introduction to the basic terminology, techniques, and contributions of filmmaking and will explore major issues in the history of the moving image, from its invention at the end of the 19th century to the present day. Prerequisites: College level reading and writing skills are required.

FIL 1420C
Motion Media I – Recording and Interpreting Reality
3.00 Credits
Provides a basic understanding of motion media production technology, equipment operation, terminology, and techniques. This will include an introduction to the camera, and to "mise en scene" for documentaries. Students apply the essentials of creative filmmaking in both studio and location settings. Prerequisites: CGS 1000, FIL 1000.

FIL 1432C
Motion Media II: Space and the Environment
3.00 Credits
A continuation of FIL 1420C with emphasis on developing camera techniques in space and the environment. Students will under more advanced projects in motion media to further works both technically and conceptually. Prerequisite: FIL 1420C.

FIL 2010
Films of Fantasy and Imagination
3.00 Credits
This course focuses on the art of the created motion picture image, which springs from the imagination with the help of tools such as animation, optical printing and digital construction and manipulation. This approach contrasts with the more traditional production of moving images, which focuses on photographs aspects of real and existing objects, whether these are actors and sets or the world of nature. This course concerns films which spring from the imagination, literally from the mental pastures of human dreams, from the subconscious rather than the conscious mind. Prerequisites: College level reading and writing skills required.

FIL 2030
History and Future of Motion Pictures
3.00 Credits
This course explores the history of the motion media, including important films, techniques, and styles from 1900 to the present. It also surveys the industrial and social developments of cinema from the point of view of the artist.

FIL 2905
Directed Independent Study: Film
3.00 Credits
This course is designed to establish a framework for further self learning in various areas of motion media for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with a member of the motion media faculty. The contract will outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. Prerequisite: FIL 1000.

FIL 2931
Careers in Film & Video
1.00 Credit
Students are exposed to the full range of careers in film, video and broadcasting in addition to learning about resumes, internships, interviews and portfolios.

FIN 1100
Personal Finance
3.00 Credits
Focuses on charting financial objectives, with an emphasis on budgeting, savings, credit, loans, insurance, estate planning, taxes, investments and real estate.

FIN 2001
Principles of Finance
3.00 Credits
This course is an introduction to the fundamentals of corporate finance. It will the student through corporate financial structures, monetary systems, financial instruments, financial statement analysis, interest and the time value of money. Prerequisites: APA 1111, ACG 2021, ACG 2071, and ACG 2100 or ACG 2110.

FIN 2051
International Financial Management
3.00 Credits
Offered as a required course for the International Business student to provide the basic concepts and principals of international finance in order to understand the nature of international banking, financial services, lending concepts and practices, capital budgeting, financial instruments, and systems of international business operations and control. College level reading and writing skills required. Prerequisite: FIN 2001.

FNR 1001
Natural Resource Management
3.00 Credits
An introduction to the ecology and conservation of natural resources of native lands, concentrating on Florida ecosystems. Emphasis will be given toward management techniques for the conservation of interactive networks and ecosystems on which species depend. Topics include: land use, ecosystems management, conservation and restoration practices, wildlife and forest management, and prescribed fire management. College level reading and math skills required. Prerequisite: EVR 1328.

FOS 1201
Sanitation and Safety Management.
2.00 Credits
Explores the scientific rationales of sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Causes of food borne illnesses will be identified, and preventative techniques by adhering to sanitation standards will be demonstrated. Methods of accident and fire prevention will be emphasized.
**FOS 2521**
*Introduction Seafood Processing*
3.00 Credits
Provides a comprehensive overview of food science and technology, and an understanding of how raw aquacultural commodities and seafood are converted into consumer products. Topics include: food constituents, food deterioration and spoilage, food laws and regulations, methods used to preserve and process foods, and examples of processing and preservation of seafood. Class will include field trips to local seafood processing plants. This class is part of the curriculum for the C.A.S.S. International Aquaculture students. Others can course with the instructor’s approval Credit for this course does NOT apply to the Associate in Arts degree.

**FRE 1120**
*Elementary French I*
4.00 Credits
Covers the fundamentals of listening, reading and writing the language, while developing an understanding of the French culture. Native speakers of French are encouraged to seek credit by exam test.
Prerequisites: College level reading and writing skills are required.

**FRE 1121**
*Elementary French II*
4.00 Credits
Enhances the skills learned in FRE 1120. College level reading and writing skills required.
Prerequisite: FRE 1120 with a minimum grade of "C" or instructor’s permission.

**FSS 1223**
*Food Preparation for Managers*
4.00 Credits
Examines the chemical and physical changes that place as food is processed. Hands on experience in the cookery laboratory is included.
Prerequisites: College level reading, writing and math skills are required.

**FSS 1246C**
*Food Specialties I (Baking)*
3.00 Credits
Covers the fundamentals of baking through the preparation of baked goods, with an emphasis on the proper use and care of equipment, sanitation, hygienic work habits and their conformance with health laws.

**FSS 1248C**
*Food Specialties II*
3.00 Credits
Stresses basic Garde Manger principles and the functions and duties of the department as it relates to other kitchen operations. Emphasis is on specialty work which includes ice carving, buffet decorations, equipment and area planning.

