EVS 2894C
Environmental Sampling and Analysis II
5 Credits
Introduces the theory and methods of analysis of inorganic chemical substances of water. Techniques of sampling, preparation for testing, testing and analysis will be covered. Federal and state approved standards for analysis will be examined and utilized for laboratory testing. Laboratory exercises will include sample collection, testing and analysis.

EVS 2895C
Environmental Sampling and Analysis III
5 Credits
Introduces the theory and methods of analysis of metals, organic load and biological test methods associated with water and wastewater. Techniques of sampling, preparation for testing and analysis will be covered. Quality control methods are also covered. Laboratory exercises will include sample collection, testing and analysis.
Prerequisite: EVS 2894

EVS 2939
Water Treatment Capstone Course
3 Credits
This course is the final preparation for students to pass state certification exams if the student chooses to work at a municipal drinking water facility. Drinking water laws are covered as well as all of the reviews necessary to prepare the student for obtaining a job in the industrial or municipal sectors. Many case studies, process flows and problem solving workshops are provided. Credit for this course does not apply to the associate in arts degree.
Corequisites: EVS 2184, EVS 2182

EVS 2942L
Environmental Technology Practicum
3 Credits
Focuses on hands-on experience in environmental sampling and analysis methods by assigning students to agencies or businesses for 150 hours per semester. 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 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 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 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 Credits
Focuses on the nutritional aspects of fish. Fish digestive anatomy, nutrition requirements, metabolic rates, diets, and available food sources will be covered.
Prerequisites: College level reading and writing skills are required.

FAS 2253
Aquacultural Disease Processes
3 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 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 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 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. Prerequisites: College level reading and writing skills required.

FAS 2941L
Aquaculture Field Experience I
3 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 required.

FAS 2942L
Aquaculture Field Experience II
3 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 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 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 Credits
Provides an overview of the fire protection field, with an emphasis on fire protection agencies, equipment, building design and construction and fire fighting tactics. Topics include fire suppression and equipment, characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents and public relations.

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

FFP 1506
Fire Prevention and Investigation
3 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 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 Credits
Involves a review of fire chemistry, equipment, manpower, strategies, methods of attack and pre planning fire problems.

FFP 2120
Fire Service Building Construction
3 Credits
Building construction topics include identifying hazards from assault by fire and gravity, how building construction can influence fire spread, fire confinement or structural collapse, and many other life safety issues.

FFP 2151
Fire Service Information Management
3 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 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 Credits  
This course will cover the principles of fire service hydraulic formulas and calculations to determine pump pressures.

FFP 2305  
Apparatus Operations  
3 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 Credits  
On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

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

FFP 2484C  
Hazardous Materials Scene Management  
3 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 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 and Standards  
3 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 and Plan Review  
3 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 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 Credits  
Focuses on the ability of chief officers to effectively plan and execute fire prevention investigation functions.

FFP 2604  
Cause and Origin  
3 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 Credits  
A survey of the principles of latent fire and arson investigation.

FFP 2701  
Organization and Command of Volunteer Fire Service Operations  
3 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 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 Credits  
Provides a medium to relate current organizational theory to practical application in the fire service.

FFP 2740  
**Fire Service Course Delivery**  
3 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 Credits  
Emphasis on instructional design, course development and training manuals. Students develop their own course by establishing goals, objectives and evaluation criteria. Students may repeat this course up to 20 times for renewal of their Fire Certification.

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

FFP 2790  
**Analysis of Fire Department Operations**  
3 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 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 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 Credits  
Covers advanced fire fighting techniques, with an emphasis on incident command systems.

FFP 2830  
**Incident Command of Major Fire Department Operations**  
3 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 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 required.