**FSS 1249C**
*Food Specialties III*
3.00 Credits
Focuses on advanced Garde Manger techniques such as aspics, pates, galantines and buffet table arrangements with an emphasis on equipment and organization.

**FSS 1500**
*Food and Beverage Control*
3.00 Credits
Covers inventory control procedures, the determination of inventory cost and efficient space utilization with an emphasis on preparation of daily cost reports and monthly cost summaries.
Prerequisites: College level reading, writing and math skills are required.

**FSS 1941**
*Food Practicum I*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 1942**
*Food Practicum II*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 1943**
*Food Practicum III*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 1944**
*Food Practicum IV*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 1945**
*Food Practicum V*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 1946**
*Food Practicum VI*
2.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

**FSS 2110**
*Food Plans and Menu Preparation*
3.00 Credits
Emphasizes the preparation of a nutritionally balanced cycle menu, portion control, use of leftovers and waste control.
Prerequisites: College level reading, writing and math skills are required.
FSS 2120
Food Purchase and Storage
3.00 Credits
Focuses on volume food purchasing, with an emphasis on the legal obligations of vendors and vendees, receiving controls and storing & dispersal.
Prerequisite: FSS 2110.

FSS 2271
Beverage Management Service
3.00 Credits
Focuses on the purchase, storing and serving of wine and related beverages. Topics include identifying wines, liqueurs, aperitifs and other distillates.
Prerequisites: College level reading and writing skills are required.

GCO 2230
Pumping and Irrigation Systems
3.00 Credits
This course is designed to allow students to focus on applying water to horticulture crops. Topics will include pumps, water resources, irrigation installation, pipe types and sizing, wire sizing, surge pressure, backflow, back siphon protection, valve locations, selection, sprinkler head location, geographical regions, pumps and pumping, water pressure calculation, cost estimation, troubleshooting and maintenance.

GEB 1011
Introduction to Business
3.00 Credits
Presents an overview of the practices and procedures of the business world, with an emphasis on career selection. Topics include business institutions, problems, organizations and business deals.

GEB 1949
Business Internship
3.00 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit. Credit for this course does NOT apply to the Associate in Arts degree.

GEB 2350
Introduction to International Business Essentials
3.00 Credits
Prepares students for entry level positions in international business; for those in the international business environment to broaden their knowledge and to acquire additional skills required for career advancement; and to provide academic opportunities for understanding international business in the global economy of the world. College level reading and writing skills required.
Prerequisite: GEB 1011.

GEB 2370
Introduction to International Business Policy Issues
3.00 Credits
Prepares students for entry level positions in international business; for those in the international business environment to broaden their knowledge and to acquire additional skills required for career advancement; and to provide academic opportunities for understanding policy development and planning in international business in the global economy of the world. College level reading and writing skills required.
Prerequisites: GEB 1011, GEB 2350, and FIN 2051.

GER 1120
Elementary German I
4.00 Credits
Covers the fundamental of reading, writing, listening and speaking the language while developing an understanding of the German culture. Native speakers of German are encouraged to seek credit by exam test. College level reading and writing skills are required.

GER 1121
Elementary German II
4.00 Credits
Enhances the skills taught in GER 1120 College reading and writing skills required.
Prerequisite: GER 1120 with a minimum grade of "C" or instructor's permission.

GEY 1000
Issues of Aging
3.00 Credits
Explores the issues related to the aging process and the later stages of life including: retirement, psychosocial concerns and community services for the elderly.
Prerequisites: College level reading and writing skills are required.

GIS 1041
1.00 Credit
Designed to acquaint students with the uses and applications of Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Methods and techniques used in GIS and GPS will also be reviewed. Credit for this course does NOT apply to the Associate in Arts degree.

GIS 2040
Fundamentals of Geographic Information Systems
3.00 Credits
Designed to acquaint students with the history, operation and applications of geographic information systems (GIS). This course will cover all aspects of geographic information systems including data collection, preprocessing, data management and data analysis as well as the application of these systems. Credit for this course does NOT apply to the Associate in Arts degree.
GLY 1010
Physical Geology
3.00 Credits
Covers basic geology concepts and principles. Topics include origin and structure of the earth, processes involved in shaping the earth’s crust, the nature and classification of earth materials, and the dynamic interactions of the lithosphere with the hydrosphere and atmosphere that produce characteristic landforms.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: GLY 1010L.

GLY 1010L
Physical Geology Lab
1.00 Credit
This course accompanies GLY 1010. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: GLY 1010.

GRA 2111C
Graphic Design
3.00 Credits
This course is an introductory class which will introduce students to the design applications relevant to graphic design. Students with little or no experience on a MAC or PC will become familiar with the operating systems and will be able to use the computer to bring their images into the computer and be able to function with proficiency in file management, input and output, design applications, and creating backups of their work.
Prerequisite: ART 1201C.
Corequisite: PGY 2401C.

GRA 2156C
Digital Illustration
3.00 Credits
This course will build upon the student's understanding of digital design within the larger context of visual literacy and communication by expanding upon basic digital design processes and practices, particularly the differences between working in raster and vector based media. The course will explore visual and technical understanding of digital illustration in a vector based environment using software applications that are considered to be the industry standard.
Prerequisites: GRA 2111C or ART 2600C.

HFT 1000
Introduction to Hospitality Industry Management
3.00 Credits
Presents introductory material on the hotel motel industry, with an emphasis on guest room facilities and services, space utilization and guest records.
Prerequisites: College level reading and writing skills are required.

HFT 1410
Front Desk Procedure
3.00 Credits
Field work in front desk operations and guest relations (80 hours, as scheduled by the instructor).
Prerequisites: College level reading, writing and math skills are required.

HFT 1790
The Event Industry
3.00 Credits
This course examines the full event planning process; beginning with the anatomy of an event to establish the different layers of an event experience and the step by step process needed to plan, design and execute events that will meet the needs of both customers and their audiences.
Prerequisites: College level reading and writing skills are required.

HFT 2210
Supervisory Development
3.00 Credits
Covers techniques for supervising, motivating and instructing hourly wage employees, writing job descriptions and developing work simplification studies and job audits. College level reading and writing skills required.
Prerequisites: College level reading and writing skills are required.

HFT 2530
Hospitality Merchandising Techniques
3.00 Credits
Includes the planning of a sales campaign, display of food items, the physical appearance and condition of equipment and property, community relations and interactions of employees and customers.
Prerequisites: College level reading and writing skills are required.

HFT 2600
Hospitality Industry Law
3.00 Credits
Presents a study of the laws, codes and regulations applicable to the hospitality industry.
Prerequisites: College level reading and writing skills are required.

HFT 2750
Meeting, Convention and Exposition Industry
3.00 Credits
Defines the scope and various segments of the convention market, explains what is required to meet individual needs, and explores methods and techniques that lead to better service.
Prerequisites: College level reading and writing skills are required.

HFT 2840
Maitre D’ and Dining Room Service
3.00 Credits
Presents introductory material on all types of dishes, how and when they are used. Includes the duties of waiters and waitresses, personal hygiene and appearance, basic rules and procedures for serving, accident prevention, familiarization with menu items, banquet service & table settings, and French, Russian and English buffet and smorgasbord service. Ninety hours of work experience in the food laboratory are included.
Prerequisites: College level reading, writing and math skills are required.
HFT 2941
Hospitality Management Internship
3.00 Credits
A work based learning experience for hospitality management students. Student intern placements will be dependent upon student preference and availability of participating hospitality institutions. The intern is to complete a minimum of 125 hours of internship experience during the term of enrollment.

HIM 1000
Medical Record Content
1.00 Credit
Covers the basics of medical record content and usage. Provides an understanding of patient record requirements, access, and confidentiality. Includes analysis of the medical record, emphasizing legal ramifications, ethics, proper use, and confidentiality issues. Credit for this course does NOT apply to the Associate in Arts degree.

HIM 1438
Principles of Disease
4.00 Credits
This course addresses the etiology, pathophysiology, treatment, and complications of human diseases. A systems approach to the disease process is used, which will incorporate basic medical terminology, anatomy and physiology. Common laboratory and diagnostic tests are included.

HIM 1442
Pharmacology
2.00 Credits
Course is designed for students who will not be administering medications but require a general knowledge of classifications, common usage, and therapeutic indications of commonly prescribed medications. Credit for this course does NOT apply to the Associate in Arts degree.

HIM 1453
Anatomy and Physiology for Medical Coding
4.00 Credits
This course is designed for students with limited background in sciences pursuing careers in the allied health fields. The students will gain an understanding of how the human body operates on a daily basis from birth to death and the fascinating working systems in our bodies, intended for medical coding students. Focuses on the structure and function of the various body systems. Includes the medical terminology and abbreviations related to each body system.

HIM 2220
Basic ICD-9-CM Coding
1.00 Credit
An introduction to basic coding principles, characteristics and conventions using the ICD-9-CM coding system. Students will learn to use the Alphabetic Index to select correct codes from the Tabular listing to numerically identify diseases and procedures. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HSC 1531.

HIM 2232
Intermediate ICD 9 CM Coding
3.00 Credits
Coding principles, characteristics, and conventions of coding using the ICD-9-CM coding system. Includes coding principles and guidelines using the Alphabetic Index and Tabular list for diseases and procedures. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HIM 2220.

HIM 2253
Basic CPT Coding
1.00 Credit
Introduces basic coding principles, characteristics, and conventions of coding, using the Physicians’ Current Procedural Terminology (CPT). Focuses on evaluation and management coding, unbundling, starred procedures, separate procedures, the global period, and modifiers. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HSC 1531.

HIM 2254
Intermediate CPT Coding
3.00 Credits
A continuation of basic coding principles, characteristics, and conventions of coding, using the Physicians’ Current Procedural Terminology (CPT) coding nomenclature. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HSC 1531, HIM 2253, HIM 1453, HIM 1438.

HIM 2272C
Medical Billing & Insurance II
3.00 Credits
Emphasis on billing regulations for the State of Florida. Course content includes LMRFs, Workers’ Compensation Laws, Florida Medicare and claims for automobile accident injuries. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HIM 2275C, HSC 1531, HIM 2253.

HIM 2273
Billing Software
2.00 Credits
Students will receive training with a software program that is used to complete billing forms and process claims to insurance companies. Includes paper claims and electronic billing. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HIM 2275C, HIM 2272C, HSC 1531, HIM 2253.