FIL 1420C  
**Motion Media I – Recording and Interpreting Reality**  
3 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 Credits  
A continuation of FIL 1420C with emphasis on developing camera techniques in space and the environment. Students will undertake more advanced projects in motion media to further works both technically and conceptually. Prerequisite: FIL 1420C

FIL 2010  
**Films of Fantasy and Imagination**  
3 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 and 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 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 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 and Video
1 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 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 Credits
This course is an introduction to the fundamentals of corporate finance. It will cover corporate financial structures, monetary systems, financial instruments, financial statement analysis, interest, and the time-value of money. Prerequisites: ACG 2021. College level reading, writing and math skills required.

FIN 2051
International Financial Management
3 Credits
This course explores the management of international banking, financial services, financial risk, foreign exchange, corporate financing from a global perspective, direct foreign investment decisions, and the management of on-going operations. Prerequisite: FIN 2001. College level reading and writing skills required.

FNR 1001
Natural Resource Management
3 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. Prerequisite: EVR 1328. College level reading and math skills required.

FOS 1201
Sanitation and Safety Management
2 Credits
This course explores the scientific rationales of sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will recognize the importance of preparing, serving, storing, and holding foods so that they are free of contamination. This course also includes a study of the micro-world, food allergies, food borne illness, safe food handling, cleaning, sanitizing, pest management, and state, local, and national regulation governing sanitary food handling practices. Prerequisites: College level reading, writing, and math skills are required.

FOS 2521
Introduction Seafood Processing
3 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 take 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 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 Credits
Enhances the skills learned in FRE 1120. Native speakers of French are encouraged to seek credit by exam test. College
level reading and writing skills required. Prerequisite: FRE 1120 with a minimum grade of "C" or instructor's permission.

**FSS 1063C**  
**Food Specialties I (Baking)**  
3 Credits  
This course covers the fundamentals of baking as it applies to the industry. The student gains hands-on experience in practical applications, weights, measures and formula procedures. Emphasis is placed on the proper use of care of equipment, food safety and sanitation.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

**FSS 1223C**  
**Food Preparation for Managers**  
4 Credits  
Students are introduced to various food preparation and kitchen management techniques. It specifically examines the chemical and physical changes that take place as food is processed and prepared for consumption. The knowledge in this course is acquired through theoretical lectures and hands-on service in the HCC kitchen laboratory ensuring the students’ understanding of back-of-the-house procedures and the application of food safety and sanitation principles.  
Prerequisites: College level reading, writing and math skills required. 
Corequisite: FOS 1201

**FSS 1248C**  
**Food Specialties II (Garde Manger I)**  
3 Credits  
The purpose of this course is to introduce basic information, procedures, and techniques identifiable to contemporary chefs, in understanding and applying garde manger terminology, and the principles of cold food preparation. The proper care and use of tools and the correct preparation, handling, and use of mousses, cold dressings, and charcuterie are explained. Traditional plate presentations and techniques will also be discussed, as well as changes and interpretations of classical preparations to contemporary cooking standards.  
Prerequisites: FSS 1063C. College level reading, writing and math skills required.

**FSS 1249C**  
**Food Specialties III (Garde Manger II)**  
3 Credits  
The cold station in any restaurant is one that encompasses a wide range of culinary techniques. From sausage making to garnishing and into charcuterie; this course will cover all the responsibilities associated with the garde manger department. The proper use of tools and the correct preparation, handling, and use of mousses, terrines, galantines, forcemeats and garnishes are explained. Traditional platter presentations and techniques will also be discussed, as well as changes and interpretations of classical preparation to contemporary cooking standards.  
Prerequisites: FSS 1248C. College level reading, writing and math skills required.

**FSS 1500**  
**Food and Beverage Control**  
3 Credits  
This course is designed to provide students with a solid introduction to the planning and controlling elements of a food and beverage operation. It focuses on proven control principles and practical applications essential to operating an effective control system.  
Prerequisites: College level reading, writing and math skills required.