HIM 2275C
Medical Billing & Insurance I
3.00 Credits
Introduction to health insurance claims processing, carrier requirements, and state and federal regulations. Billing for physician’s offices, hospital and ambulatory surgery services. Topics that are covered include, electronic billing, confidentiality, managed care systems, Workers’ Compensation, Medicare and Medicaid. Will include hands on laboratory component. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HSC 1531, HIM 2220, HIM 2253.
HIM 2283
Advanced Coding
3.00 Credits
Includes the study of complex medical and surgical diagnoses and procedures in the inpatient and outpatient settings using CPT and ICD-9-CM codes to ensure accurate coding and reporting. Addresses current concepts and changes related to coding practice. Reimbursement by prospective payment systems will be reviewed. The 3M encoder will be used to provide hands on practice. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HSC 1531, HIM 1442, HIM 1438, HIM 1453, HIM 2232, HIM 2253, HIM 2254, HIM 2220.

HIM 2940
Clinical Billing Practicum
2.00 Credits
Course is a planned work based experience that provides students with an opportunity to enhance their skills through a supervised practical experience related to their career objectives in medical billing. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HSC 1531, OST 1100, OST 2145, CIS 1931, HSC 1641, HIM 1000, HIM 2275C, APA 1111, SLS 1261, HIM 2253, HIM 2220.

HIM 2941
Clinical Coding Practicum
2.00 Credits
Course is planned work based experience that provides students with an opportunity to enhance their skills through a supervised practical experience related to their career objectives. Coding guidelines will be used and the student will address billing and reimbursement issues. Medical records will be used by the student to perform coding procedures. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HSC 1531, CIS 1931, HIM 2253, HIM 1000, HIM 1438, HIM 1453, HSC 1641, HIM 2254, HIM 2232, HIM 1442.

HIS 2206
Selected Topics in History
3.00 Credits
An in depth study of the economic, intellectual, cultural, social and political developments in Western Civilization and their impact on today's world. May be taken two times for credit.

HIS 2206H
Honors Selected Topics in History
3.00 Credits
Same as HIS 2206 with honors content. Honors Institute permission required. May be taken two times for credit.

HLP 1081
Health Analysis & Improvement
3.00 Credits
Examines the role, wellness and fitness, disease, nutrition, stress and physical activity, and their implications for total well being. Includes a self evaluation of the student's current health status through their body composition and target heart rate. The development of a personal fitness program through complimentary and integrative modalities and a wide variety of choices is designed to improve total body fitness.

HOS 1010
Horticultural Science
3.00 Credits
Focuses on the fundamentals of plant growth, physiology, reproduction and related sciences. Plant identification structures, classification, soils, nutrition, irrigation, fertilizers, IPM post harvest handling and sustainable agriculture systems will be addressed. The impact of horticulture economy will also be addressed.

HOS 1016
Introduction Horticultural Math & Chemistry
3.00 Credits
Focuses on the fundamentals of chemistry and mathematics as they impact horticulture. Emphasis will be placed on measurements and units, chemicals and chemical reactions as they apply to horticulture. Topics include: numbers, metric system conversion, figures (charts and graphs), chemical reactions, liquids and solids, biochemistry and organic chemistry.

HSC 1220
Introduction to the Health Sciences
1.00 Credit
Introduces students to health care and patient care delivery systems. Includes discussion of infectious diseases and their transmission, including HIV / AIDS and hepatitis, bloodborne pathogens, legal/ethical issues regarding violence/abuse cognition and reporting. Also includes CPR certification for health care providers. College reading and writing skills required. Credit for this course does not apply to the Associate in Arts degree.

HSC 1531
Medical Terminology
3.00 Credits
Focuses on medical terminology, with an emphasis on anatomic names of bones and organs of the body, anatomic descriptive terms, radiographic laboratory terms and their common abbreviations and commonly used medical terms and their proper usage. Credit for this course does NOT apply to the Associate in Arts degree.

HSC 1538
Terminology in Healthcare Programs
1.00 Credit
Provides the student with the basic knowledge of the language of healthcare and the formation of complex medical terms. This independent study course is presented in modular design. It utilizes written and reading assignments as well as audio visual presentations to maximize retention Credit for this course does NOT apply to the Associate in Arts degree.

HSC 1641
Legal and Ethical Aspects in Health Care
1.00 Credits
An introduction to health care delivery systems, their roles and responsibilities, and the patient's legal rights within the system. The student will also evaluate ethical issues as they relate to the health care field Credit for this course does NOT apply to the Associate in Arts degree.
HSC 2100
Health Education
3.00 Credits
Provides a survey of the principles of health with an emphasis on physical fitness, mental health, nutrition, the use of tobacco, alcohol, drugs and family living.

HSC 2400
First Aid
3.00 Credits
To provide the citizen responder with the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until professional medical help arrives. Meets American Red Cross requirements for First Aid Responding to Emergencies Certification. A special fee will be charged for this course.

HUM 1520
Music in Culture
3.00 Credits
Links music to the visual arts and the composer’s cultures, focusing on western music from the Medieval Period to the present.