**FSS 1941**  
**Food Practicum I**  
2 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.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

**FSS 1942**  
**Food Practicum II**  
2 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.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

**FSS 1943**  
**Food Practicum III**  
2 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.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

**FSS 1944**  
**Food Practicum IV**  
2 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.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

**FSS 1945**  
**Food Practicum V**  
2 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.  
Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.
FSS 1946
Food Practicum VI
2 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. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 2100
Food Plans and Menu Preparation
3 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 required.

FSS 2120
Food Purchase and Storage
3 Credits
Focuses on volume food purchasing, with an emphasis on the legal obligations of vendors and vendees, receiving controls, and storing and dispersal. Prerequisites: College level reading, writing and math skills are required.

FSS 2271
Beverage Management Service
3 Credits
This course is designed to familiarize students with the many varieties of alcoholic and non-alcoholic beverages. This class also examines wines from different countries while developing an appreciation for wine and food affinity. Emphasis is also placed on responsible serving techniques, purchasing, storing, and product control. Prerequisites: College level reading, writing and math skills required.

GCO 2230
Pumping and Irrigation Systems
3 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 1214
Business Communications and Technology
3 Credits
This course is designed to equip students with a comprehensive understanding of communication, its scope and importance in business. Students will learn to apply fundamental communication theory. The various types of business communication genre are developed and used including written and oral forms. Emphasis is placed on planning, preparing, drafting, analyzing, performing the different communications required in the normal course of business activities. The course provides opportunities to recognize complex issues, organize ideas and thoughts in a consistently logical format, and then to communicate these ideas in succinct and concise manner. College level reading, writing, and math skills are required.

GEB 1949
Business Internship
3 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 Credits
Focuses on the fundamentals of international business through an analysis of the cultural, economic, legal, and political factors that influence international operations in the global economy. Prerequisite: College level reading and writing skills required.

GEB 2351
International Business Practice Firm
3 Credits
Using an international business model, the students work as team members in a simulated business firm in a state-of-the-art facility. Students have the opportunity to perform various business functions (i.e., purchasing, accounting, marketing, human resources) as the firm transacts business with students in other simulated companies both in the U.S. and in other countries. Students are involved in decision-making, critical thinking, and team activities, and will partner with local businesses to further enhance their business skills. Prerequisites: College level reading, writing and math skills required.

GEB 2370
Introduction to International Business Policy Issues
3 Credits
Examines the challenges associated with planning and implementing international policy within business enterprises whose operations span across national boundaries. Students will be able to obtain a fundamental understanding of the strategic, operational and behavioral aspects of managing across cultures. Prerequisites: GEB 1011, GEB 2350, and FIN 2051. College level reading and writing skills are required.
GER 1120
Elementary German I
4 Credits
Covers the fundamental of reading, writing, listening and speaking the language while developing an understanding of the German culture. Native speakers of German will be asked to seek credit by exam test.
Prerequisites: College level reading and writing skills are required.

GER 1121
Elementary German II
4 Credits
Enhances the skills taught in GER 1120. Native speakers of German will be asked to seek credit by exam test.
Prerequisites: GER 1120 with a minimum grade of "C" or instructor's permission. College reading and writing skills are required.

GEY 1000
Issues of Aging
3 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
Survey of Geographic Information Systems/Global Positioning Systems (GPS)
1 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 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 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 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.
Corequisites: GLY 1010

GRA 2111C
Graphic Design
3 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 1202C
Corequisite: PGY 2401C

GRA 2156C
Digital Illustration
3 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 Credits
The purpose of this course is to provide students with a basic understanding of facilities management within the hospitality industry. Emphasis is placed on the organization, structure, and functional areas in food service and lodging operations.
Prerequisites: College level reading and writing skills are required.

HFT 1410
Front Desk Procedure
3 Credits
This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel from the reservation process to check-out and settlement. It also
examines the various elements of effective front office procedures within the context of the overall operation of a hotel. Prerequisites: College level reading, writing and math skills are required.

**HFT 1790**  
**The Event Industry**  
3 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 Credits  
This course introduces students to the process of managing personnel in the hospitality industry. Lectures will highlight the supervisory skills, techniques, and procedures needed to become successful business leaders in today’s dynamic and diverse workplace. 
Prerequisites: College level reading, writing and math skills are required.

**HFT 2530**  
**Hospitality Merchandising Techniques**  
3 Credits  
This course is designed to provide students with a solid background in hospitality sales and advertising. It focuses on practical sales technologies, proven approaches for selling to targeted markets, and advertising’s role in sales. 
Prerequisites: College level reading, writing and math skills are required.

**HFT 2600**  
**Hospitality Industry Law**  
3 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 Credits  
The purpose of this course is to provide students with a basic understanding of convention sales and service. It identifies the various segments of the convention market and explores the methods and techniques utilized in exceeding guest expectations. 
Prerequisites: College level reading and writing skills are required.

**HFT 2840**  
**Maitre D’ and Dining Room Service**  
3 Credits  
Students are introduced to various service techniques and customer interaction skills. The knowledge in this course is acquired through theoretical lectures and practical hands-on service in the HCC Gourmet Dining Room. In this way, students become knowledgeable about front-of-the-house procedures and apply the principles of food safety and team leadership skills.  
Prerequisites: College level reading, writing and math skills are required.

**HFT 2941**  
**Hospitality Management Internship**  
3 Credits  
A work-based learning experience that focuses on an area of interest in a restaurant or hotel. The intern will experience the opportunity to apply the theory learned in the program within a hospitality business setting. Grading is based on academic projects related to the position. The student must also provide authorized documentation confirming 125 hours of internship experience. 
Prerequisite: College level reading, writing, and math skills are required.

**HIM 1000**  
**Medical Record Content**  
1 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 1433**  
**Principles of Disease**  
4 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. Credit for this course does not apply to the associate in arts degree.

**HIM 1442**  
**Pharmacology**  
2 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 Credits  
This course is designed for students with limited background in sciences pursuing careers in the allied health fields. The stu-
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. Credit for this course does not apply to the associate in arts degree.

**HIM 2222**  
Basic ICD-9-CM Coding  
1 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 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 2222

**HIM 2253**  
Basic CPT Coding  
1 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 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 1433

**HIM 2272C**  
Medical Billing and Insurance II  
3 Credits  
Emphasis on billing regulations for the State of Florida. Course content includes LMRPs, 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 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 and Insurance I  
3 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 2222, HIM 2253

**HIM 2283**  
Advanced Coding  
3 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 1433, HIM 1453, HIM 2232, HIM 2253, HIM 2254, HIM 2222

**HIM 2940**  
Clinical Billing Practicum  
2 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 2222

**HIM 2941**  
Clinical Coding Practicum  
2 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 1433, HIM 1453, HSC 1641, HIM 2254, HIM 2232, HIM 1442
HIS 2206
Selected Topics in History
3 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 Credits
Same as HIS 2206 with honors content. Honors Institute permission required. May be taken two times for credit.

HLP 1081
Health Analysis and Improvement
3 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 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 and Chemistry
3 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 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. Credit for this course does not apply to the associate in arts degree.

Prerequisites: MAT 0018, REA 0007 and ENC 0015 or equivalent HCC placement test scores.

HSC 1531
Medical Terminology
3 Credits
Focuses on medical terminology, with an emphasis on anatomical 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 Professionals
1 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 Credit
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 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 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 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 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. Prerequisites: College level reading and writing skills are required.

HUM 2210H
Honors World Humanities: Prehistoric to Early Modern Era
3 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 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. Prerequisites: College level reading and writing skills are required.

HUM 2230H
Honors World Humanities: Early Modern to the Contemporary
3 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 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. Prerequisites: College level reading and writing skills are required.