HUM 2210
World Humanities: Prehistoric to Early Modern Era
3.00 Credits
Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Prehistoric Era to the Renaissance. History is discovered through a study of art, music, literature, religion and philosophy as students learn what others valued and believed. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

HUM 2210H
Honors World Humanities: Prehistoric to Early Modern Era
3.00 Credits
Same as HUM 2210 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

HUM 2230
World Humanities: Early Modern to the Contemporary
3.00 Credits
Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Renaissance to the present day. History is discovered through a study of art, music, literature, religion and philosophy as students learn what others valued and believed. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

HUM 2230H
Honors World Humanities: Early Modern to the Contemporary
3.00 Credits
Same as HUM 2230 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

HUM 2410
Asian Humanities
3.00 Credits
A historical survey of the humanities in India, China, Japan: the visual arts, music, dance, theater, religion, and philosophy from the Prehistoric Era to modern times. Emphasis will be on the cultural values revealed in works of art and literature. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

HUM 2410H
Honors Asian Humanities
3.00 Credits
Same as HUM 2410 with honors content. Honors Institute permission required. College level reading and writing skills are required. Prerequisites: College level reading and writing skills are required.

HUM 2420
African Humanities
3.00 Credits
A historical survey of African humanities: the visual arts, music, dance, literature, theater, religion, and philosophy from the pre Columbian era to the present day. Emphasis will be on the cultural values revealed in works of art and artifact. Prerequisites: College level reading and writing skills are required.

HUM 2461
Latin American Humanities
3.00 Credits
A historical survey of the humanities of Latin America: the visual arts, music, dance, theater, religion and philosophy from the pre-Columbian era to modern times. Emphasis will be on the cultural values revealed in works of art, artifact, and literature. Prerequisites: College level reading and writing skills are required.

HUM 2201
Fundamentals of Human Nutrition
3.00 Credits
Presents a fundamental understanding of basic human nutrition. Topics include carbohydrates, protein, fat, vitamins, minerals, water, nutrition throughout life, fiber, fast foods, the four food group plans and popular facts and fallacies. Includes the interpretation of current nutrition information.

HUS 1001
Introduction Human Services
3.00 Credits
Focuses on the history of the field of Human Services. In addition, models of service delivery, ethics, and professionalism in the practice of human service skills are investigated. College level reading and writing skills are required.
HUS 1024
Abnormal Behavior: Etiology & Treatment
3.00 Credits
Focuses on the basic concepts of mental health and therapeutic intervention with an emphasis on normal and abnormal behaviors. Topics include concepts of normality, models of abnormal designations (medical v. non-medical) and identification and classification of abnormal behavior. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 1200
Introduction Group Process
3.00 Credits
Provides an introduction to the principles of group interaction, with an emphasis on observation and participation in the group environment. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 1304
Interpersonal Skills in Human Services
3.00 Credits
Focuses on the learning and proactive basic communication and interpersonal skills that are necessary in providing competent mental health and social services. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 1320
Crisis Intervention
3.00 Credits
Focuses on the theoretical and practical aspects of human crises, with an emphasis on handling simulated crisis situations. Prerequisites: College level reading and writing skills are required.

HUS 1406
Etiology and Treatment of Substance Use Disorder
3.00 Credits
This course is a comprehensive analysis of the causes, diagnosis, treatment, and prevention of substance abuse and dependence. Symptoms and the progression of substance use disorders are discussed. Types of abusers and different conceptualizations of the nature of substance disorders are reviewed. Strategies and skills are required for working with substance abusing clients are explored.

HUS 1540
Principles of Understanding Working Families
3.00 Credits
This course presents family theories most often used by human service workers as the framework for working with families. Three of these theories—the ecological model of human development, family systems theory and empowerment theory will be used to help students understand the complexity of family development and adaptation and the impact of stress on the family system. The student will learn how these theories can be used in the development of family professional collaboration and application of family centered practice. Students will learn and practice skills for empowering families to assess their strengths, concerns and priorities and to plan for how to meet their needs. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HUS 1001

HUS 1550
Multicultural Perspective in Human Services
3.00 Credits
Addresses cultural diversity and its implications for counseling and human services practice. It considers the psychological impact of factors such as sex, race, ethnicity and culture, religious preference, socioeconomic status, sexual orientation, and physical disability. Common stereotypes and prejudices toward various groups and cultures are investigated. Strategies for overcoming prejudice are studied. Interventions and strategies for working effectively in a helping capacity with diverse clients are discussed. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 1820
Human Services Practicum I
3.00 Credits
Provides an opportunity to apply theory in community health agencies for 16 hours per week. The emphasis is on direct client contact and on using correct interviewing techniques. A special fee will be charged for this course. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 2008
Psychotherapy: Theory & Practice
4.00 Credits
This course surveys the field of counseling theory and practice. The major theories that guide the practice of mental health counseling are investigated, including the personality theories which are the underpinnings of many theoretical approaches. Further, this course reviews issues related to the counselor as a person and a professional and considers ethical issues in counseling practice. Credit for this course does NOT apply to the Associate in Arts degree.

HUS 2311
Strategy of Behavior Modification
3.00 Credits
Focuses on the tenet of learning and motivation, with an introduction to behavior theory. Credit for this course does NOT apply to the Associate in Arts degree. College level reading and writing skills are required.
Prerequisites: HUS 1820 and HUS 1331.