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

HUM 2420
African Humanities
3 Credits
A historical survey of African humanities: the visual arts, music, dance, literature, theater, religion, and philosophy from the prehistoric 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 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.

HUS 1001
Introduction Human Services
3 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 and Treatment
3 Credits
Focuses on the basic concepts of mental health and therapeutic intervention with an emphasis on normal and abnormal behaviors. Topics include concepts of normalcy, 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 1111
Interpersonal Skills in Human Services
3 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 1200
Introduction Group Process
3 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 1320
Crisis Intervention
3 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 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 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 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 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 and Practice
4 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 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.
Prerequisites: HUS 1820 and HUS 1331. College level reading and writing skills are required.

HUS 2541
Working with Family in the Early Childhood Period: Impact on Child Health, Development and Parenting
3 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 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 new baby. 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 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 bi weekly, 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 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 bi weekly, 2 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 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 2821

IDH 2931
Honors Leadership
3 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.

Prerequisites: College level writing and reading skills are required.

IDS 1152C
Environmental Science
3 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 affect 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 Credits
Same as IDS 1152C with honors content. Honors Institute Program permission required.

Prerequisites: College level reading, writing and math skills are required.

IDS 2110
Connections
1 Credit
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 2110H
Honors Connections
1 Credit
Same as IDS 2110 with honors content. Honors Institute permission required.

Prerequisites: College level reading, writing and math skills are required.

IDS 2159
Environmental Issues in Tropical Ecosystems
3 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 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 level reading, writing and math skills are required.

**INT 1941**  
**Interpreting Practicum**  
2 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. Prerequisites: INT 2130, INT 2200, INT 2200L Corequisite: INT 2200L

**INT 2130**  
**Introduction to Interpreting Ethics**  
3 Credits  
Provides a basic understanding of the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct which governs the standards of the interpreting profession and how to apply these principles to a variety of interpreting situations as well as other central issues related to the interpreting profession. Prerequisites: INT 2200, INT 2200L. College level reading and writing skills are required.

**INT 2200**  
**Interactive Interpreting I**  
3 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 situation. Credit for this course does not apply to the associate in arts degree. Prerequisites: ASL 2160C or ASL 2130 and ASL 2130L. College level reading and writing skills are required. Corequisite: INT 2200L

**INT 2200L**  
**Interactive Interpreting Lab I**  
2 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. Credit for this course does not apply to the associate in arts degree. Prerequisites: ASL 2160C or ASL 2130 and ASL 2130L. College level reading and writing skills are required. Corequisite: INT 2200

**INT 2201L**  
**Interactive Interpreting Lab II**  
3 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. Credit for this course does not apply to the associate in arts degree. Prerequisites: INT 2200L. College level reading and writing skills are required.

**INT 2210L**  
**Interactive Transliterating Lab**  
2 Credits  
Focuses on understanding the differences between interpreting and transliterating, and reinforcing skill development in transliterating by conveying spoken English messages into signed messages using conceptually accurate signed English and other known manually coded sign systems. Credit for this course does not apply to the associate in arts degree. Prerequisites: INT 2200, INT 2200L. College level reading and writing skills are required.

**INT 2231L**  
**American Sign Language to Spoken English Interpreting**  
3 Credits  
Focuses on advanced skills in interpreting from a signed message to a spoken English message using a variety of stimulus materials with an emphasis on more complex constructions in signed messages and dialogues. Prerequisites: INT 2200, INT 2200L, INT 2130. College level reading and writing skills are required.
INT 2400
Educational Interpreting
2 Credits
Focuses 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.
Prerequisites: INT 2200, INT 2200L, INT 2210L. College level reading and writing skills are required.
Corequisites: INT 2400L

INT 2400L
Educational Interpreting Lab
1 Credit
A variety of stimulus will be used to improve expressive and receptive interpreting skills in specific settings.
Prerequisites: INT 2200, INT 2200L, INT 2210L. College level reading and writing skills are required.
Corequisite: INT 2400

INT 2930
Interpreting Topics
2 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 2160C or ASL 2130 and ASL 2130L

INT 2942
Interpreting Internship
3 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. A special fee will be charged for this course.
Prerequisites: INT 1941. College level reading and writing skills are required.