HUS 2541
Working with Family in the Early Childhood Period: Impact on Child Health, Development and Parenting
3.00 Credits
This course addresses three important issues of early childhood: health, development and parenting. Common health problems of infancy and early childhood are discussed along with important health promotion and disease prevention strategies for creating safe and nurturing environments. Content will address general social, environmental and biologic influences and factors that collectively impede or facilitate individual and family development, the major periods and domains of child development and the importance of early learning experiences that enhance brain development. Students will learn about characteristics and importance of parent-child interactions as well as other cultural and social influences on parenting skills. The depth of developmental knowledge provided is intended to enhance the skills of the family health and support worker, to increase their ability to provide anticipatory guidance and teaching, and to empower the parent-child relationship. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HUS 1001
HUS 2542
Working with Family in Perinatal Period: Impact on Mother, Child and Family
3.00 Credits
Pregnancy is an exciting and important time in the life of a woman, her unborn child and family members. This course reviews central issues that affect the family, particularly mother and child, before conception through the end of the first month after birth. The student will learn information to enhance their ability to support a woman as she gets ready for pregnancy, undergoes many changes in her body and the way she feels while pregnant, while in labor and following delivery. The student will learn what a woman should not do when pregnant, how to enable the pregnant woman to care of herself to have a healthy baby, warning signs of problems, and care and feeding of the newborn. Students will practice skills for assessing a mother’s emotional adjustment to the birth of her infant, the interactions and bonding behaviors with her child, and the infant’s physical adaptations and social responsiveness. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: HUS 1001.

HUS 2821
Counseling and Human Services Practicum II
3.00 Credits
HUS 2821 builds on the training achieved in HUS 1820. Emphasis is on developing increased skill in working therapeutically with clients and in treatment planning. The elements of ethical practice are emphasized. The course requires 200 hours over the duration of the semester and attendance at a biweekly, two hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee is charged for this course. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HUS 1820.

HUS 2822
Counseling and Human Services Practicum III
3.00 Credits
HUS 2822 builds on the training achieved in HUS 1821. Emphasis is on providing effective and professional clinical services to clients and on achieving a sense of professional identity. This course requires 200 hours over the duration of the semester and attendance at a biweekly, two hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee will be charged for this course. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HUS 2821.

HUS 2840
Field Placement in Maternal and Child Services
3.00 Credits
This course involves students being assigned by HCC to an affiliate field placement site and having supervised contact with clients under the auspices of that agency for a total of ten hours per week. This field placement allows the student to experience and practice screening and assessment procedures, adult learning principles, and health education teaching functions in maternal and child service settings. The field placement or practicum experience will be augmented by biweekly seminars during which students will review their experiences and receive additional content not covered during the previous six ATD courses. The field placement is designed to enable students to apply specialized content to a specialized population. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: HUS 1001.

IDH 2931
Honors Leadership
3.00 Credits
An honors course in leadership and career theory that emphasizes understanding of oneself as an unique individual and that will serve as the basis for developing effective leadership abilities. The major topics include personal assessment, values and expectations, motivation, decision making, and leadership and career theory. Honors Institute permission required. College level writing and reading skills required.

IDS 1152C
Environmental Science
3.00 Credits
Intended for non science majors. Focuses on the general scientific principles of biology, ecology, earth science, and physical science in describing the environment, and how human activities effect the environment. Field trips are possible. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills are required.

IDS 1152H
Honors Environmental Science
3.00 Credits
Same as IDS 1152C with honors content. Honors Institute Program permission required. College level reading, writing and math skills are required.

IDS 2110
Connections
1.00 Credits
A selected topics capstone interdisciplinary experience course for the AA degree curriculum. Summarizes major points in the bodies of knowledge acquired while participating in the general education experience in an applied manner. Involves research, application of theoretical models, and utilization of learned skills.

IDS 2159
Environmental Issues in Tropical Ecosystems
3.00 Credits
Environmental Issues in Tropical Ecosystems is a three credit hour course that provides an interdisciplinary study of issues in tropical environments. The natural ecology of a terrestrial rain forest ecosystem, a coastal mangrove swamp ecosystem, and an offshore barrier reef ecosystem will be studied. The alterations of these ecosystems by human activities will be examined. Further, the social, political and economic reasons surrounding both the exploitation and the conservation of these systems will be investigated. Sustainable resource extraction from these ecosystems will be explored and compared to the consequences of biodiversity loss, societal issues, and ecological footprinting. A significant portion of this class will occur in the water. Therefore all students must be proficient swimmers and be able to swim unassisted for at least 100 yards and tread water for 10 minutes.
IDS 2200
Energy Issues
3.00 Credits
This course provides an interdisciplinary study of renewable energy sources. A comparison of how the United States and other nations (primarily Denmark) have dealt with the political and economic vulnerability of the dependence on fossil fuel sources since the 1980's will be made. Societal aspects of energy use, waste, production, economics and environmental impacts will be compared between other nations and current United States trends. Course participants will be expected to observe aspects of Danish culture while staying with a Danish host family for approximately two weeks. This course will include both pre trip and post trip components. Note: Course participants must successfully complete an application process. Prerequisites: College reading, writing and math skills are required.

IDS 2930
Interdisciplinary Travel Study and Service Learning
3.00 Credits
This course will examine specific cultural regions from a variety of perspectives. It combines classroom activities, scholarly research, travel study, and service learning. Perspectives to be explored in this culture include the historical, social, economic, religious, and artistic (literature, art, architecture, dance, music, ritual). Additionally, the course promotes communication skills and team work.
Prerequisites: College level reading and writing skills are required.

INT 1941
Interpreting Practicum
2.00 Credits
Provides the intermediate level interpreting student with an opportunity to observe the process of interpreting in various professional work situations and to gain knowledge of community agencies and resources which serve the deaf and hard of hearing population. Students will schedule regular observation hours, and according to their level of interpreting skill, assist agency staff in normal duties. College level reading and writing skills are required. A special fee will be charged for this course. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: ASL 2130.
Corequisite: INT 2200.

INT 2130
Introduction to Interpreting Ethics
3.00 Credits
Provides an introduction to the role of an interpreter; highlighting the application of the National Registry of Interpreters for the Deaf Code of Ethics in daily interaction with deaf and hearing consumers. Identifies alternative ethical behavior utilized in specific settings, such as educational interpreting. College level reading and writing skills are required.
Prerequisite: ASL 1150.

INT 2200
Interactive Interpreting I
3.00 Credits
Provides an introduction to the basic theories, guidelines, principles, and practices of interpreting, including the role of the interpreter, professional behavior and the ethics of interpreting, and environmental considerations of interpreting situations. College level reading and writing skills are required. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: ASL 2130.
Corequisite: INT 2200L.

INT 2200L
Interactive Interpreting Lab I
2.00 Credits
Focuses on introductory cognitive, linguistic and motor skill development. Utilization of audio tape, video tape and CD ROM materials will reinforce skill development. Live role play and modeling techniques permit students to experience a variety of interactive interpreting settings. College level reading and writing skills are required. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: ASL 2130.
Corequisite: INT 2200.

INT 2201L
Interactive Interpreting Lab II
3.00 Credits
A continuation of Interactive Interpreting I, this course focuses on advanced cognitive, linguistic, and motor skill development. Utilization of audio tape, video tape and CD ROM materials will reinforce skill development. Live role play and modeling techniques permit students to experience a variety of interactive interpreting settings. College level reading and writing skills are required. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: INT 2200L.

INT 2210L
Interactive Transliterating Lab
2.00 Credits
Focuses on manually coded sign systems used primarily in educational settings with a focus on the unique role and ethics of an educational interpreter/transliterating techniques. College level reading and writing skills are required. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisite: ASL 2130.

INT 2231L
American Sign Language Spoken English Interpreting
3.00 Credits
Focuses on advanced skills in interpreting from a signed message to a voiced translation using videotapes and live voice, with an emphasis on more complex constructions in signed stories and dialogues. College level reading and writing skills are required.
Prerequisites: ASL 2130, ASL 2130L.
INT 2400
Educational Interpreting
2.00 Credits
Foci on sign systems and processes used in secondary and post secondary settings, with an emphasis on the role and ethics of the institutional interpreter, related vocabulary, use of transliteration and interpreting in various situations. College level reading and writing skills are required.
Prerequisites: ASL 2130 ASL 2130L.
Corequisites: INT 2400L.

INT 2400L
Educational Interpreting Lab
1.00 Credit
Accompanies INT 2400. Live models, video tapes and interaction with the deaf community will be used to improve expressive and receptive interpreting skills in specific settings. College level reading and writing skills are required.
Prerequisites: ASL 2130 ASL 2130L.
Corequisites: INT 2400.

INT 2930
Interpreting Topics
2.00 Credits
Designed to be taken as an advanced level interpreting course during the second year of training. Special topics including business practices, marketing/entrepreneurship and interpreting in specialized situations (education, legal, medical, and mental health) will be taught. This course may be repeated for a total of six credits. Credit for this course does NOT apply to the Associate in Arts degree.
Prerequisites: ASL 2130, ASL 2130L.

INT 2942
Interpreting Internship
3.00 Credits
Provides an opportunity to participate in the interpreting process in work situations and to assist with agency duties. Requires a minimum of 24 hours per week. College level reading and writing skills are required. A special fee will be charged for this course.
Prerequisite: INT 1941.

IPM 1011
Plant Pests
3.00 Credits
Focuses on the study of insects, weeds, nematodes and plant diseases. Topics include identification, prevention, control and integrated pest management.
Corequisite: IPM 1011L.

IPM 1011L
Plant Pests Lab
1.00 Credit
This course accompanies IPM 1011. A special fee will be charged for this course.
Corequisite: IPM 1011.

IPM 1301
Application of Pesticides & Fertilizers
3.00 Credits
The course focuses on the fundamentals of pesticide and fertilizer application as they impact the horticulture industry. Emphasis will be placed on the safe and effective use of pesticides and fertilizers on horticultural crops and the environment. It will cover theory and provide practical hands on activities in application strategies, to include application time, method rate and environment, types of chemicals, formulation, management strategies, the use of labels, habits, habitats, signs and symptoms, mode of action of pesticides and fertilizers. Special emphasis will be placed on environmental safety, food, feed and water systems. The course will also cover equipment, calibration, application techniques, point and nonpoint contamination and emergency response. Strategies to prevent offsite contamination by wind, water or equipment will also be addressed.