IPM 1301
Application of Pesticides and Fertilizers
3 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 1301
Application of Pesticides and Fertilizers
3 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 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 and Calculus
3 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 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 im-
application 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.

Prerequisite: IPM 1011

IPM 2634
Management of Diseases and Weeds
3 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 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/geochemical 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 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 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 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.

Prerequisites: College level reading and writing skills are required.

ITA 1121
Elementary Italian II
4 Credits
This course enhances skills learned in ITA 1120. Native speakers of Italian are encouraged to seek credit by exam test.

Prerequisite: ITA 1120 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

JOU 1400L
Journalism Lab
1 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 Credits
A coordinated work study course involving class work 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

JOU 2100C
Journalistic Writing and Reporting
3 Credits
Introductory course providing instruction and practice in journalistic writing and news reporting. Course includes writing leads, defining news and writing news with specific emphasis on features, editorials, and specific content. Additional course emphasis is placed on the principles of identification, selection, and evaluation of news stories for print and online publication. Course also includes instruction in professional ethics.

Prerequisite: ENC 1101 with a grade of C or better.

LAH 1020
Survey Latin American History
3 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 and Water Management
3 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 and Usage
3 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.
Prerequisites: College level reading and writing skills are required.

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

LIS 1004
Introduction Internet Research
1 Credit
This course is delivered via the World Wide Web and Internet email. The course focuses on the methods of accessing information resources available through the Internet. Students will learn to design search strategies, retrieve resources, electronic journals, and electronic text, evaluate and cite Internet sources valuable for research purposes.

LIT 2110
World Literature to 1650
3 Credits
Focuses on the major periods and forms in literature from Greek and Roman Classicism through the Renaissance, excluding British and American literature. Topics will include the cultural background of each period and the distinctive characteristics of each style and genre.
Prerequisites: College level reading and writing skills required.

LIT 2110H
Honors World Literature to 1650
3 Credits
Same as LIT 2110 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills required.

LIT 2120
World Literature: 1650 to Present
3 Credits
Focuses on literature from the Renaissance to now.
Prerequisites: College level reading and writing skills are required.

LIT 2120H
Honors World Literature: 1650 to Present
3 Credits
Same as LIT 2120 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

LIT 2370
Introduction Bible as Literature
3 Credits
Introduces the student to the study of the Bible from a literary point of view using current critical writings as a resource. As such, the course will establish a foundation for an understanding of the Old and New Testaments from an historical, philosophical and literary perspective. Alternative prerequisite: permission of the instructor.
Prerequisite: ENC 1101

MAC 1105
College Algebra
3 Credits
Provides students with the opportunity to gain algebraic knowledge needed for many fields such as engineering, business, science, computer technology, and mathematics. Graphical and numerical methods support the study of functions and their corresponding equations and inequalities. Students will study linear, quadratic, polynomial, rational, exponential, logarithmic, inverse, composite, radical, and absolute value functions; systems of equations and inequalities; modeling applied problems; and curve fitting techniques.
Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

MAC 1105H
Honors College Algebra
3 Credits
Same as MAC 1105 with honors content. Honors Institute permission required.
Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

MAC 1114
Trigonometry
3 Credits
Major topics include trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; conditional trigonometric functions; solutions of triangles; vector algebra; parametric equations; polar coordinates; applications. For students taking MAC 1140 and MAC 1114 in preparation for MAC 2311, it is recommended that MAC 1140 be taken before MAC 1114. Previous credit for MAC 1147 precludes credit for MAC 1114.
Prerequisite: MAC 1105 with a minimum grade of C or appropriate score on placement test.