IPM 2253
Management of Insects and Nematodes
3.00 Credits
The course will focus on the significance of insects and nematodes to horticulture. Emphasis will be placed on identification, classification, signs, symptoms and damage associated with insects and nematodes. It will also cover beneficial and harmful organisms, and provide hands on activities including collecting, inspecting and identifying these organisms. Characteristics essential to management such as life cycle and development, body characteristics, feeding habits, habitats, hosts and control strategies will be included. Management will cover host specificity, harmful growth stage, control strategies to include legal, chemical, cultural, mechanical and biological. Emphasis will be placed on scouting and IPM strategies used in the horticultural industry.
Prerequisite: IPM 1011.

IPM 2302
Applied Materials Chemistry & Calculus
3.00 Credits
The course focuses on the fundamentals of materials used in agriculture. Emphasis will be placed on the safe and effective use of the chemicals used on crops. It will cover theory and provide practical hands on activities in calculating chemicals for application. Chemical composition, formulation, mode of action of materials, families, application rate and factors affecting the effectiveness of the applied materials will also be covered. Safety concerns for human and domestic animals, food, feed, wildlife and aquatic systems will also be addressed.

IPM 2551
Regulatory Environment of Pest Management
3.00 Credits
The course will focus on federal, state and local regulations in pest management. It will address the various agencies with roles in pest management. The regulatory roles of the USDA, EPA, DOT, DOI, FED, DOL will be addressed. Federal, state and local regulatory roles on certification, registration, special local needs, transport, spill, storage, disposal, restricted pesticide usage will all be covered. Safe use of pesticides with implication for handlers, groundwater, endangered species, agriculture and maintaining biological diversity will be addressed. Laws and acts with regulatory roles in pest management will be discussed.
Prerequisites: IPM 1011.
IPM 2634
Management of Diseases and Weeds
3.00 Credits
The course will focus on the diseases and weeds that impact Florida’s agriculture. Emphasis will be placed on identification, classification and signs and symptoms of disease organisms. Management strategies to reduce impact of weeds and diseases of the landscape will be addressed. Characteristics essential to management such as disease occurrence, causative organisms, pathogenicity, development and transmission will be discussed. Weed characteristics, identification, classification, control strategies will be discussed. Principles and methods crucial to the management of weed and diseases will be covered, including legal, chemical, cultural, mechanical and biological. Emphasis will be placed on scouting and IPM strategies used in the horticultural industry.

ISC 1004C
Integrated Natural Science I
3.00 Credits
Students will examine integrative concepts in earth system science and environmental science. Topics include: the scientific method, the origin of the earth and life, geologic time processes/phenomena, evolution, ecology, and biological/geochmical cycles. This course is inquiry based and fully integrated with both laboratory and field experiences which emphasize active learning strategies.

ISC 1005C
Integrated Natural Science II
3.00 Credits
Students will examine integrative concepts in earth system science and environmental science. Topics include: fossils and earth history, natural catastrophic events, classification of organisms, ecosystems and how they work, the atmosphere and environment. This course is inquiry based and fully integrated with both laboratory and field experiences which emphasize active learning strategies. Prerequisite: ISC 1004C.

ISS 2930
Special Topics Interdisciplinary Social Science
3.00 Credits
This course focuses on in depth coverage of one or more topics that are not covered in great detail in other Social Science courses. The course stresses an interdisciplinary approach. Course content varies according to the interests of students and faculty. This course may be repeated one time for credit under a different topic. Prerequisites: College level reading and writing skills are required.

ITA 1120
Elementary Italian I
4.00 Credits
Covers the fundamentals of reading, writing, listening and speaking the Italian language while developing an understanding of the Italian culture. Native speakers of Italian are encouraged to seek credit by exam test. College level reading and writing skills are required.

ITA 1121
Elementary Italian II
4.00 Credits
A continuation of ITA 1120, this course enhances skills learned in ITA 1120. Native speakers of Italian are encouraged to seek credit by exam test. College level reading and writing skills are required. Prerequisite: ITA 1120 with a minimum grade of "C" or instructor's permission.

JOU 1400L
Journalism Lab
1.00 Credit
Provides practical experience through work on college publications under faculty supervision. This course may be repeated six times for credit. Prerequisites: ENC 1101.

JOU 1949
Journalism Internship
3.00 Credits
A coordinated work study course involving classwork and field experience. Objectives determined by the student and the teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit. Prerequisite: ENC 1101.

LAH 1020
Survey Latin American History
3.00 Credits
To examine the major events in the history of Latin American countries from the colonial period to the present with special emphasis on social, cultural, political, and economic development.

LDE 1310
Irrigation & Water Management
3.00 Credits
Focuses on the major aspects of irrigation. Topics include water quality and treatment, irrigation design, installation tools and techniques, drainage and retention ponds, watering techniques for turf and plant quality, and conservation.

LIN 1670
English Grammar & Usage
3.00 Credits
Provides an intensive study of traditional grammar usage and mechanics for those students who desire to improve both their understanding and use of English. Provides an in depth review of grammar to returning students. Complements English composition courses. College level reading and writing skills are required.

LIN 1670H
Honors English Grammar & Usage
3.00 Credits
Same as LIN 1670 with honors content. Honors Institute permission required. College level reading and writing skills are required.